

ABSTRACT

Title of dissertation: A THEORY OF ARGUMENTATIVE NORMS:
CONCEPTUALIZING AND EVALUATING DOMAIN-
SPECIFIC ARGUMENTATIVE EXPECTATIONS

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This project develops and tests a theory, the Theory of Argumentative Norms. The Theory of Argumentative Norms states that individuals carry specific social norms into interpersonal arguments that depend on the goal of the argument—persuasion, inquiry, identity, or play. Conforming to these norms is theorized to lead to optimal argumentative perceptions and outcomes, and violating any of these norms is thus theorized to lead to more negative consequences.

The first two chapters detail the theory and its specific normative constructs, leading to the construction of ten hypotheses and a research question. The nature of the theory called for the creation of new instruments and stimuli, so the next two chapters detail the piloting of these measures and materials. The predictions are then tested in two further studies, primarily by the construction and manipulation of dialogic argument vignettes that do or do not contain particular violations, and then asking participants to rate the vignettes for their conformity to argument norms and for other argumentative perception and outcome measures.

Findings of the research were mostly supportive of the theory: it was found that norm violations were associated with significantly more negative perceptions than normative arguments, both with respect to in-the-moment perceptions (argument quality, pleasantness) and

outcomes (goal attainment, future willingness to argue, escalation). The theory also predicted that different argument goals would be associated with different patterns of outcomes, but these predictions were mostly unsupported.

A THEORY OF ARGUMENTATIVE NORMS: CONCEPTUALIZING AND EVALUATING
DOMAIN-SPECIFIC ARGUMENTATIVE EXPECTATIONS

by

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Chapter 1: Introducing Argumentative Norms

Argumentation scholars have long sought to arrive at a proper normative evaluation system of argument. Such a system would have a set of criteria that could be referenced against a real-world argument and evaluate its quality. Many such systems have been advanced. These include the acceptability/relevance/sufficiency framework (Johnson & Blair, 1977), the informal fallacies (e.g., Walton, 1987), van Eemeren and Grootendorst's (1984, 2004) pragmadialectical rules, the Bayesian method (Korb, 2004), R. Johnson's (2000) illative core and dialectical tier, and others. Each boasts considerable and unique strengths regarding argument evaluation.

However, the foci of many of these systems have been on certain subsets of the arguments that occur in everyday discourse, and in fact, some of them (e.g., R. Johnson, 2000) are not explicitly dialogic. This has left something of a vacuum for evaluating arguments in certain areas of interpersonal arguing. Several scholars (e.g., Walton, 1998; Hample, 2003) have recognized that "interpersonal argument" or "interpersonal dialogue" are not monolithic concepts, and they have many specific instances with different features. For purposes of this dissertation, I will refer to these instances as "argumentative domains," a phrase that will be substantially elaborated in the next chapter. Some of these domains, notably the playful argument and the identity argument, have received little attention in the literature, and no significant attempt has been made at a system of argument evaluation that actively acknowledges their features.

In this dissertation, I aim to describe a system of evaluation that would apply in these domains while retaining the progress that has already been made in evaluating more traditionally-studied domains of argument (persuasion and inquiry). The system that I believe best accomplishes this task is one of *argumentative norms*. After providing a bit of background

about argumentative domains, I explain the norms framework—the Theory of Argumentative Norms—and the advantages it may provide the argumentation community. Then, I discuss four different argumentative domains—persuasive arguments, inquiries, identity arguments, and playful arguments—and discuss the normative bases upon which each may be evaluated.

The main goal of this project is not only to propose this theory, but also to test it. To that end, I offer ten hypotheses and ask a research question. Then I test the predictions with four separate experiments in which participants evaluate sample argumentative vignettes. In the final experiment, they also provide examples of problematic interpersonal arguments from their own lives. The results shed light on whether arguers perceive the proposed norms as normative, and what implications norm violations may have on both argumentative success and interpersonal relations.

Chapter 2: Theory Development and Explication

This project develops a theory and proceeds to test it. In this chapter, I lay out what the theory is and what testable predictions it makes. To do this, I begin by establishing the context in which the theory is situated, that of interpersonal arguing. I discuss some background about this context and the way thinking about it has evolved over time, finally arriving at some unresolved threads of considerable importance. I then propose the Theory of Argumentative Norms as a way into these unresolved areas. I first justify and explain what the theory is, then what advantages it has, and finally detail the specific argumentative norms it includes. I conclude by stating the predictions the theory makes, which are tested in the studies that comprise Chapters 3-6.

The Context of Argument Evaluation

Defining Arguments

This project situates itself in the context of argumentation studies, and is particularly focused on *interpersonal* arguing. In doing so, it is important to begin with a clear definition of what an ‘argument’ is—it is a word that has been defined in a variety of ways in scholarship, to say nothing of lay discourse, and one conception must be chosen as a valid starting point. A key and much-discussed insight into the definition of argument is that of O’Keefe (1977). He makes the distinction between what he termed argument₁, which is a thing a person *makes*, and argument₂, which is a thing people *have*. We mean argument₁ when we say, e.g., “This article argued passionately in favor of a new tax on cars,” but we mean argument₂ in the sentence “Hayley and Tim argued over the right way to raise their children.”

Hample (2005, p. 1) states that an argument, implicitly an argument₁ here, is “a conclusion supported by a reason.” I believe this to be a generally suitable account, and it is attractively parsimonious. However, though it seems adequately descriptive of argumentative

structure, it provides us no sense of where or why arguments are made, and I believe this to be a necessary part of an appropriate definition of argument. Arguments are not produced by accident. It takes a considerable amount of cognitive (and perhaps emotional) effort to produce arguments₁, let alone engage in arguments₂. All arguments are produced for a purpose. Sometimes, this purpose may be clearly stated or obvious: arguments that attempt to persuade, for instance. Other times, the purpose may be less obvious; perhaps in these cases, the arguer has a high need for cognition (Cacioppo & Petty, 1982) or sees argument as playful (Hample et al., 2010), and is thus simply enjoying the mental gymnastics of arguing. Or perhaps an individual does not particularly desire to argue, but is doing so to appease his or her partner, who *is* interested in the argument; thus, participation has a relational function in this case.

Thus, I define monologic argument, or argument₁, as one or more reasons given in support of one or a set of related conclusions, presented for some purpose. An argument₂, for my purposes, is an interaction in which one or more arguments₁ are advanced and considered by at least two different arguers. The argument₁(s) in play in an argument₂ always consist of conclusions, reasons, and purposes, though each of these features may not be explicitly expressed. Further, if multiple argument₁s are being made in an argument₂, they need not be made toward the same purpose.

Armed with this basic definition, let us now move to a key issue for this dissertation, the normative system within which arguments do or should take place. To situate my suggestion that we use argumentative norms to evaluate arguments, let us briefly review other means of argument evaluation.

A Brief History of Argument Thought

This is far from the first attempt to assemble an evaluation system for argument. Argument has been an object of study for over two millennia, and as with many fields, it dates back to Aristotle. Fundamental to Aristotle's notion of argument, expressed in his logical treatises, is the idea of deductive syllogisms, chains of reasoning that contained premises and conclusions (Smith, 1989). Aristotle's key insight was that conclusions should be derived from the premises, which became basic to formal logic studies. The enthymeme, a foundational idea in rhetorical theories of argument, is an adaptation of the syllogism to informal contexts.

The Aristotelian tradition continued as a dominant force in argumentative thought well into the 20th century. We now look back on much of the work that was done in the intervening centuries under the umbrella of formal logic. An attractive feature of formal logic is its ability to declare chains of reasoning as *valid* or *invalid*. If a certain conclusion followed from its premises, then it was valid; if it did not, it was invalid. Therefore, if one wanted to discern the validity of a certain claim, he or she merely had to work out an appropriate set of premises from which that claim would be fully valid. If the premises were true, then the claim was true as well.

Such formal undertakings were largely done in an attempt to "mathematize" logic (R. Johnson, 2000, p. 104). Indeed, much of the work done in formal logic dealt with formulae attempting to turn all arguments into sets of propositions that could be proven or disproven. Such procedures are quite distant from anything that arguers actually do in real-life argumentative contexts. This is so for a variety of reasons. Premises are often unexpressed in everyday discourse, claims do not always have an obvious truth value (e.g., "I feel like it might rain today"), and the methods adopted by formal logicians would often be quite time-consuming to replicate in a conversational setting. These considerations led rhetorical theorists to endorse the enthymeme and to see practical arguments as contingent, defeasible, and probabilistic.

The distance between formal logic and everyday argument was felt especially in classroom environments, where many teachers of logic felt the application of formal logic to everyday scenarios was lacking. As the twentieth century progressed, a number of scholars began to work on this problem more earnestly, and the prevailing result was the notion of *informal* logic (e.g., Hamblin, 1970; Kahane, 1971). Informal logic, as the name suggests, divorced argument—the practice—from rigid forms. Ralph Johnson (2000) argued that informal logic thus studied argument, while formal logic studied *inference*, which consisted merely of determining what conclusions could definitively follow from which premises.

Instead of logical validity being the determinant of argument quality, informal logic relied on *fallacies*. The traditional view (see Hamblin, 1970) was that fallacies are arguments that seemed to have the appearance of being sound, but in fact suffered from a flaw that made them defective. The concern was that fallacies are often produced in normal argumentative exchanges (to say nothing of intentionally deceptive ones such as advertising), and they can easily be accepted when they ought not to be. A vast number of fallacies have been proposed, as there are any number of problematic sorts of arguments one might make, but several (e.g., *ad hominem*, *ad ignorantium*, *ad baculum*, circular reasoning, begging the question, red herring) are commonly included in informal logic work.

Research in and around the informal logic movement has at times sought to arrive at more specific judgments of argument evaluation. For instance, Ralph Johnson (2000) argued that arguments₁ consist of both an *illative core* (a sort of premise-conclusion structure) and a *dialectical tier* (which considers alternatives, matters external to the argument's premises). In this sense, Johnson says that for an argument₁ to be sound, it must not merely have an illative core that is fallacy-free, but it also must reasonably situate that logical core in the larger context

of the issue in which it takes place. A specific illative core may seem well-founded by itself, but its opposite may yet be stronger. In this sense, it seems Johnson advocates for arguers to counter-argue with themselves. They must consider and compare the merit of alternative positions within the argument in order to present something that can be judged. To use Deanna Kuhn's (1991) term, arguers must demonstrate an evaluativist orientation toward their knowledge in a subject area to truly argue for a position convincingly.

Another project based in informal logic that has much direct relevance to mine is that of Walton (1998). Walton discusses six different *dialogue types* and noted that some of the traditional fallacies were legitimate moves in some types, but problematic in others. The dialogue types were distinguished by the goals arguers brought to the argumentative interaction. For instance, if two arguers are seeking to reach a compromise, they naturally fall into negotiation dialogue. If one arguer is an expert on a subject and the other is not, the second arguer may seek expert advice from the first, thus naturally falling into information-seeking dialogue.

Other scholars have certainly not been ignorant of the multiplicity of purposes arguments may have. In fact, though James Dillard (e.g., 1997, p. 47) did not necessarily include goals as a definitional component of arguments, his line of research certainly proceeds from and explicates many of the same points I have made above. Dillard et al. (1989) classify goals of influence attempts (which themselves may be something of a subset of arguments, although persuasion may not necessarily be argumentative at all) into two tiers. *Primary goals* deal with the desired outcome of the influence attempt (e.g., behavioral change), while *secondary goals* "derive directly from more general motivations that are recurrent in a person's life" (p. 20). They posit four types of secondary goals: identity goals (maintenance of self-concept), interaction goals

(conforming to social norms), resource goals (gaining and/or maintaining relational, material, and/or physical assets), and communicative arousal management.

Another approach to understanding argumentative purposes is that of Hample's (2003; Hample et al., 2009) argument frames. These frames represent a multi-tiered system that seeks to explain what people think they are doing when they are arguing. In particular, Hample's (2003) frames scale measures what individuals generally see as the functional experience of argument.

Hample's frames are divided into three tiers, and mainly the first is relevant to this project. That tier represents the immediate functions or goals of argument. He lists four: dominance (attempting to win at all costs), identity display, play, and utility (gaining something of value from the argument, e.g., persuasion). The frames, as with Dillard's goals, are not mutually exclusive: cruelly teasing another person might be an expression of dominance while being (one-sidedly) playful, or one could draw on his or her identity to persuade, for instance.

One interesting aspect of Hample's first-order frames is how they align relatively neatly with Dillard et al.'s (1989) secondary goals. The utility frame maps to resource goals (and often primary goals as well), the play frame may be part of arousal management, and the identity frame connects to identity goals. The dominance frame and interaction goals are the only aspects that do not align particularly well between the two typologies, especially in that attempts to dominate are often poor ways of maintaining or attaining interaction goals. Still, Hample's frames, such as they are intended to represent arguers' perceptions of what they are doing in arguments, seem to fit well with the ever-present secondary concerns Dillard discusses and thus provide a reasonable encapsulation of the range of possibilities for argumentative domains.

I should note here that, though I will henceforth be using "frame" and "domain" to mean "argumentative contexts subdivided by goal" (persuasion, inquiry, dominance, identity, or play),

they are not quite synonymous, at least in the way I will be employing them. A *frame* (in Hample's first-order sense) refers to an arguer's perception of *his or her own goal(s)* in an interpersonal argument, whereas a *domain* refers to an arguer's perception of what a *currently considered interpersonal argument* is trying to accomplish. Frames may thus take into account personal goals that are not yet apparent in the argument (e.g., "Next time I see this person, I really want to see if I can get them to be my workout buddy"). Domains take into account what *dyadically* seems to be going on: rather than asking "What am I trying to do here?" they answer the question "What does it seem like *we're* trying to do here?" A person may thus be able to respect the rules of a domain while being in a different frame (e.g., listening to a crush's stories about trouble at work while looking for an opportunity to ask them out on a date).

The one modification I will make to Hample's list of first-order frames (and hence, possible argumentative domains) is to subdivide the utility frame. The utility frame was intended as a sort of comparative default for arguing against which play and identity could be measured (Hample & Irions, 2015). In the wealth of existing literature on utility arguments, several scholars have pointed out a number of different types. One of the most exhaustive taxonomies is that of Walton (1998), and I will separate utility into two categories he discusses: persuasion arguments and inquiries.

So this brief history has brought us from the invention of formal logic to contemporary theories about argument in use. We have seen a movement from propositions to people, from validity requirements to personal goals. This dissertation is oriented to argument₂, argument goals and domains, dialogic encounters, and interpersonal interaction. In all this, I seek to create a useful system that accounts for how individuals effectively navigate interpersonal arguing and judge their experiences.

The Present Issue

The argumentative domains have received far from equal treatment in the literature. The dominant paradigm of argument analysis is centered on the utility argument—and persuasion in particular—with only a few studies dealing with identity and play in much depth. The conclusion of Hample and Irions (2015, p. 413) provides a striking passage regarding the implications of this focus:

One of this paper's reviewers made an interesting point to the effect that frames research may have implications for how arguments should be evaluated. Our community standards (often acceptability, relevance, and sufficiency) were developed in view of arguments intended to resolve controversy or settle epistemological questions. But if an argument is intended to display identity, to participate in an entertaining exchange, or to assert dominance, should we apply the same assessment standards? On one hand, identity and dominance arguments have conclusions ... and these need a defensible illative core in the same way that a utility argument does (cf. Johnson 2000). However, an identity argument's evaluation should surely involve standards about what identities ought to be projected ... and what the social implications of those identities might be. Similarly a playful argument should be assessed for the enjoyment it produces, and a dominance argument for its forcefulness.

In short, the focus on utility arguments has led to developed standards of argument evaluation that proceed from the assumption that all arguments are utility-oriented. But they are not, and other argumentative domains (identity and play) have enough differences from the utility framework (e.g., absence of fundamental controversy) that application of utility-oriented standards to their evaluation seems dubious, or at least hasty.

Walton (1998) had a similar realization. He argued that application of one of the most common standards of argument quality in argumentation studies—the informal fallacies—must vary depending on the argumentative context. In his schema, what constitutes a fallacy depends on whether the argument is an eristic quarrel (or in the dominance frame, to use Hamble’s term), a deliberation, an information-seeking dialogue, a critical discussion, etc. For instance, a threat (*ad baculum*) is legitimate in negotiation but fallacious in inquiry. The fallacy literature is well-developed and all of Walton’s dialogue types (with the exception of quarrels) remain utility-oriented, yet the need for contextual variance in the standards of soundness persists. As identity and play arguments bear striking differences from utility arguments in content, form, and the evaluative mechanisms of the ordinary arguer, it stands to reason that any sort of evaluative system for them likely should have at least some differences from that of utility arguments. This should be so regardless of whether such arguments appear purely or only as modifying aspects of more familiar persuasive or investigative arguments.

In the present research, I aim to develop just such a system. Many routes and perspectives may be taken to undertake such a project. For my purposes here, I have elected to take the route of elaborating upon *argumentative norms* for identity and play arguments, as well as persuasion and inquiry. In the next section, I will discuss what an argumentative norm is and three reasons I find a norms-based approach to argument evaluation promising.

The Theory of Argumentative Norms

Conceptualization

An argumentative norm is a social norm that is specific to arguing behavior. Social norms are cultural conventions that are representative of behavior in a certain social domain or set of domains. The conception of norms may vary somewhat (Cialdini et al., 1991): they may

represent what is seen as the optimal behavior in a certain situation or merely be more descriptive of typical behavior regardless of its perceived value or quality. They may include proscriptive rules or conventions to follow and/or warnings against other behavior (Triandis, 1994). It is both socially normal to greet your friends when you see them and *not* to scream insults at them.

Dialogic arguing, defined as “argumentative conversation” between two individuals (Hample, 2018, p. 179), as with any interaction, is social. And argument as I have defined it is certainly something that almost any mentally fit individual will partake in with regularity, accumulating a wealth of social experience around the activity. This experience accustoms the individual to the sets of norms that surround arguing and helps guide the individual’s future argumentative tactics.

This insight is shared by Burgoon (1978) in developing Expectancy Violations Theory, which has many parallels with the framework I will soon lay out, chiefly because our expectations are often closely aligned with the norms we register. This theory holds that social experience accustoms individuals to expected behaviors that are situationally specific. We have social scripts of sorts for teaching our classes, ordering at restaurants, going to movie theaters, attending sporting events, etc. These scripts both set our expectations for how others in the activity with us should be behaving, and how we should be behaving. These can sometimes be the same (e.g., two friends conversing over a shared hobby) or different (e.g., customers and employees) (Houser, 2005). If expectations are met, then individuals are seen as behaving in socially appropriate ways; if they are not, then they are seen as deviant. To the extent that the interaction has some sort of impact on the future, these judgments of normativity influence individuals’ ability to be rewarded or punished (e.g., Nicholls & Rice, 2017).

The Theory of Argumentative Norms is, at least partially, an expectancy violation theory for interpersonal arguing. It holds that, like the discrete situations mentioned in the preceding paragraph, arguments that exist in different domains carry different scripts—different sets of expectations of what is normal. Play and inquiry may have different norms and therefore different expectations. These norms become salient in guiding the argumentative behavior of an individual, and his or her expectations of the other actors in the argument², when the individual perceives a particular domain is on the argumentative floor. The ability to meet these domain-specific expectations will thus allow arguers to move toward more positive argumentative outcomes, whereas arguments that violate the domain-specific normative contexts will more often meet negative outcomes. Expectancy violations theory allowed for the possibility of an expectancy violation being a positive event (e.g., an attractive person being friendlier to you than expected), but this theorizing required moderating conditions to be specified. I believe the Theory of Argumentative Norms to accommodate norm violations similarly, but investigating these moderating conditions is outside the scope of the present project. At present, the theory will satisfy itself with predicting negative results for norm violations.

Norms are in service of outcomes. Arguments have quite important consequences, both positive and negative. They constitute a significant portion of our interpersonal exchanges, and they are thus of considerable importance to our building and maintaining good relationships with the people around us. In addition, of course, many arguments have the potential to assist us in getting things we want (again, the *utility* frame). Further, the fact that the lay connotation of the word “argument” is so negative is because interpersonal arguments are liable to end up in hostile, counterproductive places if not conducted with care and consideration. These frustrating sorts of episodes can sometimes significantly weaken or end relationships; keeping arguments away from

these spirals is itself an important goal to strive for. Interpersonal arguing clearly can lead to important social outcomes for individuals, both positive and negative, and it is my contention that the attainment of these outcomes is highly intertwined with an individual's awareness of and ability to conform to argumentative norms.

The primary concern of the present research is to explicate sets of these argumentative norms and subsequently test out a) if they actually are used in everyday arguments and b) what effects norm violations actually may carry. I say sets, plural, because the differences between persuasion, inquiry, identity, and play arguments demand independent normative criteria. This is not to contend that argument goals are not the only shaper of norms: argumentative traditions vary across culture, for instance (e.g., Katriel, 1986; Ellis & Maoz, 2002). One might also speculate that argumentative topics are themselves shapers of even more specific norms: for instance, we often hear the maxim to never discuss politics or religion with those who disagree or may disagree with you. Still, though domain-specific norms will not capture all possible argumentative norms that may exist, the frames' reflection of an individual's mindset—what arguers think they are doing while they argue—provides a robust base for understanding the situational expectations they bring to the argumentative experience.

Advantages of the Norms Framework

The norms framework has three particular advantages for this project. First, its base in the perspectives of ordinary arguers reflects their typical argumentative judgments, which determine argumentative outcomes. This is an essential vantage point for study of what is a *social* activity. Second, compared to typical formal and informal accounts of argument soundness, the norms account better for the provisional judgments we make in interpersonal argumentative contexts. Finally, the norms provide guidance for both the relational and content levels of arguing

(Watzlawick et al., 1967), as opposed to focusing exclusively on the latter. In this section, I will discuss each of these three advantages.

Norms Reflect Social Judgments

The first strength—that the norms approach is grounded in the norms of ordinary arguers rather than a more external and critical view—may initially seem like a weakness. We may worry that the norms are conventionally valid, to use the pragmadialectical terminology, but not problem-valid. *Conventional validity* is a concept in pragmadialectics that refers to whether ordinary arguers view a certain prescribed argumentative rule or practice as good (van Eemeren et al., 2009). It is distinguished from *problem validity*, which is the *critic's or theorist's* perspective on whether that rule or practice is good. It is possible that certain argumentative tactics or behaviors may actually be effective but poorly understood or undervalued by ordinary arguers (thus problem-valid but not conventionally valid) or vice versa (e.g., crying to get your way might be understood as effective but still contraindicated by argument theory). Most previous theories of argument evaluation have naturally sought some variant of problem validity without much concern for conventional validity.

Still, in the Theory of Argumentative Norms, conventional validity takes on heightened importance. The idea of social norms of arguing (especially on the relational level, which is much of the uniqueness the theory has to offer) only works as an effective guide to arguing if the norms actually *are socially typical and/or approved*. If arguers meet the social expectations of interpersonal arguing, they improve their chances of the argument staying on track and reaching its goal(s), both individual and dyadic. Again, arguments have important outcomes and consequences on a day-to-day basis for individuals, and understanding how these outcomes can

be optimized thus takes on considerable importance. If this is not the case for some of the to-be-hypothesized norms, their argumentative utility would be in question.

We may further worry that the emphasis on ordinary arguers' norms will prove too permissive, in that ordinary arguers often lack basic arguing skills (Kuhn, 1991), and anyone can think of many well-received advertisements, political speeches, and interpersonal arguments that have contained overtly fallacious and/or problematic displays. But ordinary arguers have at least some ability to make judgments that match those of good critics. This, of course, does not mean they are perfect arbiters, but that the assumptions about their faults often stem from concerns unrelated to the scope of the present research.

Consider the idea of fallacies. Fallacies, in a particularly basic conception, are arguments that seem persuasive but actually are not sound. Based on this description, we might immediately come to two impressions about fallacies: a) they can easily serve deceptive purposes and b) it may take considerable scrutiny to detect them. These impressions are generally correct. However, the deceptive, non-scrutinized scenario we may worry about largely comes forth in mass communication, not interpersonal communication. We may appropriately worry that advertisers, politicians, news agencies, and journalists may sneak fallacies by us, because our attention is focused on something else, our investment in processing the message is low, and it results in something analogous to "peripheral" (Cacioppo & Petty, 1984) or "heuristic" (Chaiken et al., 1989; Liberman, & Eagly, 1989; Evans, 2003) processing.

Such a scenario manifests itself far less in interpersonal arguments, however. Typically, when we decide to engage in an interpersonal argument, we either care about the topic being argued about or the person(s) we are arguing with. This results in a deeper analysis of the

arguments being presented, and when we are invested in this way, fallacies are not particularly difficult for ordinary arguers to spot (Bizer et al., 2009).

Moreover, though ordinary arguers' conception of the word "argument" has diverged sharply from that of argumentation scholars (Martin & Scheerhorn, 1985), there is little evidence that ordinary arguers have a sharply different view of what constitutes good or appropriate argumentative content. Not only are they generally able to spot fallacies when they are invested in processing the argument, they also find van Eemeren and Grootendorst's (1984, 2004) pragmadiadialogical rules to all constitute appropriate and valued argumentative behavior (van Eemeren et al., 2009). While ordinary arguers may not always conduct *themselves* appropriately, it at least appears that they have reasonably accurate judgment in how they would like *others* to act.

Norms Reflect Provisional Inferences

The second advantage of a norms-based system is that it accounts for the stream-of-consciousness nature of arguing and reasoning in real time. Mercier's (2012) work is foundational in guiding this particular point. He notes that when individuals argue, they often begin with their claim and then look for reasons to support it. This search for reasons--which, given the norms of interpersonal dialogue, tends to be quite abbreviated in discussions--is governed not by argument *quality*, but by argument *accessibility*. The most accessible reasons we might have are not necessarily our best ones, especially if we have never argued about the topic before. Glassner et al. (2005) found that participants rated evidence as more persuasive than explanations, but still generated more explanations than evidence when attempting a proof task. An individual may have, e.g., seven reasons that support his or her claim but present them

in a seemingly random order; it may be that the fifth reason offered is the one that is strongest and finally proves persuasive.

Arguers are aware of this argumentative rhythm. We do not hear the first reason an arguer offers, evaluate that reason as weak or invalid, and then immediately assume the arguer's claim is invalid and that he or she has no case. We rebut the reason and then offer the arguer the opportunity to bring forth the next most accessible reason. This process is governed by what Ohm (2005) termed *provisional inferences*. When we evaluate arguments, we do not arrive at hard, inflexible conclusions: we make provisional ones based on what we know and make allowances that there may be contradictory evidence.

These provisional inferences are important in distinguishing how individuals evaluate everyday dialogic arguments as opposed to monologic, written, or mass arguments. Monologic arguments, e.g., a political speech or an op-ed, generally are thought out and prepared, and we can thus assume that their creators have generally selected for argument quality. Therefore, it makes sense that we can evaluate their argument quite critically on its face. If a monologic argument is fallacious or ill-founded, chances are quite high that its conclusion is problematic. However, in interpersonal arguing, we understand that often individuals are just forming their arguments as they go. An individual may state a fallacious argument simply because he or she has not quite thought through it. In this case, we may rebut the argument or at least express that we are unconvinced, but we do not assume that the claim is unsupportable--we simply invite the arguer to find another, better reason. If he or she cannot, only then do we conclude the argument lacks merit. Argument evaluation methods that move to criticize each reason presented in an argument thus somewhat miss the point in interpersonal dialogue. Given the reality of argument production, arguers will not always be able to present the best reasons first, nor should we expect

them to. Rather, two other things may derail an argument from reaching its goal. The first possibility is that the argument will not be accepted once all of the arguer's reasons have been exhausted. The second is that the argument contains some sort of normative violation that throws the argument into more of a dominance-oriented quarrel, frustrates or confuses the other arguer, or causes the other arguer to withdraw. As the latter possibility looms large, ascertaining what sorts of norms there are, what sorts of norm violations there are, and what impact such violations have, is of considerable importance to understanding how argument goals are met or not.

Though a set of norms can be developed for inquiries and persuasion dialogue, and I do so in this project, this is not the main contribution the norms theory has to offer—plenty of work has been done on evaluating these, and I do not wish to do much beyond adapting that work to the normative framework I propose. The main addition here, other than the overall framing of expectancy and domain-specific norms, is that of adding the normative system—or any system of evaluation, really—for identity and play arguments. And this leads me to the third advantage of such a system: it works especially well in identity and play contexts.

Norms Account for Relationally-Oriented Arguing

Arguments operate on both content and relational levels, regardless of frame or domain (Watzlawick et al., 1967). For instance, if two friends are discussing who they expect to win the Super Bowl this season, they both want their arguments to be heard and understood as they were intended (content), but they also want to collectively enjoy the discussion about a mutually interesting topic and maintain or strengthen their friendship (relational). However, because previous argument evaluation systems have assumed purely utilitarian purposes for arguing, they placed the content level above the relational level in terms of importance. In persuasion dialogue, the primary question these systems asked was “Did the right argument win?” In inquiry dialogue,

the primary question they asked was “Did the arguers find the best answer?” If arguers, for example, avoid fallacies or follow pragmadialectical protocols, they optimize their chances of the best arguments prevailing. This is not to say that these protocols exist entirely irrespective of relational concerns--avoiding *ad hominem* attacks, for one, likely safeguards against escalation—but they do not care about the preexisting relationship between the two arguers nor its improvement or worsening following the argument. This relationship remains important, however, especially in personal-issue arguments (A. Johnson, 2000, 2002).

Though the emphasis on content goals in utility argument evaluation is of considerable value, such an emphasis need not be retained for identity and play contexts. Identity and play arguments need not proceed from a point of genuine controversy, and so the idea of the “right” arguments advancing and the “wrong” ones being discarded seems largely inapplicable. Rather, in identity displays, the goal seems to involve mutual understanding of the identity or identities being projected, and in play arguments, the goal is mutual enjoyment regardless of content. These goals sit more on the relational level than the content level, and in order to arrive at a system that can evaluate behavior toward these goals, we must consider relationally-oriented behavior more explicitly.

In sum, a system of argument evaluation based on argumentative norms boasts three primary advantages: it reflects the judgments of ordinary arguers, it accounts for how individuals process everyday arguments in face-to-face discussions, and it equips us to investigate the relational level as well as the content level of meaning.

The Argumentative Norms

With these advantages in mind, I will turn to proposing the argumentative norms themselves. I will discuss one universal norm—frame synchronization—and then turn to

persuasion, inquiry, identity, and play individually, discussing the specific features and norms of each.

Frame Synchronization

The first norm of interpersonal arguing is

N1: Arguments should proceed with a common domain in the minds of all participants.

Perhaps the most important thing an arguer can do to ensure that an argument will proceed in a largely normative way, optimizing both content and relational outcomes, is to ensure that both (or all) arguers are approaching the argument from the same frame (for my purposes, I will consider inquiry and persuasion to be separate “frames,” even though Hample does not distinguish them), thus allowing the overall argument to proceed consistently within a particular domain. It is easy to see how, e.g., if arguer A is being playful and arguer B is attempting to persuade A of something, both could see each other’s statements as irrelevant and disruptive. Likewise, one-sided teasing may fulfill a play objective of A, though its ostracism of B is clearly neither socially normative nor relationally profitable. This extends the analysis of Walton (1998): as noted earlier, he pointed out many instances in which a certain statement or tactic is acceptable in one dialogue type but problematic in another (e.g., bargaining in negotiation but not persuasion).

Often, both arguers may enter the argument with the same frame in mind, so synchronizing the frames may not take any effort. However, it is natural that individuals in a conversation may begin with different goals in mind, or a different goal may enter into one’s mind midstream, creating a frame conflict. For example, an arguer might put forth a statement intended to persuade the other, but the other may reject the persuasive attempt with an identity appeal. There is no one best way to figure out how to proceed from this; possible negotiation

about a mutual definition of the situation is outside the scope of this project. For best practice, arguers should both be clear about their purposes and be aware of the potential for differing mindsets. If a conflict of frames is discovered, the arguers should work out if both threads should be pursued, and if so, in what order to resolve them or whether they can be pursued simultaneously.

Walton (1998), though he was dealing with dialogue types instead of frames, recognized a similar idea as an area of concern. He noted the propensity of dialogic interactions to change forms rapidly, either resulting in *shifts* or a sort of *mixed discourse* that blends different dialogue types together. Sometimes, Walton argued, these shifts are acceptable and even necessary. If a couple is negotiating their weekend plans while driving and suddenly realizes they are lost, figuring out proper directions to their destination naturally takes some precedence over the negotiation. Still, Walton argues that other shifts are “illicit” (pp. 201-202); they are intended to distract from the original purpose of the argument. Interpersonal arguing inherently involves commitment, not just to specific ideas but also to a particular type of dialogue; once an arguer has agreed to participate in a certain type of argument, this commitment should stay (Hample, 2018) unless a licit shift arises.

The major effect of this synchrony norm is that it establishes argument, regardless of domain, as a normatively cooperative activity. As such, the dominance frame is excluded from the normative framework I am proposing; it will need to be theorized in a unique way sometime in the future. We may seek to persuade, and sometimes to be persuaded; we may seek to inquire; we may wish to display our identities or learn about those of others; we may wish to play, and indeed, we may wish to argumentatively dominate another person. But in most situations, certainly in Western contexts, we never seek reciprocation on this last possibility: we do not

want to be subjected to an argumentative evisceration. Such an interaction, if it were to be legitimate (as opposed to the idea of lamination, which I will discuss later), would result in a loss of face, an undesirable personal outcome (Goffman, 1967). Further, when a dominance attempt occurs, a natural reaction is to push back, and the conflict may escalate in a decidedly non-normative and undesirable way. “Shifts that go from another type of dialogue to a quarrel are always dangerous, and often illicit” noted Walton (1998, p. 202). It may be possible for there to be such a thing as a normative dominance argument, but a more thorough exploration of that question is outside the scope of the present project.

Overall, for an argument to proceed in a way that allows it to meet its goals, both arguers must see the conversation in the same way, or at least have a generally similar view about what the argument experience will be. If their views are divergent enough for their goals to be incompatible, the argument naturally leads to frustration, misunderstanding, and general inefficiency. In some sense, frame synchronization is a precondition of both arguers participating in the same activity. Therefore, it serves as both a general argumentative norm and a guide to some of the domain-specific norms, which I will now proceed to.

Norms of Persuasion Argument

Perhaps the most natural, and certainly most considered, purpose of argument is persuasion (Mercier & Sperber, 2011). A persuasive argument occurs when one or both arguers have arguments₁ they wish to advance and convince the other arguer to accept (and perhaps act on). Persuasive arguments naturally have two sides: they may be opposing (one arguer making a case and the other advancing an opposing case) or one-side-and-neutral (one arguer making a case and the other weighing whether to accept it) (van Eemeren & Grootendorst, 1984). In order

to meet the goal of persuasion, one arguer need not fully prove a case: he or she merely needs to meet the other arguer's sufficient standard of proof (Walton, 1998).

Normative systems for persuasion dialogue have been fairly well-explored, and thus the work of deriving reasonable argumentative norms for this sort of argument has largely been done. To take a quite rigorous and sound example, perhaps the most advanced normative persuasion system is the ten pragmadialectical rules of van Eemeren and Grootendorst (1984, 2004). These rules lay out ideal conduct for a critical discussion, which is a sort of idealized form of persuasive argument. Critical discussions themselves are quite rare in everyday argument and would be challenging to hold with any sort of consistency. Thus, Walton (1998, pp. 47-48) notes that not all ten rules of critical discussions apply to the broader category of persuasion dialogue. However, he submits that five of them retain applicability to persuasion in general:

N2: Parties must not prevent each other from advancing standpoints or casting doubt on standpoints.

N3: A party's attack on a standpoint must relate to the standpoint that has indeed been advanced by the other party.

N4: A party may defend his [sic] standpoint only by advancing argumentation relating to that standpoint.

N5: A party may not regard a standpoint as conclusively defended if the defense does not take place by means of an appropriate argumentation scheme that is correctly applied.

N6: A failed defense of a standpoint must result in the party that put forward the standpoint retracting it and a conclusive defense in the other party retracting his [sic] doubt about the standpoint.

To put these more plainly, arguers must let the other person talk, stay on topic, use actual arguments₁, cannot claim victory prematurely, and must be willing to concede defeat in the face of a good argument. The first and last of these prevent the persuasion argument from turning into win-at-all-costs dominance. The others assist in keeping the argument progressing forward toward some sort of conclusion—arguers must supply evidence and address the topic rather than deviating, filibustering, or refusing to supply any sort of backing. These are all basic principles, and adequately serve as a normative framework through which to evaluate everyday persuasion arguments.

Beyond this distilled pragmadiialectical framework, there is one other issue to consider in persuasion dialogue. This is the issue of personal-issue arguments (A. Johnson, 2000, 2002). These are arguments that concern topics about the relationship between the arguers (e.g., “should we go on a trip this summer?”), rather than public issues, which do not depend on the nature of the relationship between the two arguers (e.g., “does the county really need to build two more public schools this year?”). Given this topical context, premises in these personal-issue arguments may have more to do with the relationship than any sort of objective truth, even if the relational meanings are buried below the apparent content issues. Consider the following argument:

A: Going to San Diego for this expo would be a once-in-a-lifetime experience for me. All I need is a ride to the airport. It’s only 45 minutes away. Can you drive me?

B: Um...I’m not really sure. I might have other plans that afternoon.

A: But I really can’t afford to miss out on this! It would mean so much to me.

B: Yeah, I just don’t think I’m going to have the time.

Which side deserves to win the argument? It's not clear, because it entirely depends on the relationship between the arguers. If A and B are complete strangers, A's request, while perhaps excusable given the evident desperation, is a significant ask—we do not typically drive strangers to distant airports. B's refusal is thus acceptable and probably expected. If A and B are romantic partners, however, B's prioritization of a free afternoon over A's once-in-a-lifetime opportunity seems callous and a telltale sign of a lack of commitment.

Thus, our statements in personal-issue persuasive arguments often shed light on our priorities. These statements become problematic if they imply these priorities are not normative for the relationship type. Thus, an additional norm of personal-issue arguments is:

N7: In personal-issue persuasive arguments, statements should imply a reasonable set of relational priorities given the relationship.

This leaves us with six norms of persuasion: the five adapted from the pragmadialectical rules (N2-6), and N7, which is more specific to personal-issue arguments. As I have mentioned earlier, the pragmadialectical rules have received some conventional validation (van Eemeren et al., 2009), so in the persuasion domain, I intend to extend this finding and add N7 to the mix to account for the different sorts of evaluations that go on when personal issues are at hand. Further, I will explore the particular effects each of these violations has on the argument and its fallout.

Norms of Inquiry

Like persuasion dialogue, inquiry dialogue usually centers around a specific content issue, and the goal of it is for the arguers to arrive at a shared understanding of the truth, or the best answer they can come to about that issue. The key distinction between inquiry and persuasion is that in inquiry, neither arguer begins with a position that he or she wishes to advance. Instead, both arguers work cooperatively to find the optimal answer to the

argumentative problem. It is useful to think of inquiries as motivated by “information problems,” to use Marchionini’s (1995) term. These information problems are characterized as “defects in one’s mental models” (Marchionini, 1995, p. 35) in a particular domain of interest—insufficient knowledge or some sort of logic gap. Dialogic inquiries are thus stimulated when the arguers perceive an information problem in a domain of personal relevance to them.

Walton (1998) classified inquiries as one of his dialogue types. He characterizes information-seeking as a separate dialogue type, but for the purposes of the present research, I am collapsing the two together, much as we can group some of Walton’s other types under the persuasion umbrella. Walton (pp. 69-70) notes that inquiries are characterized by an information-collecting phase, where all the arguments for or against are collected, followed by a phase in which the information is organized and analyzed to reach conclusions. As in persuasion, bad arguments are discarded as the inquiry proceeds, with the superior ones being retained. However, in inquiry, the arguers collaboratively decide on which reasons are good, and due to the concerted effort in collecting all of the available evidence, more reasons are sifted through-- conversely, in a persuasive dialogue, as soon as a single reason proves persuasive, the episode may conclude.

Walton stated that the most defining attribute of inquiries is that of progressive commitment—that once an arguer has committed to a certain premise being true, he or she does not retract that commitment. This encourages efficiency in argument, because old ground does not need to be surveyed repeatedly. Over the duration of the argument, the idea is that commitments increase until eventually the correct answer is reached. Walton terms this process *cumulativeness*. He states: “It is important to emphasize that cumulativeness is a property of the goal of the inquiry as an ideal model of argumentation. This does not mean that retraction of

commitments never happens in argumentation in an inquiry. It only means that the goal of the inquiry as a type of dialogue is to minimize or, if possible, eliminate retractions” (1998, p. 70). As with the pragmadialectical rules, this passage directly connects the ideal (never retracting, in this case) with the norm (generally minimizing retraction). Retraction may sometimes be inevitable if an individual generally realizes a previous error or notes contradictory evidence, but it should not be done carelessly, or else the inquiry may not proceed efficiently or effectively. Thus, the first norm of inquiry is:

N8: Arguers should seek to preserve their commitments as much as possible.

An outgrowth of cumulativeness is that the arguers in an inquiry should consistently improve their collective knowledge as the inquiry proceeds. Either new evidence is being found, or the arguers are making new sense of the evidence they have on hand. But this is a structure that has to develop over a period of time. Evidence must be gathered and sifted through before judgments can be made. As such, a second norm of inquiry is that arguers do not abandon the inquiry and quickly reach conclusions on the issue before an appropriate amount of evidence has been gathered. Not only might such a conclusion be hasty and incorrect, but it would turn the arguer’s role into more of a persuasive one, thus potentially throwing the argument out of balance (violating N1) and causing confusion. Certainly, arguers make provisional inferences—if the first two points of evidence found point in the same direction, we begin to think that direction may be the best one—but abandoning the inquiry outright in favor of a persuasive goal remains problematic even in these cases. Thus,

N9: Arguers should allow evidence to accumulate before making decisions on it.

Walton also provided another useful passage in determining the norms of inquiry. He states that “[w]e can never have circular reasoning, in the sense that an argument proceeds from

a set of premises to a conclusion and then loops backward using that conclusion as a premise to argue back to one of the initial premises again...circularity is the very thing the inquiry is specifically designed to exclude” (1998, p. 75). Much like the discouragement of retraction, the ban on circular reasoning is designed to reinforce the cumulating process of inquiry. Thus,

N10: Arguers should avoid circularity.

Thus, inquiry involves three domain-specific norms. N9 augments the frame synchronization norm in that it guards against the inquiry turning into a sort of persuasion dialogue too quickly, while N8 and N10 are focused on making the inquiry productive, increasing the evidence on hand and making progress toward decisions.

Norms of Identity Argument

At this point, we leave the standard grounds of argument evaluation, centered on persuasion and inquiry, and move to kinds of argument for which scholars have not yet developed normative criteria. The first of these is identity.

Identity arguments are those put forth for the purpose of expressing one’s identity or emotion. It may be tempting to view identity displays as non-argumentative and in an entirely separate category of interaction. However, identities may often loom so large in arguments that they are either the claim being supported (e.g., “I’m a huge Cleveland Browns fan; I just renewed my season tickets”) or the central reason an arguer asserts for a related claim (e.g., “As a good Christian, I cannot condone abortion”). These identity displays may arise in or around more traditionally utilitarian argumentative contexts, but such a context is not required for their existence, nor does the presence of one diminish the legitimacy of the identity display as an argumentative goal in its own right (Hampe & Irions, 2015). Understanding of identities is key to relational progress, and it is thus natural that individuals seek to disclose their identities, often

feeling the need to give evidence to better explain themselves. We can therefore expect that relational norms should be prominent in analysis of such arguments.

It is important to note that the sort of identity put forth may have major bearing on identity arguments. Self-categorization theory (Turner, 1975) and social identity theory (Tajfel & Turner, 1986) make an important distinction here—personal identities vs. group (or *social*) identities. Personal identities—identities that are simple attributes of a person (e.g., height, extraversion)—are often quite straightforward and non-controversial to express. Social identities, on the other hand, affiliate the person with a particular group (e.g., Black women, college professors, people from the suburbs, or fans of the Oakland Athletics). Claims of these identities make relevant identities salient in the minds of the recipient of the argument, which can elicit an intragroup conversation (both arguers identify with the same group) or an intergroup one (the arguers identify with different groups). Intragroup conversations can be important social bonding experiences, and intergroup ones can sometimes be positive learning experiences (e.g., getting to know what it’s like in Iceland from someone who has lived there) or highly conflictual (e.g., political arguments between liberals and conservatives). The potential for intergroup conflict (e.g., Paolini et al., 2010) is often driven largely by the resource competition among the salient groups. In general, I will be attempting to capture all sorts of identity arguments in this project, but as I noted elsewhere (Stoltz, 2021), these differing features have the potential to drive identity arguments into particularly nice or nasty places.

Hample and Irions (2015) provided the sole study to date on identity arguments, and offer further clarification on the features they have. Like inquiries, identity arguments are not centered on resolving disagreement, but rather in reaching a sort of common understanding. In this case, though, the understanding is not about the “right answer” to some question, but a relational

understanding of the projected identity or identities. Much like persuasion dialogue, identity displays can be one-sided (A projects his or her identity to B) or two sided (A and B discuss their differing identities, e.g., national heritages).

While persuasion dialogue and inquiry dialogue present fairly similar frameworks—multiple individuals attempting to arrive at a common understanding of or answer to an extant issue—identity arguments present more deviations. Most notably, they may lack an antecedent controversy. Certainly, conflicting or opposing identities may come up in an argument—but in these cases, the identity work often serves a secondary function to persuasive attempts and/or dominance displays. Arguments in which identity serves a primary function—put forth mostly to display one’s identity—may be advanced without extant controversy, and without the expectation of forthcoming controversy.

The first norm for identity arguments is:

N11: Arguers should only project contextually non-negative identities.

This follows from Hample and Irions’ (2015) analysis. Identities need not be bracketed only into strict “positive” and “negative” categories, but it is not normative for arguers to project identities that would be highly controversial or socially problematic to hold (e.g., abstaining from religious/political identities in conversations with strangers with opposing views; projecting problematic negative identities such as “I am a criminal”). When arguing in the identity frame, arguers project identities that they believe they can explain and defend, and that they do not expect to be met with significant pushback. Other identities (e.g., political affiliations) may of course be expressed in arguments, but these may often arise in more utilitarian contexts that drew them out rather than an explicitly identity-oriented display.

One might note that occasionally, arguers do express negative identities, especially in moments of crisis. “I feel like a complete failure,” one might say in a particularly trying time. This sort of expression seems to be in a different category than “I am a criminal.” There is a certain sort of time element going on in the former statement—we might perceive it as the person having a particularly bad day—whereas the latter does not seem subject to one’s state of mind to the same extent. As such, when someone says “I feel like a failure,” he or she is looking for the other arguer to say “No you’re not,” and reaffirm the *opposite* identity. “I am a criminal” (in most situations) does not seem to invite the same sort of response. Thus, negative identity expression may be acceptable in these certain instances, if the goal of the argument is identity *improvement* rather than simply identity *expression*.

The second norm of identity arguments is related to the first one:

N12: Arguers should not contradict or condemn the identity arguments of others, provided that the projected identity is non-negative.

Excepting the sort of cases described in the previous paragraph, when an arguer expresses an identity, he or she expects the identity to be affirmed. Contradicting an expressed identity would likely activate ego-defense mechanisms, which trigger negative argumentative outcomes (e.g., Schmeichel & Vohs, 2009, Sherman & Cohen, 2006). An arguer may express something of a contrast in identity; if one arguer has just discussed his or her identity as a Canadian, the other may reply by contrasting the expressed Canadian identity with his or her American identity, for instance. The other arguer also might explain *why* he or she does not hold the same identity expressed by the first person: “That’s interesting. I just can’t get into that TV show because...” Both of these express some contrast and may not explicitly share values, but they do not give rise

to any sort of conflict; they are not condemning the expressed identity or charging that the arguer does not actually have the expressed identity.

The final norm of identity arguments is:

NI3: Arguers should engage in therapeutic listening in response to identity arguments.

Therapeutic listening is a specific sort of listening that is non-critical in nature. Wolvin and Coakley (1996) listed several facets of therapeutic listening: focusing attention, actively demonstrating this focus, being supportive and empathetic, and responding appropriately. It is this framework that helps guide responses to individuals who need to use others as sounding boards or get through a crisis.

We most often think of therapeutic listening, as the name implies, with formal therapy and its attendant purpose: sorting through and improving issues. But therapeutic listening need not only apply to such crises, and it indeed extends to identity arguments that do not center on a personal stress or problem. Individuals express their identities often as a form of self-disclosure, helping to deepen relationships. When we express our identity, we want the other arguer to understand something more about us, whether it is a positive (e.g., a special talent) or negative (e.g., a pet peeve) aspect of ourselves, and take that into account in future interactions. This makes identity arguments a particularly self-centered domain (Hample & Irions, 2015). Given this self-centered orientation, we may want to be more closely listened to in these types of discussions than if we are merely offering an opinion on a public topic. If the other arguer diverts from the therapeutic listening norm, not actively paying attention or showing understanding, we may perceive him or her as not interested in us or in further building the relationship, which can be taken more personally than not paying attention to another sort of argument. After all, identity

arguments are essentially self-disclosure-as-argument, and self-disclosure is an essential process in relationship building.

N11-13 thus constitute three norms specific to identity arguments. Projected identities should either be positive or be negative identities the arguer is actually seeking to improve or have generously corrected. Identity arguments should also not be met with contradiction—differentiating them from persuasion—and the standards of listening are different, and perhaps higher, than for the other sorts of arguments.

Norms of Playful Argument

A second sort of argument that does not match the traditional concerns with persuasion and inquiry is the playful argument. These do not have serious persuasive aims, and do not necessarily aim at any resolution. Thus, different norms are expectable in this context as well.

Playful arguments are arguments undertaken for the purpose of amusement or recreation. There is not a specific case to be genuinely proven, a specific problem to solve, or a specific identity to project, or at least, none of these is required in a playful argument. Stoltz (2017) divided playful argument into two types: substantive playful argument, which consists of debate-like interactions undertaken for the purpose of enjoying the back-and-forth, and superficial playful argument, which consists of simple and often overtly silly or outrageous exchanges. While these two subtypes do not necessarily imply specific content, they do hint at two argumentative avenues from which people may derive enjoyment. First, the content of arguments may be overtly humorous (superficial play). Second, the argumentative exchange in itself may be enjoyable or be an energizing force (substantial play). The second will most likely only be possible for reasonably argumentative individuals, and indeed, argumentativeness explained nearly half of the variance in substantive playful arguing (Stoltz, 2017). Here we see social

activity being valued more than argumentative content, which will naturally point us to relational matters.

Hample et al. (2010) contributed the first quantitative study on playful arguments. The most overriding finding of the study was that playful arguing correlated strongly with verbal aggressiveness. Hample et al. thus concluded that playful arguing is merely a “lamination of the natural eristic strip” of argument. This view, which draws on Goffman’s (1974) concept of keys, holds that the natural state of argumentative behavior is verbal combat, and that people will use certain behavioral cues to “lamine” this behavior into something more interactionally functional. As a lamination of verbal combat, then, playful argument offers verbally aggressive individuals a chance to indulge themselves in a way that is less relationally damaging than following their base argumentative impulses. Though Stoltz’s (2017) follow-up study was less conclusive on the relationship of verbal aggressiveness and playful arguing, the idea of playful argument as lamination remains useful to the present research. Nevertheless, while the lamination analogy may connote playful arguing as highly similar to persuasion or perhaps even dominance, play, like identity, retains considerable differentiation from utility arguments.

A key difference between playful arguments and all other types of argument is the sense of timing associated with achieving the goal. In persuasive dialogue, the success or failure of goal achievement is determined solely by whether or not attitude and/or behavior change has been effected at the conclusion of the argument. Likewise, in an inquiry, goal achievement is determined by whether or not the inquiry is resolved at the end. Conversely, playful argument reflects on its goal continuously. To be sure, one may reflect on an entire playful episode and weigh whether it was enjoyable, but the statement-to-statement pressure on arguers to stay within playful bounds--preserving the lamination--is weightier than the pressure on any individual

reason in a persuasive dialogue, for example. At the same time, there is no ultimate end result that arguers work toward in playful discourse--the play exists on a turn-by-turn basis, not in a decisive end result. This evaluation by process over product gives playful argument a distinctly different flow than the other forms.

Though it is useful to think of playful argument as a lamination of eristic dialogue, it is equally important to note that this lamination is often thin—one-sided teasing, for instance, may be playful in form but dominating in effect. Even a well-intentioned playful joke may sometimes be taken as offensive. In cases like this, the lamination wears so thin that the other arguer ceases to perceive the argument as playful and instead takes it personally as a dominance attempt—the natural strip, as it were.

In light of problematic examples such as this, it seems clear that for playful argument to function in a non-damaging way, the lamination must be preserved. And since the pressure of meeting play goals rests on more of a turn-by-turn basis than a holistic one, that means the lamination must be *consistently reinforced*. While arguments are generally governed by provisional inferences about their conclusions, the non-conclusiveness of play arguments stimulates the possibility for any individual problematic statement to cast significant doubt on the entire lamination premise. An arguer need not be fully persuasive with every reason he or she offers in a persuasive attempt, but a playful arguer cannot afford to have one statement taken personally in an otherwise playful dialogue.

One of the content challenges of play arguments is that what counts as playful may vary between individuals and argumentative dyads. Highly argumentative individuals may view debating as fun, while low argumentatives may view it as stressful. Some individuals do not take offense at off-color humor, while others do. The ground from which play can be mined through

argument will thus be quite contextual. Given this, individuals are more likely to edit playful arguing impulses around individuals with whom they have not established argumentative rapport. Close friends, romantic partners, etc. who want to argue playfully may more often be comfortable engaging in playful arguments because they can rely on partner-specific scripts. Hence,

N14: Play must be adapted to both individual and dyadic preferences.

Still, playful arguments even in close relationships can quickly spiral into problems if the lamination is not consistently maintained and reinforced. Individuals may accomplish this through N15 and N16.

N15: Arguers should deliberately construct their statements in a way that implies they are not to be taken seriously.

This may involve comic exaggerations, tonal shifts that indicate sarcasm, or transparently outrageous statements (Hample et al., 2010).

N16: Arguers should actively show appreciation for the other's playful contributions, either by enjoying humor or responding in kind.

N16 may give many playful arguments a sort of “topping” character, where the arguments ascend to increasingly ridiculous heights, which does retain the “natural strip” character of verbal combat while clearly indicating none of the actual argumentative content is meant to be taken at face value as a legitimate persuasive message or identity statement.

Though the appropriate topical ground for play may be negotiated in a dyad over the course of the relationship, some topics are going to be generally safer and more normative than others. Established couples might even have “pet” play arguments, just as they develop other dyad-specific communication. In particular, personal issues have the potential to be taken more

personally than public issues, and thus they have a higher probability of leading to escalation. Even when an individual “plays along” (in accord with N16) with a playful personal attack, this serves a similar function as self-deprecation. Self-deprecation may be a useful argumentative strategy in places (e.g., Dewberry & Fox, 2012; Golato, 2005), but it also is associated with low self-esteem (Sciangula & Morry, 2009; Supple & Plunkett, 2011). Thus, personal attacks, even if playfully laminated, may contribute to low self-esteem, which may result in ego-defensive behavior either in the argument or later in the relationship. To whatever extent personal-issue playful arguments are normative, they demand a tougher lamination with particularly overt reassurance that the argument is not to be taken to heart.

The laminative character of play produces perhaps a more tenuous set of norms than those of the other three domains. Still, we can again see that N14-16 comment on argument production (N15), argument reception (N16), and overall argumentative context (N14). Again, the norms for play have little overlap with those of any other domain, marking it, like identity, as a sort of argument that is enacted in a strikingly different way from the utility frame.

Hypotheses

Validity of the Norms

An important goal of this project is to ascertain whether the argumentative norms I have proposed actually have conventional validity. Conventional validity has to do with whether social actors register and abide by the rules; in contrast, problem validity is whether or not they should. The case for problem validity is theoretical. How might we attempt to test conventional validity? I make two predictions that will be helpful in ascertaining whether ordinary arguers hold the norms:

H1: An argument₁ (embedded within an argument₂) that follows the norms of its domain will be seen as higher-quality than one that does not.

H2: An argument₂ will be viewed as a less pleasant experience if one of the arguers committed a norm violation.

These basically combine to state that norm violations create perceptual differences (in a negative direction) compared to arguments that stay normative, and that these affect both the argument₁ and argument₂. The reason H1 and H2 are split is that not all norms of argument₂ have to do with advancing arguments₁ (e.g., therapeutic listening, not preventing the other party from advancing standpoints). An arguer may not advance an argument₁ at all (e.g., by eye-rolling or frowning instead of smiling) yet still violate argumentative norms, thus affecting the argument₂.

Perhaps important to split somewhat apart from the other violations is that of frame synchronization. This is captured in H3:

H3: Arguments that contain norm violations will be perceived as more out of sync with the other arguer than arguments that do not.

Frame synchronization is reflected throughout the rest of the norms, and, as remarked earlier, is basic to the functioning of most of the other norms. One must know that an argument is playful in order to apply the play norms, for instance. In particular, in inquiry (not taking a position too early), identity (not contradicting or condemning an identity), and play arguments (nonseriousness), there are explicit norms that safeguard the argument from turning back to the “natural strip” of oppositional persuasion. Thus, frame synchronization is violated whenever these other violations occur. Other violations may not necessarily indicate an outright frame difference, but nonetheless may suggest a sync issue on some level (e.g., not listening therapeutically (N13) may indicate a lack of understanding of the identity arguer’s goal,

advancing persuasion unrelated to the other person's standpoint (N3) may indicate a lack of understanding of the other person's position. Feeling out of sync is frustrating, and may be a conduit to other negative outcomes.

Impacts of Norm Violations

As I have noted earlier, arguments always have both some sort of content goal and some sort of relational goal. Most prior systems of argument evaluation stem from the idea of argumentative validity. They ask, "Did the best argument₁ win the argument₂?" or "Did the arguers find the best answer to their inquiry?" Though I argued earlier that the focus on these questions has placed some limitations on much of prior argumentation research, the normative system that I have proposed must include some sense of what consequences arguers face when they violate norms.

The Theory of Argumentative Norms holds that arguments that avoid norm violations optimize their chances of attaining goals on both the content and relational levels. Thus,

H4: a) Arguers who commit norm violations will be seen as attaining their content goals less than arguers who do not. b) The same will be true with respect to relational goal perceptions.

On the content level, arguments assist arguers in either finding out new information or transmitting information to others. On the relational level, they give arguers content over which to bond, deepen the relationship, and better understand the other person. The sorts of questions discussed in the paragraph above concern themselves chiefly with the content level, but they *are* certainly the key questions to ask on that level. When we are evaluating the content level of an argument₂, the fundamental question is always if the arguments₁ in play met their deserved ends. Were they fully stated, were they fully understood, and was the proper decision made by both

arguers on whether to accept them? A system of evaluation on the content level should have criteria that, if followed, optimize the chances of these things happening, and if not followed, cast doubt on the ability of the arguers to reach these goals (though perhaps this possibility is not removed, as an arguer could, e.g., be convinced of the right thing for the wrong reasons).

The relational level has received considerably less scrutiny in argumentation studies, but the spectrum of possibilities is fairly evident. Arguments can go smoothly and without conflict, ultimately being a positive social experience, or they can devolve into something that resembles the layperson's definition of the word "argument" (Martin & Scheerhorn, 1985), which is highly negative in the moment and can also do relational damage.

Thus, when we look for the impacts of norm violations, three basic issues would be 1) the failure of the right arguments₁ advancing, 2) the argument turning into a quarrel/dominance attempt, and 3) the episode causing relational damage that persists into the future. A primary concern of this research is to ascertain which norm violations would lead to which of these outcomes, and with what frequency these outcomes would occur.

I have several predictions to offer in this respect. They are:

H5: Arguers who commit norm violations will be seen as worse future argumentative partners than those who do not.

H6: Arguments in which a violation is committed will be seen as more likely to escalate into quarrels than those that do not.

H7: Violations of the norms of inquiry and persuasion arguments will lead to more content-goal failures than violations of the norms of identity and play arguments.

H8: Arguments that include violations in the identity and play domains will be seen as more likely to lead to quarrels than those in persuasion and inquiry arguments.

H9: Arguments that include violations in the identity and play domains will lead to larger decreases in willingness to argue with the violating arguer in the future than those in the persuasion and inquiry domains.

H10: a) When frames are judged to be asynchronous in an argument, arguers in a persuasion or inquiry frame will perceive the primary implication of the frame sync issue to be on the content level. b) When frames are out of sync, arguers in an identity or play frame will perceive the primary implication of the frame sync issue to be on the relational level.

H5 and H6 state that all violations will have some effect on perceptions of possible escalation and future willingness to argue with a person. H7-H10 follow from the idea that content concerns lie at the forefront of inquiry and persuasion arguments, but relational concerns lie at the forefront of identity and play arguments.

It should be emphasized that the content and relational levels are not independent of one another, and thus failure on one level (e.g., a failure to persuade) is not necessarily irrelevant to the other level (e.g., a failure to improve a relationship). For instance, failure in persuading others can be frustrating and reveal value differences that hinder relational progress, and seeing an identity argument turn into a quarrel also makes it less likely that the identity was effectively communicated. And of course, our relationship with the other person has a significant effect on how worried we may be about the relational level of an argument in any domain. We may thus perceive the relational damage in a failed persuasive attempt with a romantic partner as more significant than that in a failed playful argument with an acquaintance. Still, the primary concern here is not the overall magnitude of the content and relational damage, since these are highly issue and relationship-specific. What the hypotheses above concern is the relationship of the

perceived content and relational damage to each other, and I expect this will track with the level the primary (perceived) goal works on.

Finally, I offer a single research question:

RQ: Do norm violations differ from each other in magnitude of effect or type of effect (other than the predictions made in H7-H10)?

The hypotheses, in general, state that normative arguing is always preferable to non-normative arguing. That is what the theory proposes. However, are some violations more harmful than others? Do some violations come with a very high likelihood of escalation, but a fairly minimal reduction in the other person's future willingness to argue? As I go through the data in later chapters, any notable violation-to-violation patterns will be of significant interest.

Summary

Interpersonal arguing is a ubiquitous activity in human life. Given its importance to ordering our social world, it has a number of effects. To date, argumentation studies has largely focused on only one: the effect of argument on public discourse. Relational and personal consequences have thus been under-considered, as have the domains of argument that most directly connect with these outcomes—identity and play. I believe the Theory of Argumentative Norms retains the progress scholarship has made in defining what sorts of argument characteristics lead to good public discourse, but also recognizes that these different contexts arise with considerable frequency, and provides guidance to the evaluation of discourse in these domains as well. In the following chapters, I test the theory to see if ordinary arguers seem to hold the norms and whether norm violations have tangible effects on argumentative outcomes.

Chapter 3: Piloting Measures and Noting Patterns (Study 1)

As I have outlined it, the Theory of Argumentative Norms makes several innovations in our understanding of interpersonal arguing. Naturally, to test whether the theory stands up to empirical scrutiny, some novel measures are required, as the norms and some of their hypothesized outcomes need operationalization. To that end, I undertook a pilot study to test out a possible way to operationalize and measure the norms and their effects, looking to see whether the norm-variable manipulations were effective and whether the outcome scales I developed were statistically reliable.

In particular, the hypotheses mention variables for which no suitable measurements exist. We need ways to measure both the immediate perceptions of arguments (quality and pleasantness), as well as argumentative outcomes (goal attainment, escalation, and future willingness to argue). In addition, the general research design in the dissertation is to use vignettes (because they conveniently allow manipulation of normative or non-normative arguing behavior) and ask respondents to give various reactions to those stimuli. These materials also needed to be developed to ensure that they were realistic, comprehensible, and successfully manipulated the different domain and norm specifications.

The two primary goals at hand were thus to develop measurement scales and stimulus vignettes, though the pilot process also allowed for some preliminary results to be collected, and thus some early returns on the theory's predictions.

Method

Procedure

The study consisted of an online survey administered through the University of Maryland Communication Department's SONA research system, in which students in undergraduate

communication courses participate in research studies in exchange for course credit. Permission was obtained from the Institutional Review Board to conduct the study and post it on SONA. The materials are to be found in Appendix A. The survey began with an informed consent form. If participants agreed to participate in the survey, they filled out basic demographic information (age, gender, year in school, ethnicity) and then were shown four argument vignettes, referred to as “dialogues” in the study so as to not invoke the lay connotations of “argument.”

There were 40 such vignettes—16 persuasion, 8 inquiry, 8 identity, and 8 play. Each participant was shown one dialogue per domain, selected randomly and presented in a random order. Each dialogue was given a number visible to respondents, 9-48, to emphasize that these were randomly selected and dispel any thoughts that there was some sort of temporal order participants were supposed to figure out (e.g., “Dialogue 1” being perfect, the conversations getting more outrageous as they go on, etc.). The “arguers” in the vignettes were given unisex names, with different names being used for each argument frame (thus, each participant would see the same four sets of names). It was not specified whether the vignettes were actual transcriptions of dialogues or constructed examples. All vignettes are in Appendix A.

As each argument vignette was on the screen, participants filled out a variety of scales about it. First, they filled out the scales for the norms of the relevant argument type (if it was a persuasion vignette, the persuasion norm subscales were shown, etc.). The N1 (frame synchronization) scale was shown for all vignettes. Participants were only asked about domain-specific norms rather than all norms for two reasons: 1) because many of them would not make sense in a different domain (e.g., asking if the play was appropriate in an inquiry, asking if the identity display was negative in a public persuasion argument) and would thus be confusing to participants, and 2) doing so would greatly increase the length of the survey and lead to a lower

response rate. After rating a vignette on the relevant norms, participants were asked to mark the vignette on the Argument Typicality Scale, Argument₁ Quality Scale, Argument₂ Pleasantness Scale, Argumentative Goal Attainment Scale, Future Willingness to Argue Scale, and Quarrel Probability Scale. All of these scales are novel and developed for this project, as detailed in the next section. Since the scales accounted for a large number of items in total per vignette, the survey would occasionally prompt the respondent (approximately every twenty-five items) to click forward to load the next set of items with the vignette reappearing at the top, so as to keep the vignettes easy to look back at.

Materials and Measures

Vignettes

To test out the 16 norms, a total of 40 argument vignettes were prepared. There were ten “normative” vignettes (i.e., no-violation conditions): two public-issue persuasion arguments, two personal-issue persuasion arguments, two inquiry arguments, two identity arguments, and two play arguments. Two vignettes per domain were tested rather than just one so that findings from this research could be generalized beyond a single topic. Each of the base vignettes was then altered to contain norm violation conditions, each with a single violation in them. These norm violation conditions could then be compared to the base conditions to test several of the project’s hypotheses. The public-issue persuasion vignettes thus had six conditions, each implemented for two different vignettes: no violation, N2 violation (suppressing dissent), N3 violation (off-topic objection), N4 violation (non-argumentative defense), N5 violation (claiming victory prematurely), and N6 violation (refusal to retract in face of good evidence). The personal-issue persuasion vignettes had two conditions: no violation and N7 violation (abnormal relational

priorities). The inquiry, identity, and play vignettes followed this pattern, with four conditions (eight vignettes) each: no violation and violations of each of their three norms.

The first set of personal-issue persuasion vignettes and the first topic for the public-issue persuasion vignettes were adapted from Hample et al. (2009); the others were developed from scratch for the present project. In all cases, the norm violations in the violation vignettes are committed by one of the two arguers, not both; the other arguer behaves normatively (i.e., avoids violations). The topics of the vignettes are presented in Figure 3.1 below.

Figure 3.1.

Topics and Implied Relationships in Vignettes, Study 1

<u>Domain</u>	<u>First Vignette Set Topic</u>	<u>(Implied) Relationship Between Arguers</u>	<u>Second Vignette Set Topic</u>	<u>(Implied) Relationship Between Arguers</u>
Persuasion (Public)	Library food and drink rules	College friends/acquaintances	Construction of a new shopping center	n/a
Persuasion (Personal)	Doing the dishes	Roommates	Weekend plans	Friends
Inquiry	Taking the same class	College friends	Buying mother's birthday presents	Siblings
Identity	Liking live music concerts	n/a	Volunteering at the library	n/a
Play	Baseball teams	n/a	Rock bands	n/a

Note. In the cases for which relationship cells are left blank (n/a), no particular relationship is implied from the context, but the casual nature of the arguments and specificity of the topics probably implied some sort of friendship.

The vignettes were constructed with a few guiding principles. First, I wanted to make the topics seem like fairly ordinary episodes. I did not want to make any particular identities salient in participants' minds or venture into highly conflictual ground (e.g., politics). Doing so might magnify the impacts of violations, but to have the most explanatory force, the theory ought to

apply to fairly mundane topics like these, not simply a subset of topics ripe for escalation and frustration. If violations in arguments about volunteering at the library or whether it's good that a shopping center is being built at a certain intersection stimulate negative outcomes, then the same is likely true in more controversial topics, but the reverse would not apply.

Second, I wanted to make the episodes seem fairly specific, rather than just generic dialogues. I wanted to make them seem like typical conversations in a college setting (i.e., no talk of mortgages), thus being somewhat familiar or relatable to undergraduate participants, without being directly analogous to particular conversations they had experienced. A few of the topics are college-specific, and the topics mostly are the sorts of casual things that normally emerge as banter progresses, and often are quickly moved on from.

Third, the vignettes were generally short—about four to six conversational turns for each arguer. This was for two primary reasons. First, I did not want to bore participants or overcomplicate their analysis: they had to read four of these and then answer a long battery of questions about each, and it is not easy to persevere through the long survey in the first place, let alone hunt through page-long vignettes to recall whether someone took a position too soon or went back on a commitment. I thus endeavored to keep the vignettes short to ensure data integrity. Second, I did not want the vignettes to resolve. If vignettes trace an interpersonal argument to its conclusion, they invite judgments based on that conclusion (Was someone persuaded? Did the inquirers find an answer? Did a fight break out?) and not the actual arguments₁ that were advanced. Further, the shorter the vignettes were, the easier it was for them to stay realistic. Continued violation behavior over several turns might come off as somewhat over-the-top, and it also becomes harder to keep the other (normative) arguer from commenting

on the violation as it persists. Keeping the vignettes short thus allowed them to retain their realism without the normative arguer calling explicit attention to the violation.

New Measures

A number of new measurement instruments were developed for the project. They also appear in Appendix A, following the vignettes.

First, in order to measure perceived normativity of the vignettes, I created the *Argumentative Norms Scale*. This scale measures how normative the respondent thought the episode to be, with distinct items for each of the norms. For example: “[Arguer] demonstrates to [other arguer] that [he/she] cares about what [he/she] has to say” for N13 (therapeutic listening); and “It doesn’t seem that [the arguers] get enjoyment from the same things” for N14 (appropriate playful ground). In most cases, the items in this scale refer specifically to the arguer who commits the norm violation. In a few cases, i.e., concerning norms that are explicitly dyadic (e.g., frame synchronization, dyadically appropriate play), the items instead refer to dyadic normativity. The scales regarding each norm were each measured by 6-item norm subscales, so the 16 subscales combined to produce an overall 96-item scale. However, no argument was actually assessed with the full 96 items: persuasion arguments were evaluated with the N1-N7 subscales (42 total items), inquiry with N1 and N8-N10 (24 total items), identity with N1 and N11-N13 (24 total items), and play with N1 and N14-N16 (24 total items). Each norm subscale was regarded as a separate measure.

To ensure that the vignettes seemed realistic, I developed the seven-item *Argument Typicality Scale*. This scale measured how typical the interaction was deemed to be (e.g., “This interaction seemed normal to me.”). This is important to ensure that the vignettes are perceived as realistic and do not seem like intentional manipulations designed to elicit certain responses.

The hypotheses also call for evaluation of the quality of arguments₁ and pleasantness of arguments₂. To operationalize the quality of an argument₁, I used a modified version of Zhao et al.'s (2005) scale, creating the five-item *Argument Quality Scale* (e.g., “[Arguer]’s argument seemed weak.”). For arguments₂, I created the eight-item *Argument Pleasantness Scale* (e.g., “It would be nice to take part in an interaction like this one.”).

To measure some of the functional impacts of norm violations (the topic of chapter 6), I created three additional scales. First was the 14-item *Argumentative Goal Attainment Scale*. This had content and relational subscales, each with seven items. For example, “I think [arguer] generally got their point across” for content, and “The participants in this episode would probably be excited to interact again” for relational. Second, I developed the 6-item *Future Willingness to Argue Scale* (e.g., “I don’t think I would want to have many future encounters with [this person]”). Finally, I wrote the 6-item *Quarrel Probability Scale* (e.g., “This interaction would likely escalate from here”).

Like the Argument Norms Scale, the Argument Quality Scale, the content level of the Argumentative Goal Attainment Scale, and the Future Willingness to Argue Scale all refer to the arguer whose dialogue was manipulated; the other scales refer to the argument₂ as a whole. All scales are Likert-type 1-7 ratings, strongly agree to strongly disagree, and contain some reverse-coded items. All reports of the norms scale results are higher-is-better (i.e., more normative); the same is true of all other scales except for Quarrel Probability, where a higher rating indicates a higher perceived chance of escalation.

Participants

In total, 358 participants completed the survey. Of these, 175 (48.88%) identified as male, 182 as female, and one as non-binary. The average age of participants was 19.71 years (*SD*

= 2.37). The ethnic makeup of the participants was in line with the ethnic diversity of the University, with 50.3% of participants identifying as being of European descent, 8.4% as East Asian, 6.1% as Southern Asian, 5% as African, and the remainder scattered between other identifications (including 13.7% who simply marked “Other”).

Results

This study provides many results that aid in the evaluation of the measurements and stimuli, as well as orienting us to the landscape of the variables of interest. In this section, I will first discuss how reliable the novel instruments proved to be. Second, I will proceed to examine the correlations present among the variables in the dataset, allowing a rough assessment of the scales’ validity. Third, I will assess the effectiveness of the norm manipulations in the vignettes. Finally, I will proceed to examine the effects of the norm manipulations on the outcome variables of interest, to the extent they can be determined at this early stage. This will allow evaluations of the new materials, and also begin to record some of the substantive outcomes bearing on the validity of the Theory of Argumentative Norms.

Reliability of New Instruments

To assess the reliability of the novel instruments developed for this project, a Cronbach’s alpha was calculated for each scale. Results are displayed in Table 3.1.

Table 3.1.
Cronbach’s Alpha Reliabilities for Novel Measures, Study 1

<u>Measure</u>	<u># Items</u>	<u>Alpha</u>
<i>Global Scales (displayed with every vignette; each participant rates 4x)</i>		
N1 (frame synchronization)	6	.81
Typicality	7	.87
Argument quality	5	.79
Pleasantness	8	.94
Content goal attainment	7	.78
Relational goal attainment	7	.89

Future willingness to argue	6	.88
Quarrel probability	6	.87
<i>Norm-specific scales (each participant rates once)</i>		
N2 (allowing the opponent to argue)	6	.75
N3 (responding on topic)	6	.72
N4 (argumentative defense)	6	.82
N5 (not claiming victory prematurely)	6	.60
N6 (retracting when proven wrong)	6	.78
N7 (reasonable relational priority)	6	.81
N8 (not going back on commitments)	6	.62
N9 (not taking a position too early)	6	.46
N10 (avoiding circularity)	6	.83
N11 (non-negative identity projection)	6	.81
N12 (not contracting/condemning identity)	6	.86
N13 (therapeutic listening)	6	.86
N14 (dyadically appropriate play)	6	.73
N15 (non-seriousness)	6	.52
N16 (playful response)	6	.48

The majority of the scales proved to be reliable. In particular, the global scales (argument typicality, argument quality, pleasantness, argumentative goal attainment, future willingness to argue, and perceived quarrel probability), all proved very reliable.

The reliabilities of the specific argumentative norm subscales were more mixed, with norms 5, 8, 9, 15, and 16 all failing to reach the accepted benchmark of .70. Examination of the inter-item correlations in these norm subscales failed to provide any clear paths for reaching this benchmark with more than two items, so I determined that revisions would need to be done on each of these five subscales. The ratings of each that appear in the remainder of this chapter (which are the unedited averages of the six-item subscales) thus come with the caveat of lack of reliability. Given that four of these five norms deal with either inquiry or play, it is possible that participants had a harder time putting inquiry and play vignettes into context and assessing them. Regardless, in order for the research program to proceed, better measurement is clearly needed to

capture these particular norms. Improvements to these scales will be undertaken in the following chapter.

The Correlational Landscape

Before looking at how the measures differed between vignettes, it is helpful to understand how the variables correlate in each domain. This allows for a clearer understanding of how much the norm judgments seem to track together, as well as the outcomes, and whether particular variables stand out as independent or highly correlated with others. While associations among these measures were not theorized, we can still see whether or not sensible results appeared, and this will afford some information about construct validity.

For clarity, I will report results for each domain separately. Readers will recall that each respondent gave data for one persuasion vignette, one inquiry vignette, and so forth. Table 3.2 displays the correlations among the variables in the persuasion domain.

Table 3.2.
Correlations Among Persuasion Variables, Study 1

Measure	N1	N2	N3	N4	N5	N6	N7	Quality	Pleas.	CG	RG	FWTA	QP
N1	1												
N2	.48	1											
N3	.31	.52	1										
N4	.17	.41	.53	1									
N5	.36	.51	.37	.46	1								
N6	.43	.46	.31	.27	.62	1							
N7	.30	.53	.47	.36	.53	.53	1						
Argument Quality	.21	.31	.41	.46	.48	.44	.55	1					
Pleasantness	.43	.47	.38	.33	.55	.61	.62	.54	1				
Cont. Goal	.18	.34	.43	.29	.23	.27	.39	.41	.43	1			
Rel. Goal	.40	.47	.36	.27	.52	.58	.62	.46	.80	.40	1		
Future Willingness to Argue	.30	.49	.39	.35	.56	.50	.63	.52	.70	.35	.76	1	
Quarrel Prob.	-.37	-.40	-.28	-.19	-.40	-.45	-.53	-.31	-.63	-.33	-.70	-.65	1

Notes. $N = 353$. N5 measure fell short of statistical reliability (see Table 3.1). All correlations significant at $p < .001$.

We see consistent correlations between every variable here, and those among pleasantness, relational goal attainment, and future willingness to argue were noticeably large. The norms generally correlated with each other at $r = .3$ to $r = .6$, with frame synchronization showing a perhaps slightly weaker association with the other norms. These data suggest that norm

judgments in the persuasion domain interrelate, but are still distinguishable. The same is true of the outcome variables. Of course, we also see early evidence that normativity and these outcomes are quite related, although distinct from one another.

Next, we will examine the correlational landscape of inquiry. Table 3.3 displays the correlations among the variables in the inquiry domain.

Table 3.3.
Correlations Among Inquiry Variables, Study 1

Measure	<u>N1</u>	<u>N8</u>	<u>N9</u>	<u>N10</u>	<u>Quality</u>	<u>Pleas.</u>	<u>CG</u>	<u>RG</u>	<u>FWTA</u>	<u>QP</u>
N1	1									
N8	.35	1								
N9	.20	.24	1							
N10	.47	.53	.48	1						
Argument Quality	.29	.30	.44	.61	1					
Pleasantness	.57	.39	.36	.62	.59	1				
Cont. Goal	.51	.49	.32	.67	.67	.72	1			
Rel. Goal	.57	.40	.35	.59	.51	.77	.68	1		
Future Willingness to Argue	.52	.32	.36	.53	.51	.74	.62	.72	1	
Quarrel Prob.	-.56	-.30	-.33	-.46	-.41	-.64	-.55	-.65	-.73	1

Notes. $N = 357$. NOTE: N8 and N9 measures not statistically reliable (see Table 3.1). All correlations significant at $p < .001$.

The trends are quite similar here to those in the persuasion domain. N10 (avoiding circularity) stands out as more strongly correlated with the other norms than N8 (not retracting commitments) and N9 (not taking a position too early). The correlations between the outcome variables here quite closely to those in persuasion, suggesting a durability in these relationships across domains.

Next, let's examine identity. Table 3.4 displays the correlations among the variables in the identity domain.

Table 3.4.
Correlations Among Identity Variables, Study 1

Measure	<u>N1</u>	<u>N11</u>	<u>N12</u>	<u>N13</u>	<u>Quality</u>	<u>Pleas.</u>	<u>CG</u>	<u>RG</u>	<u>FWTA</u>	<u>QP</u>
N1	1									
N11	.23***	1								
N12	.63***	.29***	1							
N13	.66***	.09	.58***	1						
Argument Quality	.46***	.03	.55***	.51***	1					
Pleasantness	.70***	.13*	.72***	.73***	.62***	1				
Cont. Goal	.61***	.18***	.68***	.69***	.63***	.74***	1			

Rel. Goal	.63***	.15**	.73***	.67***	.61***	.85***	.74***	1		
Fut. Will. to Argue	.58***	.19***	.66***	.67***	.61***	.80***	.70***	.81***	1	
Quarrel Prob.	-.53***	-.23***	-.70***	-.50***	-.47***	-.63***	-.61***	-.66***	-.69***	1

Note. $N = 358$.

* $p < .05$
 ** $p < .01$
 *** $p < .001$

The norm subscales here exhibit a more heterogenous pattern than for persuasion or inquiry. This may be because identity is the domain where roles most distinctly separated, into argument producer and listener. N11 (projecting a non-negative identity) thus displays little correlation with the two receiver-oriented norms. Those two norms—not contradicting or condemning an identity, and therapeutic listening—display notably strong correlations with each other and N1, though. The pattern in the dependent variables is also quite strong—a bit stronger here than in persuasion or inquiry (pleasantness explaining over 70% of the variance in relational goal attainment, for instance). This may suggest that perceptions of normativity are more forceful in identity arguments than the other domain, and tend to collapse more onto a general positive/negative axis.

Finally, we turn to play. Table 3.5 displays the correlations among the variables in the play domain.

Table 3.5.
Correlations Among Play Variables, Study 1

<u>Measure</u>	<u>N1</u>	<u>N14</u>	<u>N15</u>	<u>N16</u>	<u>Quality</u>	<u>Pleas.</u>	<u>CG</u>	<u>RG</u>	<u>FWTA</u>	<u>QP</u>
N1	1									
N14	.62***	1								
N15	.21***	.37***	1							
N16	.45***	.47***	.35***	1						
Argument Quality	.25***	.21***	-.13*	.18***	1					
Pleasantness	.51***	.65***	.33***	.48***	.32***	1				
Cont. Goal	.37***	.36***	.13*	.55***	.35***	.46***	1			
Rel. Goal	.49***	.66***	.28***	.51***	.22***	.71***	.54***	1		
Fut. Will. to Argue	.43***	.53***	.26***	.45***	.31***	.63***	.46***	.68***	1	
Quarrel Prob.	-.42***	-.57***	-.26***	-.37***	-.12*	-.58***	-.35***	-.64***	-.61***	1

Notes. $N = 358$. N15 and N16 measures not reliable (see Table 3.1).

* $p < .05$

*** $p < .001$

Play results resemble those for persuasion and inquiry in terms of correlational magnitudes, although there is a markedly lower association between the norm perceptions and argument quality (N15 is even negative) and also with content goal attainment. Several of the predictions made in the previous chapter noted the relational focus of play, and we see the content-level outcomes of perceived quality and content goal attainment less correlated to normativity here than in any of the other domains. This is sensible, because for play the content meanings are only vehicles for entertainment, but in the other domains content is a substantive aim of the dialogue. The more relational focus here does not seem to translate to an increased correlation with relational variables, however: the correlations between the norm subscales and relational goal attainment, future willingness to argue, and quarrel probability are similar in magnitude to those in the inquiry domain (which was predicted to have more of a content-level focus), and generally lower than those for identity.

Overall, the correlational data show us that we ought to expect almost every variable in this project to correlate with the others, but that the norm judgments retain a fair bit of independence from one another, as do the various outcome perceptions. No indications of construct invalidity were apparent, and the measures seemed to be performing according to the general expectations implied in the Theory of Argumentative Norms.

Manipulation Checks

With many of the new measures proving reliable, initial manipulation checks on the vignettes can be performed. The operative question with the manipulation checks is: does the non-normative vignette meaningfully change the perception of the given norm it is manipulating, relative to its normative base condition? For instance, a normative inquiry vignette should score

higher on norm 8 (not going back on previously held commitments) than the vignette that has been altered to include an arguer going back on a commitment (an N8 violation).

To test the manipulations, independent-samples *t*-tests were conducted, comparing a violating vignette with its corresponding normative vignette on each norm subscale. Both *t* and *p* values, and the degrees of freedom, were adjusted in cases where the variance was found to differ between groups at $p < .05$ on Levene's test for equality of variances. These cases can be identified in the *t*-test tables by noting whether the *df* is reported as a decimal number (indicating unequal group variance) or a whole number.

Achieved power and statistical sensitivity differed between persuasion and the other domains, since persuasion had twice as many conditions and thus approximately half the sample size per condition. Power to detect an effect size of $d = .30$ was .25 in persuasion and .40 elsewhere; at $d = .60$, power rose to .62 in persuasion and .87 elsewhere. Statistical sensitivity and power varied by domain, since there are sixteen persuasion vignettes and only eight of each of the other three domains. At power = .80, sensitivity in the persuasion domain was approximately $d = 0.86$; in the other domains, it was approximately $d = 0.60$ (varying slightly by condition). Since this study's primary goal is to test the measures and get a preliminary feel for results, rather than reaching firm hypothesis conclusions, I will not be employing study-wide error correction here; I address the overall idea of error control further in the Discussion section of this chapter, and the general topic of experiment-wise error rates is substantially evaluated as a possible project limitation in Chapter 7.

Again, we will look at persuasion first. Table 3.6 displays the results of *t*-tests comparing the norm perceptions in each persuasion dialogue condition. For each cell of the table, readers will find the mean and standard deviation, and for the cells that involve a comparison to the

normative condition, values of t , df , and Cohen's d . The bolded diagonal entries represent the direct manipulation checks. The off-diagonal entries are informative for the question of whether a manipulation of one norm affected ratings of other norms as well.

Table 3.6.
Norm Perceptions of Persuasion Argument Vignettes, Study 1

Condition		N1	N2	N3	N4	N5	N6	N7
Public Normative 1	<i>M</i>	3.78	4.71	5.01	4.79	4.27	3.58	4.49
	<i>SD</i>	0.88	0.89	0.77	1.01	0.83	0.83	0.92
N2 Violation 1 (not allowing the opponent to argue)	<i>M</i>	3.25	2.93	4.18	3.92	3.33	2.95	3.15
	<i>SD</i>	0.91	1.11	0.72	0.86	0.83	0.92	0.98
	<i>t</i>	2.14*	6.28***	3.94***	3.33**	4.08***	2.61*	5.04***
	<i>df</i>	50	49	49	50	50	50	50
	<i>d</i>	0.59	1.76	1.11	0.92	1.13	0.73	1.40
N3 Violation 1 (off-topic rebuttal)	<i>M</i>	3.00	3.29	3.60	3.86	3.90	3.04	3.80
	<i>SD</i>	0.85	0.68	0.72	1.20	0.77	0.74	1.02
	<i>t</i>	3.01**	5.97***	6.15***	2.80**	1.50	2.29*	2.39*
	<i>df</i>	44	41.55	43	43	44	44	44
N4 Violation 1 (non-argumentative defense)	<i>M</i>	3.05	3.72	3.95	3.32	3.51	3.08	3.56
	<i>SD</i>	0.66	0.78	0.66	1.06	0.86	1.06	0.74
	<i>t</i>	3.18**	3.92***	5.01***	4.90***	3.08**	1.83	3.78***
	<i>df</i>	46	44	46	46	46	45	46
N5 Violation 1 (prematurely claiming victory)	<i>M</i>	3.34	4.17	4.31	4.53	3.59	3.15	3.93
	<i>SD</i>	0.75	0.96	0.91	0.83	0.78	0.79	1.04
	<i>t</i>	1.92	2.05*	2.96**	1.01	2.93**	1.88	1.98
	<i>df</i>	49	48	49	49	48	49	47
N6 Violation 1 (failure to retract)	<i>M</i>	3.84	4.60	4.74	4.31	3.94	3.42	4.18
	<i>SD</i>	0.64	0.75	1.01	0.98	0.46	0.81	0.96
	<i>t</i>	-0.24	0.41	1.00	1.60	1.49	0.65	1.09
	<i>df</i>	41	41	43	43	43	43	43
Personal Normative 1	<i>M</i>	3.04	3.62	3.87	4.21	3.8	3.04	3.61
	<i>SD</i>	0.93	0.81	0.87	1.09	0.92	0.89	0.79
	<i>M</i>	3.65	3.57	3.73	4.07	3.62	3.02	3.48
	<i>SD</i>	0.88	0.67	0.76	0.52	0.91	1.04	0.98
N7 Violation 1 (unreasonable relational priority)	<i>t</i>	-2.04*	0.2	0.52	0.48	0.63	0.05	0.47
	<i>df</i>	36	38	36	35	38	36	37
	<i>d</i>	-0.67	0.06	0.17	0.16	0.20	0.02	0.15
	<i>M</i>	4.01	4.59	4.70	4.63	4.27	4.14	4.52
Public Normative 2	<i>SD</i>	0.64	1.01	0.86	0.86	0.76	0.78	0.84
	<i>M</i>	2.70	2.25	4.09	3.22	2.48	2.42	3.30
N2 Violation 2 (not allowing	<i>SD</i>	0.87	0.96	0.90	0.99	0.95	0.87	0.77

the opponent to argue)	<i>t</i>	5.55***	7.67***	2.27*	4.80***	6.59***	6.78***	4.96***
	<i>df</i>	41	40	41	39	39	41	41
	<i>d</i>	1.70	2.38	0.69	1.51	2.06	2.07	1.52
	<i>M</i>	2.99	3.28	3.51	3.71	3.83	3.21	3.67
N3 Violation 2 (off-topic rebuttal)	<i>SD</i>	0.87	0.9	0.73	0.94	0.6	0.79	0.59
	<i>t</i>	4.30***	4.37***	4.88***	3.24**	2.14*	3.87***	3.88***
	<i>df</i>	41	39	41	39	40	40	41
	<i>d</i>	1.31	1.37	1.49	1.02	0.66	1.18	1.19
N4 Violation 2 (non-argumentative defense)	<i>M</i>	3.33	3.69	3.85	3.82	3.35	2.92	3.52
	<i>SD</i>	0.90	0.82	1.07	1.34	0.78	1.07	0.77
	<i>t</i>	2.80**	3.05**	2.77**	2.21*	3.79***	4.15***	3.94***
	<i>df</i>	39	37	38	37	38	38	39
N5 Violation 2 (prematurely claiming victory)	<i>d</i>	0.87	0.98	0.88	0.71	1.20	1.30	1.23
	<i>M</i>	3.61	4.5	4.78	4.32	3.78	3.28	4.29
	<i>SD</i>	0.95	1.17	1.11	1.32	1.18	1.17	1.09
	<i>t</i>	1.56	0.25	-0.27	0.83	1.53	2.76**	0.73
N6 Violation 2 (failure to retract)	<i>df</i>	38	36	38	35	30.76	33.09	37
	<i>d</i>	0.49	0.08	-0.08	0.27	0.50	0.87	0.23
	<i>M</i>	3.29	3.82	3.67	3.64	3.35	2.67	3.44
	<i>SD</i>	0.83	0.86	1.16	1.24	0.79	1.19	1.22
Personal Normative 2	<i>t</i>	3.13**	2.61*	3.23**	2.85*	3.75***	4.80***	3.26**
	<i>df</i>	40	38	40	37	38	36.49	39
	<i>d</i>	0.97	0.83	1.00	0.92	1.19	1.45	1.02
	<i>M</i>	3.87	4.48	4.63	4.42	4.14	3.52	4.02
N7 Violation 2 (unreasonable relational priority)	<i>SD</i>	0.76	0.81	0.61	1.12	0.73	0.79	0.84
	<i>M</i>	3.18	3.80	4.06	4.42	3.63	2.70	3.03
	<i>SD</i>	0.72	0.70	0.72	0.91	0.74	1.04	0.94
	<i>t</i>	3.28**	3.15**	2.99**	-0.01	2.46*	3.09**	3.93***
	<i>df</i>	48	47	46	47	48	46	48
	<i>d</i>	0.93	0.90	0.87	0.00	0.70	0.89	1.11

Notes. $N = 353$ (approx. 22 per condition). The N2-N6 manipulations are compared to their respective *public*

normative vignette; the N7 manipulations are compared to their respective *personal* normative vignette. The N5 measure is not reliable (see Table 3.1).

* $p < .05$

** $p < .01$

*** $p < .001$

Most of these manipulations were successful despite the low power in the persuasion domain, which is encouraging. A few do not meet the threshold of statistical significance: the first manipulations of N6 and N7, and the second manipulation of N5. Interestingly, it seemed that in the personal persuasion case, the normative vignette from Hample et al. (2009) was

perceived as somewhat harsh (it was actually judged as *less* synchronized than the N7 violation condition, and was perceived significantly more negatively than the other personal normative vignette), rather than the violation in the non-normative vignette being missed. The data suggest these particular stimuli need revision, although it is less clear in the case of the N5 manipulation, since that norm subscale is not reliable and the manipulation approaches statistical significance. Encouragingly, many of the effect sizes (Cohen’s *d*) were quite substantial.

As the correlation table(s) earlier may have suggested to us, we also see a high penetration of norm violations across norm subscales—i.e., many of the violation conditions come with attendant drops in perceptions in not just the manipulated norm, but most or all of the others as well. Henceforth, I will term the tendency of certain violations or domains to influence norm perceptions beyond the directly manipulated norm (and frame synchronization) the *perceptual reach* of a given norm or domain, and this will emerge as a theme in results of all the studies in this project. In many cases, the manipulated norm receives the lowest score and/or highest *d* value, but not all.

Next, we turn to the inquiry domain to see if similar sorts of results emerge there. Table 3.7 displays the results of *t*-tests comparing the norm perceptions in each inquiry dialogue condition. Table 3.7 is built on the same model as Table 3.6, and should be read in the same way.

Table 3.7.
Norm Perceptions of Inquiry Argument Vignettes, Study 1

<u>Condition</u>		<u>N1</u>	<u>N8</u>	<u>N9</u>	<u>N10</u>
Normative 1	<i>M</i>	5.29	4.29	4.04	4.52
	<i>SD</i>	1.12	0.89	0.67	1.00
N8 Violation 1 (commitment retraction)	<i>M</i>	4.41	4.15	4.19	4.38
	<i>SD</i>	1.35	1.03	0.60	0.99
	<i>t</i>	3.36***	0.69	-1.08	0.67
	<i>df</i>	87.17	86	88	88
	<i>d</i>	0.70	0.15	-0.23	0.14
N9 Violation 1	<i>M</i>	4.90	4.46	3.34	4.08

(taking a position too early)	<i>SD</i>	1.33	0.86	0.78	0.87
	<i>t</i>	1.50	-0.92	4.59***	2.29*
	<i>df</i>	91	92	91	83.91
	<i>d</i>	0.31	-0.19	0.96	0.48
N10 Violation 1 (circular argument)	<i>M</i>	5.55	4.40	3.89	4.76
	<i>SD</i>	1.26	1.01	0.90	1.04
	<i>t</i>	-0.99	-0.53	0.91	-1.10
	<i>df</i>	82	83	82	82
	<i>d</i>	-0.22	-0.12	0.20	-0.24
Normative 2	<i>M</i>	5.76	4.57	4.37	4.93
	<i>SD</i>	1.00	0.73	0.64	0.98
N8 Violation 2 (commitment retraction)	<i>M</i>	4.84	3.45	3.71	3.38
	<i>SD</i>	1.04	0.78	0.54	1.01
	<i>t</i>	4.10***	6.73***	5.09***	7.22***
	<i>df</i>	83	81	83	84
	<i>d</i>	0.90	1.49	1.11	1.57
N9 Violation 2 (taking a position too early)	<i>M</i>	4.00	4.29	3.79	3.72
	<i>SD</i>	0.99	0.80	0.70	0.90
	<i>t</i>	8.46***	1.71	4.06***	6.09***
	<i>df</i>	90	86	87	88
	<i>d</i>	1.77	0.36	0.86	1.29
N10 Violation 2 (circular argument)	<i>M</i>	4.78	4.44	3.65	3.94
	<i>SD</i>	1.23	0.82	0.58	0.93
	<i>t</i>	4.17***	0.74	5.41***	4.89***
	<i>df</i>	89	85	85	87
	<i>d</i>	0.88	0.16	1.16	1.04

Notes. $N = 357$ (approx. 44 per condition). The N8 and N9 measures are not reliable (see Table 3.1).

* $p < .05$

** $p < .01$

*** $p < .001$

Of the four domains, this is the one that caused the most issues, and is thus in the need of most repair, which will be undertaken in Chapter 4. Not only do we have two subscales that are not reliable, there are also two vignettes that did not prove to be effective manipulations. These both occurred in the first vignette set in which two college friends attempt to figure out which class they want to take together, suggesting that the norm violations struggled to come across in that context. The second set of vignettes, in which two siblings explore gift ideas for their

mother, was more clearly successful. In these successful manipulations, inquiry was associated with a fairly strong perceptual reach—violations of a single norm called into question the propensity of the arguer to hew to any norms. Also like the persuasion vignettes, the manipulated norms are not necessarily the most negative judgments in their respective conditions. Clearly, more work needs to be done here to clean up the scales and the first set of vignettes.

Did the identity vignettes fare better? Table 3.8 displays the results of *t*-tests comparing the norm perceptions in each identity dialogue condition.

Table 3.8.
Norm Perceptions of Identity Argument Vignettes, Study 1

<u>Condition</u>		<u>N1</u>	<u>N11</u>	<u>N12</u>	<u>N13</u>
Normative 1	<i>M</i>	5.06	5.80	5.78	5.68
	<i>SD</i>	1.21	1.00	1.05	1.03
N11 Violation 1 (negative identity)	<i>M</i>	4.64	5.41	5.11	5.10
	<i>SD</i>	1.01	0.92	1.00	0.87
	<i>t</i>	1.77	1.93	3.07**	2.85**
	<i>df</i>	88	88	88	87
	<i>d</i>	0.37	0.41	0.65	0.60
N12 Violation 1 (identity contradiction)	<i>M</i>	3.53	5.54	3.44	4.18
	<i>SD</i>	0.71	0.99	0.77	0.79
	<i>t</i>	7.51***	1.27	12.22***	7.85***
	<i>df</i>	73.78	91	82.34	91
N13 Violation 1 (disaffected listening)	<i>M</i>	3.31	5.41	3.88	2.85
	<i>SD</i>	1.22	0.85	0.90	1.06
	<i>t</i>	6.92***	2.00	9.18***	12.86***
	<i>df</i>	90	89	88	88
Normative 2	<i>M</i>	5.13	5.95	5.59	5.38
	<i>SD</i>	0.97	0.95	1.05	0.98
	<i>M</i>	4.09	4.65	4.12	5.02
	<i>SD</i>	0.78	0.94	0.75	0.92
N11 Violation 2 (negative identity)	<i>t</i>	5.42***	6.23***	7.17	1.72
	<i>df</i>	84	80	82	82
	<i>d</i>	1.18	1.38	1.58	0.38
	<i>M</i>	4.48	5.90	3.93	4.57
N12 Violation 2 (identity contradiction)	<i>SD</i>	1.07	0.76	1.37	1.07
	<i>t</i>	2.98**	0.31	6.29***	3.71***

	<i>df</i>	86	84	74.40	86
	<i>d</i>	0.64	0.07	1.37	0.79
N13 Violation 2	<i>M</i>	3.45	5.85	3.90	3.00
(disaffected	<i>SD</i>	1.00	0.86	0.98	1.00
listening)	<i>t</i>	8.13***	0.56	7.96***	11.50***
	<i>df</i>	89	88	90	90
	<i>d</i>	1.71	0.12	1.66	2.40

Note. $N = 358$ (approx. 44 per condition).

* $p < .05$

** $p < .01$

*** $p < .001$

These data are far more encouraging than the inquiry results. With the exception of the first manipulation of N11, all of these manipulations showed up very significantly in the data, with d values well above 1.00. The difficulty in manipulating N11 can likely be attributed to the fact that the identity display involved (being a fan of live music and concerts) is not generally perceived as negative or non-normative, and thus takes quite a lot of context to be seen as such. The attempt to manipulate that identity in this case was to associate concertgoing with a rebellious streak, but this did not prove to be effective at eliciting negative perceptions. The context for N11 in the second set of norms (not working hard at a volunteer job and taking credit anyway) was easier to manipulate into a contextually negative context while remaining realistic. The receiver-oriented norms, N12 and N13, come across quite strongly in both vignette sets.

In looking at the identity correlations earlier (Table 3.4), I pointed out two notable features: the distinctiveness between the production-oriented N11 and receiver-oriented N12 and N13, and the notably stronger correlations between many of the variables compared to other domains. We see some effects of those interrelations here: N11 judgments are largely independent of N12 and N13, somewhat capping the perceptual reach of identity violations, but judgments overall seem far more forceful here than in the other domains, often exceeding $d = 2.0$, despite the notably pleasant baseline ratings of identity arguments.

Finally, we examine a second domain that came with measurement difficulties—play.

Table 3.9 displays the results of *t*-tests comparing the norm perceptions in each play dialogue condition.

Table 3.9.
Norm Perceptions of Play Argument Vignettes, Study 1

<u>Condition</u>		<u>N1</u>	<u>N14</u>	<u>N15</u>	<u>N16</u>
Normative 1	<i>M</i>	3.96	4.18	4.20	4.65
	<i>SD</i>	0.79	0.98	0.91	0.78
N14 Violation 1 (dyadically inappropriate play)	<i>M</i>	3.47	3.36	3.98	4.32
	<i>SD</i>	0.89	1.00	0.88	0.64
	<i>t</i>	2.79**	3.92***	1.14	2.17*
	<i>df</i>	89	88	91	89
	<i>d</i>	0.59	0.83	0.24	0.46
N15 Violation 1 (serious framing)	<i>M</i>	3.83	3.88	3.55	4.23
	<i>SD</i>	1.04	1.06	1.01	0.83
	<i>t</i>	0.64	1.41	3.22**	2.44*
	<i>df</i>	86	88	88	89
	<i>d</i>	0.14	0.30	0.68	0.51
N16 Violation 1 (non-playful response)	<i>M</i>	4.03	3.93	3.64	4.48
	<i>SD</i>	0.80	1.11	0.76	0.62
	<i>t</i>	-0.42	1.15	3.08**	1.10
	<i>df</i>	86	84	87	87
	<i>d</i>	-0.09	0.25	0.66	0.23
Normative 2	<i>M</i>	4.40	4.56	4.11	4.59
	<i>SD</i>	0.90	0.88	0.67	0.71
N14 Violation 2 (dyadically inappropriate play)	<i>M</i>	3.19	2.91	3.91	3.75
	<i>SD</i>	0.76	0.75	0.57	0.59
	<i>t</i>	7.12***	9.86***	1.60	6.32***
	<i>df</i>	94	93	96	95
	<i>d</i>	1.45	2.02	0.32	1.28
N15 Violation 2 (serious framing)	<i>M</i>	3.59	3.54	3.68	4.26
	<i>SD</i>	1.03	0.92	0.72	0.62
	<i>t</i>	4.01***	5.21***	2.93**	2.36*
	<i>df</i>	88	83	87	88
	<i>d</i>	0.85	1.14	0.63	0.50
N16 Violation 2 (non-playful response)	<i>M</i>	3.70	3.38	3.69	4.06
	<i>SD</i>	0.98	0.78	0.74	0.66
	<i>t</i>	3.53***	6.61***	2.85**	3.63***
	<i>df</i>	89	86	89	86
	<i>d</i>	0.74	1.41	0.60	0.78

Notes. *N* = 358 (approx. 44 per condition). The N15 and N16 measures are not reliable (see

Table 3.1).

* $p < .05$

** $p < .01$

*** $p < .001$

These results are generally more encouraging than those for identity, with the caveats on reliability applying (see Table 3.1). Only one manipulation failed, and both manipulations of the one reliable norm, N14, came through strongly. We again see significant perceptual reach here, particularly in the second set of vignettes, though negative judgments actually tend to center on N14 more than anything else. This may be due to its being the one play norm with a reliable scale, but it may also be that it serves as more of a summary judgment of appropriateness than the other two, more specific, norms. In the first vignette set, the N14 and N15 violation conditions do center their perceived impact more specifically on the manipulated norms, so at least in this case, participants did perceive the violations to be more isolated.

In addition to the direct manipulation checks, a second strategy that was employed to ensure that the manipulations were appropriate was measuring vignettes' typicality, or realism. If certain vignettes were perceived as significantly atypical or unrealistic, it would call their suitability as argumentative stimuli into question. These typicality judgments are displayed in Table 3.10. Typicality was assessed on a 1-7 scale, meaning that a value of 4 is the theoretical midpoint, indicating indifferent realism.

Table 3.10.

Typicality Judgments of Argument Vignettes, Study 1

		Set 1	Set 2
Public Persuasion Normative	<i>M</i>	5.40	5.08
	<i>SD</i>	0.77	0.87
N2 Violation (not allowing the opponent to argue)	<i>M</i>	4.64	4.80
	<i>SD</i>	0.98	1.28
N3 Violation (off-topic rebuttal)	<i>M</i>	4.56	4.35
	<i>SD</i>	1.41	0.91

N4 Violation (non-argumentative defense)	<i>M</i>	5.12	4.88
	<i>SD</i>	0.95	0.78
N5 Violation (premature claim of victory)	<i>M</i>	4.72	5.09
	<i>SD</i>	1.02	0.99
N6 Violation (failure to retract when disproven)	<i>M</i>	5.03	4.73
	<i>SD</i>	1.11	1.03
Personal Persuasion Normative	<i>M</i>	4.97	5.03
	<i>SD</i>	0.89	0.97
N7 Violation (unreasonable relational priority)	<i>M</i>	4.55	4.23
	<i>SD</i>	0.83	0.84
Inquiry Normative	<i>M</i>	5.69	5.84
	<i>SD</i>	0.96	1.02
N8 Violation (commitment retraction)	<i>M</i>	5.48	5.48
	<i>SD</i>	1.10	0.97
N9 Violation (premature adoption of a position)	<i>M</i>	5.30	5.29
	<i>SD</i>	0.94	1.03
N10 Violation (circular argument)	<i>M</i>	5.63	5.55
	<i>SD</i>	0.98	0.92
Identity Normative	<i>M</i>	5.89	5.39
	<i>SD</i>	1.07	1.12
N11 Violation (negative identity)	<i>M</i>	5.22	5.27
	<i>SD</i>	1.35	1.10
N12 Violation (identity contradiction or condemnation)	<i>M</i>	5.06	5.21
	<i>SD</i>	0.86	1.22
N13 Violation (disaffected listening)	<i>M</i>	4.59	4.79
	<i>SD</i>	1.03	0.97
Play Normative	<i>M</i>	5.73	5.62
	<i>SD</i>	0.89	1.00
N14 Violation (inappropriate play)	<i>M</i>	5.53	4.71
	<i>SD</i>	0.84	1.23
N15 Violation (serious framing)	<i>M</i>	5.49	5.26
	<i>SD</i>	0.89	1.36
N16 Violation (non-playful response)	<i>M</i>	5.91	5.39
	<i>SD</i>	0.84	1.02

Note. Persuasion *N* approx. 22 per vignette (44 per condition); other domain *Ns* approx. 44 per vignette (88 per condition).

While the non-normative vignettes were generally seen as slightly less typical than their normative counterparts, only a single vignette scored below 4.5, and none scored below the

neutral midpoint of 4.0, so no vignettes came across as particularly unusual or unbelievable to the participants. This speaks to their suitability as stimuli, and also indicates that norm violations were not seen as wildly unusual occurrences.

Impacts of Norm Violations

The primary purpose of this study was simply to arrive at reliable measures and effective manipulations, but to the extent that those goals were achieved, they do allow for some preliminary exploration of some of the relationships between norm violations and the dependent variables of interest. It is worth pausing here for a moment to repeat the hypotheses from the previous chapter:

Figure 3.1.

Hypotheses, Restated

H1: An argument₁ (embedded within an argument₂) that follows the norms of its domain will be seen as higher-quality than one that does not.

H2: An argument₂ will be viewed as a less pleasant experience if one of the arguers committed a norm violation.

H3: Arguments that contain norm violations will be perceived as more out of sync with the other arguer than arguments that do not.

H4: a) Arguers that commit norm violations will be seen as attaining their content goals less than arguers that do not. b) The same will be true with respect to relational goal perceptions.

H5: Arguers who commit norm violations will be seen as worse future argumentative partners than those that do not.

H6: Arguments in which a violation is committed will be seen as more likely to escalate into quarrels than those that do not.

H7: Violations of the norms of inquiry and persuasion arguments will lead to more content-goal failures than violations of the norms of identity and play arguments.

H8: Violating arguments in the identity and play domains will be seen as more likely to lead to quarrels than in persuasion and inquiry arguments.

H9: Violating arguments in the identity and play domains will lead to larger decreases in willingness to argue with the violating arguer in the future than violating arguments in the persuasion and inquiry domains.

H10: a) When frames are out of sync, arguers in a persuasion or inquiry frame will perceive the primary implication of the frame sync issue to be on the content level. b) When frames are out of sync, arguers in an identity or play frame will perceive the primary implication of the frame sync issue to be on the relational level.

What the hypotheses expect to find, in short, is that violation conditions will be associated with statistically significantly lower values in each of the variables in the following tables (Tables 3.11-3.14) relative to the normative conditions. Further, we expect to see especially stark changes in content goal attainment in persuasion and inquiry arguments, and especially stark changes in relational goal attainment, future willingness to argue, and quarrel probability in the identity and play domains.

Nine of these ten hypotheses can be at least somewhat tested by the data to follow, if in a preliminary way. Results in this chapter, of course, are in some cases based on vignettes and measurements that will be refined in the chapters to come. The other, H3, concerns frame synchronization (N1), and thus was tested in the previous data (Tables 3.6-3.9). The *t*-tests done in those tables indicated that 22 of the 30 violation conditions were associated with statistically significant changes in frame synchronization relative to their normative companions, all but one (the problematic N7 violation discussed earlier, where the normative vignette was perceived harshly) in the negative direction. These 21 significant results encompassed all norm violations except premature claims of victory (N5). Since not all of the vignettes even showed statistically significant results on their own norms, the frequency in which violation conditions show these associations with N1 reductions is a fairly strong sign of support for H3, though an incomplete one.

In order to assess the other hypotheses, we turn to the data regarding the other outcome variables—perceived argument quality, pleasantness, goal attainment (content and relational), future willingness to argue, and quarrel probability. As with the manipulation checks, assessment of conditional differences was done via independent-samples *t*-tests between violating vignettes and their normative companions. In Figure 3.2 above, we can see that argument quality

assessments test H1, pleasantness assessments test H2, goal attainment assessments test H4, future willingness to argue assessments test H5, and quarrel probability assessments test H6.

We will again go domain by domain, beginning with persuasion. Table 3.11 displays the perceptions of the outcomes of the persuasion vignettes.

Table 3.11.
Outcomes of Persuasion Norm Violations, Study 1

<u>Condition</u>		<u>Argument</u>		<u>Content</u>	<u>Relational</u>	<u>Fut. Will.</u>	<u>Quarrel Prob.</u>
		<u>Quality</u>	<u>Pleasantness</u>	<u>Goal</u>	<u>Goal</u>	<u>to Arg.</u>	
Public Normative 1	<i>M</i>	4.19	3.63	4.31	3.75	4.15	4.05
	<i>SD</i>	1.08	1.24	0.82	0.98	1.19	1.20
N2 Violation 1 (not allowing the opponent to argue)	<i>M</i>	3.44	2.90	3.95	2.99	3.35	4.65
	<i>SD</i>	1.06	1.06	0.61	1.00	1.06	0.90
	<i>t</i>	2.55*	2.30*	1.78	2.78**	2.56*	-2.05*
	<i>df</i>	50	50	50	50	50	50
	<i>d</i>	0.71	0.64	0.50	0.77	0.71	-0.57
N3 Violation 1 (off-topic rebuttal)	<i>M</i>	3.57	2.95	3.67	3.41	3.90	4.05
	<i>SD</i>	1.35	0.95	0.53	0.81	1.09	1.17
	<i>t</i>	1.75	2.00*	2.99**	1.24	0.73	-0.02
	<i>df</i>	44	44	44	44	44	44
N4 Violation 1 (non-argumentative defense)	<i>M</i>	3.01	2.63	4.05	3.20	3.35	4.49
	<i>SD</i>	1.01	1.02	0.74	1.04	1.10	0.71
	<i>t</i>	3.88***	3.01**	1.11	1.90	2.41**	-1.60
	<i>df</i>	46	46	46	46	46	43.10
N5 Violation 1 (prematurely claiming victory)	<i>M</i>	3.63	3.39	4.27	3.58	3.61	4.27
	<i>SD</i>	1.28	1.10	0.48	0.85	0.86	0.87
	<i>t</i>	1.70	0.74	0.21	0.67	1.85	-0.75
	<i>df</i>	49	49	42.81	49	49	49
N6 Violation 1 (failure to retract)	<i>M</i>	3.96	3.42	4.10	3.74	3.92	4.01
	<i>SD</i>	1.09	0.85	0.75	1.20	1.18	1.26
	<i>t</i>	0.70	0.65	0.85	0.04	0.66	0.10
	<i>df</i>	43	43	43	43	43	43
Personal Normative 1	<i>M</i>	3.84	2.54	3.91	2.89	3.43	5.00
	<i>SD</i>	0.99	1.05	0.40	0.97	1.07	0.96
	<i>M</i>	3.74	3.05	3.82	3.18	3.25	4.91
	<i>SD</i>	0.86	1.27	0.58	0.99	0.93	0.98
N7 Violation 1 (unreasonable relational priority)	<i>t</i>	0.32	-1.40	0.59	-0.95	0.53	0.28
	<i>df</i>	37	38	38	38	38	38
	<i>d</i>	0.10	-0.45	0.19	-0.30	0.17	0.09

Public Normative 2	<i>M</i>	4.09	4.04	4.24	4.15	4.23	3.32
	<i>SD</i>	0.85	1.01	0.64	0.76	1.10	0.93
N2 Violation 2 (not allowing the opponent to argue)	<i>M</i>	2.90	2.31	3.69	2.55	2.62	5.15
	<i>SD</i>	1.10	0.90	0.55	0.83	0.79	0.83
	<i>t</i>	3.92***	5.95***	3.05**	6.56***	5.53***	-6.83***
	<i>df</i>	41	41	41	41	41	41
	<i>d</i>	1.20	1.82	0.93	2.01	1.69	-2.09
N3 Violation 2 (off-topic rebuttal)	<i>M</i>	3.33	2.84	3.79	3.36	3.38	4.47
	<i>SD</i>	0.84	1.05	0.59	0.71	1.11	0.91
	<i>t</i>	2.95**	3.82***	2.43*	3.52***	2.48*	-4.10***
	<i>df</i>	41	41	41	41	41	41
	<i>d</i>	0.90	1.17	0.74	1.08	0.76	-1.25
N4 Violation 2 (non-argumentative defense)	<i>M</i>	3.29	2.58	3.73	3.04	3.21	4.56
	<i>SD</i>	1.36	1.14	0.63	1.08	1.31	0.98
	<i>t</i>	2.26*	4.33***	2.61*	3.79***	2.69**	-4.18***
	<i>df</i>	39	39	39	39	39	39
	<i>d</i>	0.71	1.35	0.81	1.19	0.84	-1.30
N5 Violation 2 (prematurely claiming victory)	<i>M</i>	4.08	3.82	4.51	3.93	4.35	3.25
	<i>SD</i>	1.06	1.40	0.87	0.98	1.26	1.03
	<i>t</i>	0.03	0.59	-1.11	0.78	-0.33	0.20
	<i>df</i>	38	37	37	37	37	37
	<i>d</i>	0.01	0.19	-0.35	0.25	-0.11	0.06
N6 Violation 2 (failure to retract)	<i>M</i>	3.23	2.88	3.75	3.23	3.04	4.56
	<i>SD</i>	1.14	1.20	0.76	1.00	1.00	1.10
	<i>t</i>	2.76**	3.39**	2.25*	3.34**	3.66***	-3.93***
	<i>df</i>	40	40	40	40	40	40
	<i>d</i>	0.85	1.05	0.70	1.03	1.13	-1.22
Personal Normative 2	<i>M</i>	3.53	3.49	3.92	3.97	4.33	4.12
	<i>SD</i>	1.34	1.01	0.59	0.94	1.18	0.92
N7 Violation 2 (unreasonable relational priority)	<i>M</i>	2.91	2.45	3.63	2.63	3.09	5.27
	<i>SD</i>	1.02	0.92	0.62	1.00	0.88	0.97
	<i>t</i>	1.84	3.81***	1.71	4.86***	4.16***	-4.34***
	<i>df</i>	48	48	48	48	48	48
	<i>d</i>	0.52	1.08	0.48	1.37	1.18	-1.23

Note. $N = 353$ (approx. 22 per condition).

* $p < .05$

** $p < .01$

*** $p < .001$

A strong difference arises here between the two sets of vignettes. The second set (which dealt with the construction of a shopping center in the public conditions, and two friends deciding on weekend plans in the personal conditions), with the exception of the N5 violation condition (which did not prove to be a very effective manipulation to begin with) showed marked differences between the normative vignettes and non-normative vignettes on all of the variables

of interest, thus mostly supporting H1, H2, and H4-H6 in these cases. Particularly of note is the marked negative effect of persuasion norm violations on perceived pleasantness of the interaction, with all of the violation conditions being over a point below the normative one and Cohen's d values exceeding 1.00, and the particularly strong effect of the N2 violation condition on all of the dependent variables. A somewhat more complex relationship emerges with the personal-issue persuasion vignettes, where the N7 violation significantly influenced perceived pleasantness, perceived attainment of relational goals, future willingness to argue, and perceived quarrel probability (all $d > 1.00$), but did not show an effect on content goal achievement or argument quality (thus supporting H2, H4b, H5, and H6, but not H1 or H4a).

However, the first set of vignettes (which dealt with a library food and drink policy in the public conditions, and a discussion over cleaning dishes in the personal conditions) did not show the same magnitude of effects, with only the N4 violation condition showing strong d values. Part of this lack of success was the ineffective manipulations of N6 and N7, of course (all dependent variables were unaffected in these two conditions, as well), but even the effective manipulations did not produce statistically significant outcomes as consistently or as strongly as those in the second set of vignettes. Still, the N2 and N4 manipulations elicited statistically significant differences on all of the variables, so the hypotheses were supported overall in a majority of cases in the persuasion domain.

There are a few implications we can derive from this table. For one, when the manipulations failed, there was also little in the way of discernible differences between normative and violation conditions, but when the manipulations were successful, results generally conformed to several of the hypotheses of this project—norm violation conditions often received lower marks for argument quality, pleasantness, goal attainment, future

willingness to argue, and quarrel probability relative to their normative counterparts. As with the H3 discussion above, this is often but not always true; there are several vignettes where some but not all of the outcomes were significantly reduced from the normative baseline. We also see some evidence that N2 violations—not allowing the other arguer to advance arguments—might be particularly strong, with N4 violations—non-argumentative defenses—also appearing to cause more markedly negative outcomes than some of the other violations. In the case of N2, this is not particularly surprising—failing to allow the opponent to advance arguments is akin to a dominance attempt, and perhaps the most obvious and forceful norm violation.

The successful N7 manipulation’s effect pattern may indicate that N7 violations—inappropriate relational priorities in personal-issue arguments—tend to cause more relational damage than content damage, as argument quality and content goal attainment perceptions were unaffected, but all of the more relationally-oriented variables were strongly altered from the normative condition. This, of course, flies against the hypotheses that suggested persuasion violations would be more apt to cause content-level harm than relational. But on reflection, perhaps N7 violations, being personal in nature and in more of a logical gray area due to the relationship-dependent nature of their logic (as discussed in Chapter 2), ought to be exempt from that prediction. The data here, limited as they are, certainly suggest so.

Even without considering N7, there is no data here to support the line of thinking that persuasion arguments are more prone to content harm than relational harm. The effect sizes on relational goal attainment are almost always higher than those on content goal attainment, and there is little, if any, pattern emphasizing argument quality over pleasantness.

In sum, the data in the persuasion domain largely support the idea that argument norm violations lead to these negative outcomes relative to arguing normatively—at least, the

successful manipulations here elicit many or all of these negative outcomes more often than not. However, the predictions regarding the content-level focus of persuasion are entirely unsupported thus far; we will see if this persists in the remainder of the research trajectory.

Next, we will see if the other supposed content-focused domain, inquiry, exhibits similar trends. Table 3.12 displays the perceptions of the inquiry vignettes on the dependent variables.

Table 3.12.
Outcomes of Inquiry Norm Violations, Study 1

Condition		Argument		Content	Rel.	Fut. Will.	Quarrel
		Quality	Pleasantness	Goal	Goal	to Arg.	Prob.
Normative 1	<i>M</i>	4.40	4.85	4.37	4.77	5.12	2.43
	<i>SD</i>	0.90	1.02	0.64	0.83	0.90	0.93
N8 Violation 1 (commitment retraction)	<i>M</i>	4.47	4.42	4.26	4.53	4.88	2.74
	<i>SD</i>	1.04	1.32	0.83	0.92	1.03	1.13
	<i>t</i>	-0.33	1.72	0.71	1.30	1.15	-1.41
	<i>df</i>	88	88	88	88	88	88
	<i>d</i>	-0.07	0.36	0.15	0.28	0.24	-0.30
N9 Violation 1 (taking a position too early)	<i>M</i>	3.77	4.07	4.27	4.23	4.50	2.95
	<i>SD</i>	1.06	1.21	0.76	1.04	1.09	1.09
	<i>t</i>	3.07**	3.31***	0.69	2.75**	2.96**	-2.46*
	<i>df</i>	92	92	92	92	92	92
	<i>d</i>	0.64	0.69	0.14	0.57	0.61	-0.51
N10 Violation 1 (circular argument)	<i>M</i>	4.77	5.06	4.66	4.94	5.01	2.48
	<i>SD</i>	1.05	1.00	0.86	0.85	1.02	0.97
	<i>t</i>	-1.76	-0.94	-1.81	-0.94	0.53	-0.23
	<i>df</i>	83	83	83	83	83	83
	<i>d</i>	-0.38	-0.21	-0.39	-0.20	0.12	-0.05
Normative 2	<i>M</i>	4.93	5.11	4.85	5.03	5.34	2.25
	<i>SD</i>	0.92	1.05	0.72	0.92	0.99	0.97
N8 Violation 2 (commitment retraction)	<i>M</i>	3.73	4.02	3.61	4.23	4.58	3.20
	<i>SD</i>	1.05	0.89	0.61	0.51	0.81	1.03
	<i>t</i>	5.66***	5.19***	8.54***	5.14***	3.82***	-4.35***
	<i>df</i>	84	83.68	84	76.25	84	84
	<i>d</i>	1.23	1.10	1.85	1.05	0.83	-1.39
N9 Violation 2 (taking a position too early)	<i>M</i>	3.78	3.56	3.84	3.78	4.11	3.83
	<i>SD</i>	0.92	1.14	0.78	0.83	0.98	0.95
	<i>t</i>	5.99***	6.77***	6.48***	6.87***	5.98***	-7.86***
	<i>df</i>	90	90	90	90	90	90
	<i>d</i>	1.25	1.41	1.35	1.43	1.25	-1.64
N10 Violation 2	<i>M</i>	3.94	4.23	4.16	4.29	4.66	3.08

(circular argument)	SD	1.05	1.06	0.77	0.71	1.08	1.10
	<i>t</i>	4.83***	3.96***	4.47***	4.36***	3.10**	-3.81***
	df	89	89	89	87.06	89	89
	<i>d</i>	1.01	0.83	0.94	0.90	0.65	-0.80

Note. $N = 357$ (approx. 44 per condition).

* $p < .05$

** $p < .01$

*** $p < .001$

The second set of vignettes (which concerned two siblings thinking through what to buy their mother for her birthday) all had effective manipulations (inasmuch as could be determined given the lack of reliability for the N8 and N9 subscales), and these conditions indeed exhibited sharp differences from the normative one in all six outcome variables, thus supporting H1, H2, and H4-H6. In the first set of vignettes (which dealt with two college students trying to decide on a philosophy class to take), however, the N8 and N10 manipulations were not successful and also did not show significant impacts on the dependent variables. The N9 violation condition (taking a position too early) did show a successful manipulation (again, to the extent it can be ascertained), and mostly showed significant impacts on the dependent variables as well, though somewhat less strongly than in the second set of vignettes. We thus have strong evidence that N9 violations lead to more negative results in all of these variables.

Therefore, as with the persuasion vignettes, the pattern here is that if the manipulation works, then negative judgments of the vignette follow, but if the manipulation fails, judgments generally stay in line with the normative condition. This is an important finding, because it illustrates how the outcome variables seem to track with the perceptions of normativity. We are generally not seeing significant outcomes from insignificant manipulations. Further, we continue to see that when a violation condition shows a difference from a normative one, it tends to

manifest across all six outcome variables, which strengthens the theoretical claims made in Chapter 2 regarding these variables.

It is also worth emphasizing the much higher baseline perceptions of these outcomes in the inquiry domain relative to persuasion, as evident by comparing means in Tables 3.11 and 3.12. Even the violation conditions in the inquiry domain attained similar or more positive scores on these variables than the *normative* persuasion vignettes, and in general the perceptions of these vignettes are much more positive than their persuasive counterparts. Participants seem to read inquiry as more pleasant, less prone to conflict, and leading to more fruitful outcomes, compared to persuasion.

As with persuasion, the hypothesized content-heavy effects of inquiry violations do not appear in these data, where there is no particular pattern in effect size between content and relational goal attainment, or between argument quality and pleasantness. We continue to see a fairly stable set of effects across the board, e.g., the effect sizes ranging between 1.25 and 1.64 for all six variables in the second N9 violation condition. The successful N8 manipulation did register a d of 1.85 on content goal attainment and 1.05 on relational goal attainment, but that is the only data that supports the hypothesized pattern.

Thus, again, we are left with a relatively supportive picture on the hypotheses that non-normative arguments will be judged more negatively than normative arguments on these variables, but the hypotheses that concern the content-level focus of inquiry are unsupported so far.

Of the four domains, it was identity which offered the most promising data earlier in the chapter, in Table 3.8. Five of its six manipulations worked very well, and all were measured by very reliable subscales. Table 3.13 displays how the identity vignettes' outcomes were perceived.

Table 3.13.
Outcomes of Identity Norm Violations, Study 1

<u>Condition</u>		<u>Argument</u>		<u>Content</u>	<u>Rel.</u>	<u>Fut. Will.</u>	<u>Quarrel</u>
		<u>Quality</u>	<u>Pleasantness</u>	<u>Goal</u>	<u>Goal</u>	<u>to Arg.</u>	<u>Prob.</u>
Normative 1	<i>M</i>	5.03	5.73	5.34	5.56	5.72	2.11
	SD	1.09	1.13	0.95	1.18	1.06	0.89
N11 Violation 1 (negative identity)	<i>M</i>	4.59	4.76	4.80	4.73	4.91	2.76
	SD	0.83	1.27	0.74	0.95	1.04	0.86
	<i>t</i>	2.17*	3.87***	2.99**	3.64***	3.65***	-3.51***
	df	85.61	89	89	88	88	89
	<i>d</i>	0.45	0.81	0.63	0.77	0.77	-0.74
N12 Violation 1 (identity contradiction)	<i>M</i>	3.55	3.62	4.23	3.48	3.88	3.80
	SD	1.17	1.04	0.75	0.84	1.16	1.06
	<i>t</i>	6.36***	9.47***	6.32***	9.88***	8.06***	-8.41***
	df	93	93	93	83.19	93	93
N13 Violation 1 (disaffected listening)	<i>M</i>	3.65	2.86	3.75	3.27	3.37	3.41
	SD	0.71	1.25	0.80	0.99	1.23	0.97
	<i>t</i>	7.19***	11.54***	8.70***	10.07***	9.81***	-6.72***
	df	79.66	90	90	90	90	90
Normative 2	<i>M</i>	4.84	5.27	5.15	5.24	5.38	2.32
	SD	0.92	1.24	0.92	1.06	1.08	0.95
	<i>M</i>	3.96	3.80	4.42	3.61	4.28	3.05
	SD	1.10	1.03	0.83	0.76	1.06	1.02
N11 Violation 2 (negative identity)	<i>t</i>	4.03**	5.92***	3.81***	8.29***	4.74***	-3.47***
	df	84	84	84	82.45	84	84
	<i>d</i>	0.87	1.28	0.83	1.74	1.03	-1.19
	<i>M</i>	3.49	3.63	3.96	3.80	4.07	3.55
N12 Violation 2 (identity contradiction)	SD	1.05	1.43	0.83	1.12	1.36	1.24
	<i>t</i>	6.50***	5.82***	6.35***	6.23***	5.06***	-5.31***
	df	87	87	87	87	87	87
	<i>d</i>	1.38	1.24	1.35	1.32	1.08	-1.13
N13 Violation 2 (disaffected listening)	<i>M</i>	3.44	3.02	3.61	3.28	3.41	3.36
	SD	1.04	1.33	0.77	1.06	1.25	0.85
	<i>t</i>	6.88***	8.44***	8.76***	8.89***	8.18***	-5.57***
	df	91	91	91	91	91	91
	<i>d</i>	1.43	1.75	1.82	1.85	1.70	-1.16

Note. $N = 358$ (approx. 44 per condition).

* $p < .05$

** $p < .01$

*** $p < .001$

Indeed, a similar picture emerges: the five effective manipulations showed significant differences on all six outcome variables. Even the ineffective manipulation (N11 in vignette set 1) largely exhibited these differences: this is the first time we have seen an ineffective manipulation still produce differences in outcomes relative to the normative condition. The effect sizes are quite large across the board on all variables in all five of the successful manipulation conditions. Thus, we see strong support for H1, H2, and H4-H6 here.

Like inquiry, identity arguments are perceived quite positively when conducted normatively, which Hample and Irions (2015) also found. However, violations to the norms seem to cause particularly strong effects here. These data show the strongest support for several of the hypotheses of the project: norm violations seem to cause strong reductions in all of these argumentative perceptions relative to normative arguments. As the Theory of Argumentative Norms represents the first attempt that I know of to render an evaluative schema for identity arguments (as opposed to inquiry and of course persuasion, where the norms are largely derived from existing theory), the strength of the identity norms in affecting these judgments is an important finding, and the most positive sign yet for the theory.

With respect to the predictions that identity would prove particularly relationally focused, we do see large differences in the d values between content and relational goal attainment in two conditions here: the first N12 violation and second N11 violation, which also come with more modest but still notable differences in effect size between argument quality and pleasantness. Still, the other conditions do not exhibit a clear pattern, and the perceived probability of quarrels remains comparable to the inquiry vignettes and well below those of persuasion. The data may suggest a slight leaning toward relational issues overall, but no norm shows this trend clearly in

both of its manipulations, and overall the effect pattern is dominated by large effect sizes across the board rather than any sort of particular variable emphasis.

Finally, we turn to the play domain. Table 3.14 displays the perceptions of the play vignettes on the outcome variables.

Table 3.14.
Outcomes of Play Norm Violations, Study 1

<u>Condition</u>		<u>Argument</u>		<u>Content</u>	<u>Rel.</u>	<u>Fut. Will.</u>	<u>Quarrel</u>
		<u>Quality</u>	<u>Pleasantness</u>	<u>Goal</u>	<u>Goal</u>	<u>to Arg.</u>	<u>Prob.</u>
Normative 1	<i>M</i>	4.32	4.38	4.63	4.54	4.81	3.38
	<i>SD</i>	0.64	1.41	0.80	1.05	1.13	1.10
N14 Violation 1 (dyadically inappropriate play)	<i>M</i>	4.22	3.94	4.64	3.97	4.40	3.67
	<i>SD</i>	0.86	1.20	0.81	0.85	1.23	1.30
	<i>t</i>	0.63	1.62	-0.11	2.81**	1.67	-1.17
	<i>df</i>	91	91	91	91	91	91
	<i>d</i>	0.13	0.34	-0.02	0.58	0.35	-0.24
N15 Violation 1 (serious framing)	<i>M</i>	4.66	4.19	4.55	4.21	4.57	3.44
	<i>SD</i>	0.92	1.23	0.76	0.92	1.10	1.09
	<i>t</i>	-2.05	0.69	0.48	1.57	1.04	-0.26
	<i>df</i>	90	90	90	90	90	90
N16 Violation 1 (non-playful response)	<i>M</i>	3.84	4.32	4.39	4.58	4.63	3.28
	<i>SD</i>	1.12	1.29	0.58	0.91	1.06	1.09
	<i>t</i>	2.40*	0.22	1.59	-0.18	0.79	0.45
	<i>df</i>	58.78	88	88	88	88	88
Normative 2	<i>M</i>	4.36	4.85	4.67	4.76	4.96	2.69
	<i>SD</i>	0.75	1.20	0.69	1.02	0.97	1.03
	<i>M</i>	3.39	3.25	3.80	3.53	4.06	3.81
	<i>SD</i>	0.89	1.09	0.80	0.87	0.99	1.01
N14 Violation 2 (dyadically inappropriate play)	<i>t</i>	5.90***	7.00***	5.82***	6.49***	4.59***	-5.51***
	<i>df</i>	98	98	98	98	98	98
	<i>d</i>	1.18	1.40	1.16	1.30	0.92	-1.52
	<i>M</i>	4.44	3.95	4.48	3.98	4.55	3.62
N15 Violation 2 (serious framing)	<i>SD</i>	1.00	1.52	0.78	1.11	0.94	1.05
	<i>t</i>	-0.39	3.16**	1.21	3.46***	2.04*	-4.29***
	<i>df</i>	70.50	88	89	89	89	89
	<i>d</i>	-0.09	0.67	0.26	0.73	0.43	-0.90
N16 Violation 2 (non-playful response)	<i>M</i>	4.05	3.94	4.22	4.11	4.44	3.44
	<i>SD</i>	0.93	1.40	0.79	1.00	1.00	1.02
	<i>t</i>	1.75	3.37***	2.91**	3.09**	2.55*	-3.51***

df	90	90	90	90	90	90
<i>d</i>	0.37	0.71	0.61	0.65	0.53	-0.74

Note. $N = 358$ (approx. 44 per condition).

* $p < .05$

** $p < .01$

*** $p < .001$

It is again the second set of vignettes (about rock bands, in this case) outpacing the first (about baseball teams) in terms of generating effects. The fact that we have observed fairly different effect sizes between topics in three of the four domains may indicate that topical contexts play a significant role in outcome judgments and perhaps even effectiveness of manipulations, even if there is not an obvious difference in seriousness or intensity of the topic.

Both N14 (appropriate play) manipulations were effective, yet the second again showed differences in all six outcome variables at the $p < .001$ level, while the first manipulation only showed a statistically significant difference of relational goal attainment, a rare successful manipulation that did not produce downstream effects on most or all of these outcome variables. A similar gulf exists between the N15 (being non-serious) manipulations, which are harder to evaluate since the N15 measure is not reliable, though both showed similar evidence of manipulation and yet produced differing results on the outcome variables. The second N16 (responding playfully) violation vignette also showed differing evaluations from its normative counterpart while the first vignette generally did not, but this can be explained by the first vignette not being an effective manipulation in the first place.

Despite five of the six play manipulations being successful, and all five of those impacting at least one of these six outcome variables, we see a less global pattern of effects here. Part of this result may be that play violations simply produce weaker relational effects—the non-serious nature of the domain may somewhat insulate it from downstream harm. However, for the

first time, the content-relational balance of effects may also play a part. Only one of the six vignettes here showed a significant deviation from its normative counterpart on argument quality, and only two showed significant deviations on content goal attainment. The impacts on both pleasantness and relational goal attainment were more frequent (three and four of the violation conditions, respectively), and often stronger, showing the first evidence, albeit fairly marginal, for a domain leaning toward effects on one level over the other. This trend bears monitoring in the rest of the studies.

In sum, two distinct trends emerge in the analysis of the outcome data, one positive and one negative for the theoretical predictions. The first is that there are many clear instances of the norm violation conditions being associated with strongly divergent effects in all six outcome variables under consideration, relative to their normative counterparts. Certainly, this trend did not hold for every single vignette on every single variable, but most of the norms showed substantial effects in at least one of their two manipulations. The findings in the identity domain are particularly promising in showing that norm violations can take identity arguments from being highly pleasant to notably negative interactions.

By contrast, the conceptualizations of particular effect patterns—that violations in certain domains would cause larger effects on one level (content or relational) than the other—are less supported by these data. Certain vignettes did exhibit distinctive effect patterns, but none can be generalized to both instances of a particular norm violation, let alone a domain. The only area in this regard that is slightly promising is play, which may conform to its hypothesized relational-over-content prioritization to some extent. These data also fall far short of offering an affirmative answer to the project's research question, whether individual norm violations differ from each other in magnitude or type of effect.

Discussion

The primary objective of this study was to pilot twenty-three new scale instruments and forty vignettes so that the Theory of Argumentative Norms (and its constructs) could be tested reliably in the future. In conducting that test, however, this study has also provided us with rich data—in its need to cover everything, this is the only time in this project that every vignette will be tested on every variable. As such, it has given us some early returns on the predictions made by the theory and spotlighted some other trends that will be worth watching in the remainder of the project. In this section, I will first address the primary goal of the study—the piloting—and then move on to a discussion of some of the interesting results. Finally, I will plot the path forward from here.

Instrumentation

Of the numerous new materials (scales and vignettes) prepared for this research, a significant majority held up very well in this pilot process. Eighteen of the twenty-three new scales (counting subscales) proved to be reliable at $\alpha = .70$ or above, with many coming in far above that threshold. Particularly encouraging was all six of the key outcome measures clearly attaining statistical reliability, making all of the project's hypotheses at least partially testable. Only five norm subscales need work. Further, of the vignettes that were completely testable (i.e., those manipulating norms for which the subscales proved reliable), only four did not display effective manipulations: one failure to retract when disproven, one unreasonable relational priority, one circular argument, and one negative identity.

Nevertheless, the research trajectory could not proceed without all of the scales being fully reliable, and with those needing alteration and retesting, it made sense to edit the problematic vignettes as well in an attempt to strengthen the manipulations (while working to

keep the vignettes realistic and in line with their normative counterparts as much as possible). As such, while most of the new scales and stimuli could be deemed ready for inclusion in a full test of this project's hypotheses, a second, more targeted pilot study was clearly needed before that could happen. Thus, I made edits and additions to the unreliable subscales and attempted to make the violations more apparent in the ineffective vignettes. The editing to the scales and vignettes, and their resulting more targeted pilot, is the subject of the next chapter.

Initial Substantive Results

When this study commenced, it was hard to know what to expect. The creation of the vignettes and measures was a daunting undertaking, and I was unsure what portion of the data in this initial test would actually prove usable for analysis of anything beyond reliability and manipulation checks. Fortunately, the clear majority of the data pass muster in these regards and were able to point toward some conclusions for and against the various hypotheses of the Theory of Argumentative Norms, while also providing a rich characterization of the relationships between many of the newly created variables. Since these are only the initial findings and will be replicated later in the project, with better materials in some cases, I will not provide exhaustive treatments of any of the notable findings here, but I do wish to call attention to five themes, some of which interrelate: the generally strong associations of norm violations with negative outcomes, the even priorities given to the content and relational levels, the correlations between nearly all variables in the dataset, the notion of perceptual reach, and the possibility of varying levels of violation strength.

Effects of Norm Violations

First, we can see that, to the extent that they are testable from this initial dataset, violations of argumentative norms often do appear to impact a variety of important outcomes. In

many cases, violations made arguments perceived as significantly lower in quality, made argumentative experiences less pleasant and more likely to lead to goal failures and escalation, and made respondents less willing to argue with the hypothetical vignette participants in the future. Certainly, these effects did not persist with every variable in every vignette, but in a general sense, the early returns on the significance of norm violations are promising. It is especially so given the relatively low sensitivity of the study: only fairly large effect sizes are clearly detectable, yet we are able to see clear evidence of violation impacts in all four domains. Several of the manipulations that worked generated statistically significant effects on all of the dependent variables relative to their normative companions; thus, at least some of the violation conditions were fully in line with this set of predictions.

The strong support offered for the effects of identity norm violations, and the positive—though more mixed—results in the play domain represent particularly notable findings. As I noted in Chapter 2, a key innovation of the theory is its creation of norms as an evaluative schema for non-utilitarian arguments—i.e., those aiming for an identity expression or playful result. The identity data support the idea that the identity norms—especially the receiver-oriented N12 and N13—are strong shapers of where identity arguments end. If the norms are followed, then the non-controversial nature of identity display typically makes this domain particularly fulfilling and pleasant, as Hample and Irions (2015) found. However, lack of appropriate reception turns the domain into a sharply negative direction, providing context for some of the qualitative trends noted by Hample et al. (2019), where identity was recast into a more conflictual space. In the play domain, findings were less consistent and certainly less pronounced, but still provided support in several cases that play violations are associated with worse evaluations of the argument of most of the outcome variables.

Similarity Between Content and Relational Levels

While the theoretical predictions regarding violations' association with negative argumentative perceptions and outcomes were largely supported, the predictions of domain-specific effect patterns received less support. Instead, the pattern that emerges is one of relative uniformity—the effect sizes in each violation condition tended to be quite similar on most or all of the outcome variables. Participants seemed to see content and relational damage as intertwined in most cases, with similar effect sizes on goal attainment in both levels and changes in argument quality by a single arguer often changing the dialogic pleasantness by a similar amount. Though utility arguments and their traditional evaluative schemas tend to center the content level, and identity and play arguments have more relational goals, actually violating the rules of conduct in any domain (except perhaps play) seems to make frustration similarly salient on both levels. This does not mean that the *importance* of the levels is necessarily equal, but still provides us with evidence that arguers see effects extend to both levels with some consistency.

Variable Correlations and Eschewing Bonferroni

We now move into territory that was not hypothesized by the Theory of Argumentative Norms. Tables 3.2-3.5 demonstrated that the variables in the dataset—the norm perceptions and the outcomes—almost always exhibit correlations with each other, in all four domains.

With the outcome variables, this is not surprising. It follows that arguers will be deemed as meeting their goals less in unpleasant arguments, or when they have advanced low-quality arguments₁, than when they have participated in pleasant arguments or advanced arguments₁ of reasonable quality. Unpleasant or poor arguments or frustration at reaching goals also would be more likely to lead to escalation or decreased willingness to argue in the future than more positive and fulfilling argumentative experiences. Nevertheless, these variables do retain some

independence— r^2 values between them tended to be around .40, and there were several cases (e.g., the second manipulation of N7, the first manipulation of N9) where at least one outcome variable was significantly affected at $p < .001$ and another variable was not affected at all.

The correlations between norms were generally weaker—only one domain-specific norm explained over thirty percent of the variance in another—but almost always present. This is also not surprising, since some norm violations suggest a likelihood of others (e.g., not letting the other person advance arguments may often indicate a premature claim of victory, a contradiction or condemnation of an identity is rarely accompanied by appropriate therapeutic listening). But some norms are more conceptually disconnected—e.g., going back on commitments vs. taking a position too early in inquiries, responding to the other person's standpoint vs. retracting a failed defense of a standpoint in persuasion—and yet correlations persist even in these cases (though more weakly, with r^2 being about .10).

The consistent correlations between variables also means this research meets two criteria that Moran (2003) noted tend to cause issues if one employs a Bonferroni correction: the study employs a very large number of tests (336, to be exact), and is conducted on variables that exhibit significant correlations. Moran emphasizes that large numbers of tests that arise from studying many conditions, rather than employing many variables in the hopes to find some sort of statistically promising result, are particularly punished by Type I error correction procedures. Here, employing a study-wide Bonferroni correction on these data would require me to regard only tests significant at $p = .05/336 = .00015$ as statistically significant, which would render the study incredibly insensitive—at power = .80, sensitive only to effect sizes greater than ~ 1.52 in the persuasion domain and ~ 1.03 elsewhere. To put it another way, to be as sensitive as this

study is at $p = .05$ (which is not particularly sensitive to begin with, at $d = 0.86$ in persuasion and 0.60 elsewhere), I would need just shy of two thousand participants.

The strong correlations, especially between the outcome variables, indicate such a correction would be too harsh, since positive tests are more likely to converge together. As Moran (2003, p. 404) noted, “the more individual tests that fall below α , the lower the probability that they are all spurious.” The dominant trend in the data is that effects tend to exist across the board. Further, as noted in the previous subsection, we see similar effect sizes across the outcome variables on many of the conditions tested. As such, employing the Bonferroni correction, intended to mitigate Type I error possibilities, would instead lead to potentially dozens of Type II errors. Conversely, if we add all of the p -values of the statistically significant tests together, we estimate there will be only a few Type I errors, perhaps two or three. Thus, employing the Bonferroni correction is not a statistically helpful procedure in this research, as it would push us toward far more error possibilities.

Nevertheless, as I proceed, I will be mitigating the chances of Type I error by replicating many of these procedures in the main studies of the project (Studies 3 and 4), in addition to some methodological triangulation in Study 4. The overall sample that results will thus allow for analysis in overall trends in the multiple datasets to reach firmer conclusions on the hypotheses. I will also be mindful of persistently weak (i.e., $p < .05$ but no better) effects potentially being Type I error candidates. As Moran (2003, p. 405) recommended, I will “make reasonable interpretations based on experimental design, power analyses, differences between control and treatment groups, and basic logic.” In Chapter 7, I will make complete assessments of the hypotheses based on the data from the three hypothesis-testing studies in the project.

Perceptual Reach

Perceptual reach is the idea that, in the system of argument perceptions under study here, one noticeable perception affects (or reaches to) others. Above, I briefly discussed the fairly consistent correlations among the norm subscales. More notable than these, and certainly less expected, was the fairly wide perceptual reach exhibited by many of the norm violations in the vignettes. Despite the vignettes all being carefully manipulated to include a single norm violation, these violations seem to result in a more global negative perception of normativity. Off-topic responses (N3 violations) and non-argumentative defenses (N4 violations), for instance, lowered perceptions of normativity on most or all of the six persuasion-specific norms in both of their violation conditions. This trend seems to be especially strong in persuasion, but most of the (effective) violation conditions in other domains were associated with reductions in two of the three domain-specific norms. Sometimes this was fairly mild—identity contradictions were very strongly detected, but did not significantly affect perceptions of identity negativity, with therapeutic listening perceptions only mildly affected by comparison. Still, the reach extended beyond the directly manipulated norm in even these sorts of cases.

The fact that the persuasion norms are perhaps more enmeshed with each other is perhaps not surprising. The paths to content goals (and thus persuasion and inquiry arguments) are somewhat narrower (i.e., often bound by the topic being argued about) than those toward relational goals, thus making identity and play somewhat more open playing fields and their norms somewhat more general. It is, however, of note that this seems (preliminarily) to be more a characteristic of specific norms or specific dialogue types than the perceived severity of the violation—off-topic responses were detected less strongly than identity contradictions, for instance, and yet had a more significant effect on the outcome of the perceptions of the other relevant norms (including N1).

On one hand, perceptual reach is something of an interpretive annoyance, because it implies that the effect of one violation might be mistaken for the indirect effects of others. However, I regard this as a substantial finding (if it replicates) rather than something to be somehow prevented. If it proves to be supported throughout these studies, it will be a phenomenon that will need to be embraced theoretically. Perceptual reach bears watching in the main research studies of the project, and I will endeavor to draw more definitive conclusions about and explanations for the varying reach of violations as those studies reveal patterns in this regard.

Perceived Force of Violations

Finally, the vignette manipulations seem to vary in effect size from norm to norm. That is, the manipulation of some norms caused the scale means to move over two points (e.g., allowing argument, not contradicting identity claims, and therapeutic listening, where d values often exceeded 1.20; see Tables 3.6 and 3.8), whereas others were under a point (e.g., using argumentative defenses and avoiding circular arguments, where d values were typically under 1.00; see Tables 3.6-3.7).

To some extent, one may attribute this to the vagaries of the vignettes and their construction, but the fact that these differences showed up in both vignette examples across quite a few of the norms seems to suggest that these specificities might not be the sole cause of this trend. Rather, people may be more attuned to certain norms and their violations more strongly than others, or perhaps perceive the baseline of normativity to be different, norm-to-norm. Indeed, the norms score fairly differently in the normative vignettes—norm 6 (retracting if appropriate) gets significantly lower scores in the normative persuasion vignettes than the other public persuasion norms, for instance (see Table 3.6). Or perhaps some norms can be more

definitively broken than others—i.e., breaks of some norms may be seen as temporary gaffes on the part of an arguer and thus fairly reparable, whereas others seem more heinous and damning to the entire argument.

Whether certain norm violations are simply easier to detect than others for ordinary arguers, or whether such violations are simply perceived to be more egregious expectancy violations, is not clear, but is an interesting trend to monitor in the rest of this project, as well as to explore more directly in future research, particularly studies that use other stimuli than in this project.

The Path Forward

Overall, this first pilot study established most of the framework for this project's main studies and points toward fairly promising results for the theory established in Chapter 2. Before turning to the main studies, however, the rest of the measures need to be usable. Thus, we turn to the tasks of reliably measuring the problematic norms (N5, N8, N9, N15, N16) and ensuring that the vignettes contain effective manipulations.

Chapter 4: Refining Operationalization (Study 2)

The first pilot study attempted to develop 23 new scales and test 40 different vignettes as argumentative stimuli. Out of those, eighteen of the scales proved reliable and all but eight vignettes proved to be effective manipulations. Nevertheless, to proceed with the present course of research, the materials that failed needed to be revised and retested: thus, a second pilot was deemed necessary before proceeding further. Thus, this chapter is concerned with the second pilot study, which sought to test out revised scales and vignettes to attain statistical reliability and effective manipulations. In particular, it was a targeted assessment of the five norm subscales (N5, N8, N9, N15, and N16) that failed to reach a Cronbach's alpha of .70, as well as a test of eight rewritten vignettes in the hope that their manipulations would appear more strongly than they did in the first pilot without compromising their typicality (see Tables 3.6-3.10). The revised scales contained some newly written items, and the vignettes contained more pointed argumentative violations than their original versions. All revised materials for this study appear in Appendix B, with new scale items bolded.

In other respects, the aims and procedures of this study paralleled those for Study 1.

Method

Procedure

The procedure for Study 2 was similar to the procedure for Study 1. This study was also conducted via an online survey in which participants each viewed four randomly selected argument vignettes (again, one per argumentative domain—one persuasion, one inquiry, one identity, and one play) and filled out some normative evaluations of each, along with a typicality judgment. The vignettes viewed were either violation condition vignettes that received reworking or normative vignettes to compare them to. Again, permission to conduct the study was obtained

from the University's Institutional Review Board, and participants indicated their consent to participate via an online consent form at the outset of the study.

There were, however, a few differences between Study 1 and Study 2. Most notably, far fewer variables needed to be assessed, so the list of items participants had to fill out about each vignette was less than half of what it was in the first study—just the frame synchronization subscale, whatever other norm subscales needed to be tested (i.e., the norms that were unreliable in Study 1 or the norm(s) being manipulated in the retested vignettes), and the Argument Typicality Scale. Consequentially, participants only received 30 minutes of credit in the SONA research system for Study 2, as it took significantly less time to complete, on average.

Participants

Participants were again recruited from undergraduate communication courses in exchange for credit toward course credit or extra credit requirements for participating in research studies. Altogether, 320 participants completed the study. One hundred and thirty-eight (43.1%) identified as male, with 180 (56.3%) identifying as female and two as non-binary. The average age of participants was 19.41 years ($SD = 2.02$). The young age of participants indicated that many likely came from introductory courses, and they thus represented a diversity of academic interests. As with Study 1, the participants were ethnically diverse: 131 (40.9%) identified as of European descent, with the other 60% being comprised largely of individuals who identified as African, Southern Asian, East Asian, or “Other,” in relatively equal proportions.

Materials and Measures

Vignettes

The materials for Study 2 consisted of a pared-down selection of vignettes: one in the N6 violation condition (public persuasion in which an arguer fails to concede appropriately), one in

the N7 violation condition (personal persuasion, in which an arguer shows unreasonable relational priorities), one in the N8 violation condition (inquiry, in which an arguer goes back on a commitment), two in the N9 violation condition (inquiry, in which an arguer takes a position too early), one in the N10 violation condition (inquiry, in which an arguer makes a circular argument), one in the N11 violation condition (identity, in which an arguer makes a negative identity claim), one in the N16 violation condition (play, in which an arguer does not respond playfully), and the normative counterpart for each (i.e., one normative public persuasion, personal persuasion, identity, and play vignette and two inquiry vignettes). The personal persuasion *normative* vignette was altered, rather than the N7 violation vignette, but in all other cases it was the violation vignettes that were edited. Vignettes retained their numbering from Study 1, 9-48, even though many of the Study 1 vignettes were unused here. Recall Figure 3.1, reprinted here, for the vignette topics and implied relationships. In Figure 4.1, I have bolded the vignette sets which are under consideration in Study 2.

Figure 4.1.

Topics and Implied Relationships in Vignettes, Study 2

<u>Domain</u>	<u>First Vignette Set Topic</u>	<u>(Implied) Relationship Between Arguers</u>	<u>Second Vignette Set Topic</u>	<u>(Implied) Relationship Between Arguers</u>
Persuasion (Public)	Library food and drink rules	College friends or acquaintances	Construction of a new shopping center	n/a
Persuasion (Personal)	Doing the dishes	Roommates	Weekend plans	Friends
Inquiry	Taking the same philosophy class	College friends (or perhaps romantic partners)	Buying mother's birthday presents	Siblings
Identity	Liking live music concerts	n/a	Volunteering at the library	n/a
Play	Baseball teams	n/a	Rock bands	n/a

Note. In the cases for which relationship cells are left blank (n/a), no particular relationship is implied from the context, but the casual nature of the arguments and specificity of the topics probably implied some sort of friendship.

Vignette edits (identified in bold in Appendix B) were attempts to strengthen the manipulations, i.e., to make the violations appear more clearly. In general, this involved either making the violating behavior continue for an extra conversational turn or two, or making it more emphatic when it begins. As with the original vignette construction, the violations all occur from one arguer in each dialogue, and I attempted to minimize alterations to the dialogue of the other (normative) arguer in the violation conditions. In the case of the N7 violation, however, the corresponding normative vignette was altered because it was judged quite harshly in Study 1; thus, the behavior of the arguers in the normative vignette was softened somewhat to make it appear less strident.

Measurements

The typicality scale was repeated without alteration from Study 1 to ensure the novel vignettes were still judged as reasonably typical argumentative episodes despite their strengthened violations. The only other measures for the study consisted of the N1 (frame synchronization), N6 (retracting if necessary), N10 (avoiding circularity), and N11 (non-negative identity) subscales, which were unchanged from Study 1 (these were employed to test the manipulations of their norms), and the N3 (responding to the other person's argument), N5 (not prematurely declaring victory), N8 (commitment adherence), N9 (not taking a position too early), N15 (nonseriousness), and N16 (playful response) scales, which each received two to five new items in addition to the six items used for Study 1. Two of the original items from the original N8 subscale were deleted, as I deemed them to be poorly articulated upon review, and

they were particularly poorly correlated with the others in Study 1. Again, all scales are 1-7, strongly agree to strongly disagree, where higher is better (i.e., more normative), and include roughly half reverse-coded items.

The new items were constructed with careful emphasis on wording, attempts to capture the core of the norm concepts, and use of different synonyms from the original scale items. I did not presume which of the old items would survive to the final scales, so the new items were not constructed to replace or duplicate particular items. Overall, I tried to capture the norms in ways the previous items had not (e.g., “[Arguer] thinks the only way for the discussion to continue is for [other arguer] to concede that he/she is right” for N5, “[Arguer] isn’t thinking through the issue enough” for N9, “[Arguer]’s tone indicates that he/she is just trying to have a lighthearted exchange about the topic” for N15), but without introducing particularly new ideas into the scales.

Results

The results of interest here bear on the reliability of the new instrumentation, and the suitability of the revised vignettes. This study’s data can generate some of the other results mentioned in the Chapter 3 results (e.g., correlations among measures, indications of perceptual reach), but since all the measurements were not made here and not all the stimulus conditions used, I think there is little point in reporting such partial results. Chapters 5 and 6 will report the formal tests of hypotheses.

Reliability of Revised Instruments

Six of the sixteen norm subscales were revised for this study, with new items added on to the previous versions of the scales. The reliabilities of these revised instruments are presented in Table 4.1.

Table 4.1.
Cronbach's Alpha Reliabilities for New Measures, Study 2

<u>Scale</u>	<u># Items</u>	<u>Reliability</u>
Typicality	7	.88
N1 (frame synchronization)	6	.81
N3 (responding to the actual argument)	8	.81 [^]
N5 (not claiming victory prematurely)	11	.81 [^]
N6 (accepting defeat if necessary)	6	.75
N7 (reasonable relational priorities)	6	.85
N8 (not going back on commitments)	6	.73 ^{^*}
N9 (not taking a position too early)	11	.83
N10 (avoiding circularity)	6	.71
N11 (non-negative identity projection)	6	.83
N15 (nonseriousness)	10	.71 [^]
N16 (responding playfully)	10	.83 [^]

Notes. [^] indicates scales that were originally unreliable (i.e., $\alpha < .70$) in Study 1 in six-item form. The N8 scale originally attained a reliability of .696 with nine items; it reached .73 after a stepwise deletion of the first two items (which were in the original scale) and the final item (which was new).

All of the scales that were reliable in Study 1 were again reliable in this sample, and with one correctable exception, all of the revised scales proved immediately reliable. The only exception was the N8 subscale, which attained statistical reliability as a six-item scale after three items were deleted. We can proceed with confidence that the norm subscales will be reliable.

Appropriateness of Stimuli

As in Study 1, typicality scores were obtained for each of the tested vignettes. The typicality judgments are again employed to ensure that participants perceived each revised vignette as reasonably realistic and representative of everyday arguments, and also that violation conditions in particular would not look like artificial manipulations participants are supposed to spot. Readers will recall that the theoretical midpoint of this scale is 4. Typicality results are presented in Table 4.2.

Table 4.2.
Typicality Perceptions of Vignettes, Study 2

<u>Condition</u>	<u><i>N</i></u>	<u>Typicality <i>M</i> (<i>SD</i>)</u>
Public Persuasion Normative	93	5.44 (0.96)
Public Persuasion N6 Violation	74	5.17 (1.01)
Personal Persuasion Normative	77	5.10 (1.00)
Personal Persuasion N7 Violation	75	5.08 (0.81)
Inquiry Normative 1	64	5.57 (1.02)
Inquiry N8 Violation	54	5.58 (1.20)
Inquiry N9 Violation 1	54	5.45 (1.06)
Inquiry N10 Violation	48	5.12 (1.37)
Inquiry Normative 2	48	5.91 (0.90)
Inquiry N9 Violation 2	50	5.41 (1.06)
Identity Normative	161	5.80 (1.00)
Identity N11 Violation	158	5.71 (0.93)
Play Normative	171	5.63 (1.19)
Play N16 Violation	148	5.12 (1.01)

Each of these vignettes was perceived as quite typical, with all scoring above a 5.0 on the 1-7 scale. This is encouraging especially in light of the strengthened violations in many of them. None seem to raise red flags in the minds of participants.

Manipulation Checks

Manipulation checks were again performed with independent-samples *t*-tests in the same manner as Study 1. As with Study 1, I corrected for unequal group variances in cases where a Levene's test for equality of variance was significant at $p < .05$. Because the number of vignettes tested differed significantly between domains, the statistical power also varied by domain. Because of the smaller number of vignettes per domain, Study 2 had significantly higher statistical power and was significantly more sensitive than Study 1. Power to detect an effect size of $d = 0.3$ was .61 in the public persuasion domain, .58 in the personal persuasion domain, approximately .48 in the inquiry analyses, and .85 in identity and play. Power to detect an effect size of 0.6 was .99 in the public persuasion analysis, .98 in personal persuasion, approximately

.94 in inquiry, and greater than .999 in identity and play. The sensitivity thresholds at .80 power were $d = 0.44$ public persuasion, 0.46 in personal persuasion, approximately 0.55 in inquiry, and 0.32 in identity and play.

First, let us consider the results in the persuasion domain, which are displayed in Table 4.3. Manipulation checks appear in bold in the remaining tables of this chapter.

Table 4.3.
Norm Perceptions in Persuasion Vignettes, Study 2

<u>Condition</u>		<u>N1</u>	<u>N3</u>	<u>N5</u>	<u>N6</u>	<u>N7</u>
Public Normative	<i>M</i>	3.64	5.07	4.08	3.55	4.48
	<i>SD</i>	0.94	0.90	0.89	0.93	0.99
N6 Violation (not accepting defeat)	<i>M</i>	3.41	4.63	3.62	3.31	4.18
	<i>SD</i>	0.79	0.97	0.81	0.87	0.86
	<i>t</i>	1.64	3.01**	3.43***	1.70	2.03*
	<i>df</i>	160	164	163	161	162
	<i>d</i>	0.26	0.47	0.54	0.27	0.32
Personal Normative	<i>M</i>	3.9	4.19	3.93	3.44	3.54
	<i>SD</i>	1.10	1.02	0.88	1.12	1.18
N7 Violation (unreasonable relational priority)	<i>M</i>	2.80	4.04	3.15	2.77	3.02
	<i>SD</i>	0.74	1.02	0.77	0.85	0.89
	<i>t</i>	7.24***	0.92	5.80***	4.13***	3.06**
	<i>df</i>	133.48	150	150	142.03	148
	<i>d</i>	1.17	0.15	0.94	0.67	0.50

Note. *N* sizes: Public Normative 93, N6 violation 74, Personal Normative 77, N7 Violation 75

* $p < .05$

** $p < .01$

*** $p < .001$

The N6 manipulation did not differ significantly from the normative condition in its manipulated norm ($p = .09$). However, the personal-issue vignette manipulation did produce a statistically significant difference in N7. Both manipulations did produce statistically significant differences in the revised N5 measure (not claiming victory prematurely); the N6 manipulation also evoked a difference in N3 (responding to the opposing viewpoint), and the N7 manipulation was paired to

a sharp difference in N1 (frame synchronization) and a difference in N6. The newfound effectiveness of the manipulation in the personal-issue condition is encouraging. The N6 manipulation is less satisfactory, though it at least does attain some perceptual differences from its normative counterpart.

In the inquiry domain, there were also two vignette revisions, but also two major overhauls to the norm subscales. Since this domain caused so many issues in Study 1, I also included the (unrevised; effective in Study 1) N9 violation vignettes just to check that things were headed in the right direction. The inquiry results appear in Table 4.4.

Table 4.4.
Norm Perceptions in Inquiry Vignettes, Study 2

Condition		N1	N8	N9	N10
Normative 1	<i>M</i>	5.40	4.16	3.96	4.30
	<i>SD</i>	1.16	0.91	0.83	0.85
N8 Violation 1 (commitment retraction)	<i>M</i>	4.90	4.16	4.18	4.05
	<i>SD</i>	1.13	0.94	0.77	1.01
	<i>t</i>	2.34***	0.02	-1.46	1.43
	<i>df</i>	114	113	113	111
	<i>d</i>	0.44	0.00	-0.27	0.27
N9 Violation 1 (taking a position too early)	<i>M</i>	4.69	4.08	2.63	4.29
	<i>SD</i>	1.31	0.74	0.92	0.78
	<i>t</i>	3.12***	0.50	8.07***	0.08
	<i>df</i>	115	114	111	113
	<i>d</i>	0.58	0.09	1.52	0.02
N10 Violation 1 (circular argument)	<i>M</i>	4.47	4.43	4.26	4.12
	<i>SD</i>	1.09	1.00	0.87	0.96
	<i>t</i>	4.30***	-1.46	-1.78	1.02
	<i>df</i>	109	105	106	104
	<i>d</i>	0.82	-0.29	-0.34	0.20
Normative 2	<i>M</i>	5.76	4.97	4.40	4.90
	<i>SD</i>	0.89	0.61	0.74	0.88
N9 Violation 2 (taking a position too early)	<i>M</i>	3.79***	4.55***	3.55***	4.21***
	<i>SD</i>	1.14	1.11	0.83	0.94
	<i>t</i>	9.39	2.29	5.27	3.72

df	94	76.72	93	95
<i>d</i>	1.92	0.46	1.08	0.76

Note. *N* sizes: Normative 1 64, N8 violation 54, N9 Violation 1 54, N10 Violation 48, Normative 2 48, N9 Violation 2 50

* $p < .05$

** $p < .01$

*** $p < .001$

The inquiry manipulations remained problematic, as neither the N8 nor N10 manipulations proved effective at altering judgments of normativity in their manipulated norms. However, the N9 manipulations remained effective, as they were in Study 1, which is encouraging with the now-reliable N9 subscale. Interestingly, although the N8 and N10 manipulations in the first vignette set were not associated with differing perceptions of their manipulated norms, they did show statistically significant differences in frame synchronization—it was sensed that the arguers weren't as much “on the same page” in these vignettes, but participants were not able to localize the source of that disruption to the specific norm violation, despite the changes to the manipulations. This was the case for the original version of the N8 manipulation in Study 1, but not the N10 manipulation, so the strengthening of the N10 violation does seem to have elicited this particular difference. Possible reasons for participants' inability to detect the norm violations in these particular cases are further explored in the Discussion section.

The identity revisions were much more straightforward: only one vignette (and no scales) needed revision. The results of the identity manipulation are displayed in Table 4.5.

Table 4.5.
Norm Perceptions in Identity Vignettes, Study 2

<u>Condition</u>		<u>N1</u>	<u>N11</u>
Public Normative	<i>M</i>	5.33	5.98
	<i>SD</i>	0.93	0.70
N11 Violation	<i>M</i>	4.67	5.60

(negative identity)	SD	0.99	0.95
	<i>t</i>	6.39***	3.95***
	df	317	282.73
	<i>d</i>	0.72	0.45

Note. *N* sizes: Normative 161, N11 Violation 158

****p* < .001

This is essentially unchanged from Study 1, where the normative vignette N11 mean was 5.80 and the N11 violation condition was 5.41 ($d = 0.40$). However, given the higher *n* size, the difference was statistically significant in this case, a privilege of our increased power in this domain. The effect of the manipulation appears to be small but durable, given the very similar *d* values in both studies. With the significant change to the N11 violation condition here (originally the negative identity was feeling somewhat rebellious at concerts, here it is liking extreme fringe genres of music in addition to the rebelliousness), it appears that the identity in question—liking going to concerts—is somewhat impervious to very negative perceptions, at least in the brief context of vignettes like these.

Play also only needed one vignette revision, but it also required two subscale changes.

The results of the play manipulation are in Table 4.6.

Table 4.6.
Norm Perceptions in Play Vignettes, Study 2

<u>Condition</u>		<u>N1</u>	<u>N15</u>	<u>N16</u>
Public Normative	<i>M</i>	3.97	4.06	4.51
	SD	0.87	0.78	0.86
N16 Violation (non-playful response)	<i>M</i>	3.09	3.67	3.27
	SD	0.81	0.77	0.63
	<i>t</i>	6.39***	4.38***	14.44***
	df	309	303	293.92
	<i>d</i>	1.04	0.50	1.63

Note. *N* sizes: Normative 171, N11 Violation 148

**p* < .05

***p* < .01

*** $p < .001$

This manipulation was a clear success, differing sharply from the Study 1 result: though the normative vignette retained a very similar evaluation to that of Study 1 (where $M = 4.65$), the mean of the N16 perception in the violation condition dropped 1.21 points from the original version in Study 1, producing a very large effect size. Smaller but still statistically significant differences between the normative and N16 violation conditions were seen on the other two norms tested here, which matches the fairly global effect of the successful N16 violation condition in the Study 1 as well.

Summary of Findings

This study sought to finalize the measures and stimuli for this dissertation, focusing on scales and vignettes that were unreliable or ineffective in the first pilot process. The data here are quite positive regarding the measures and more mixed regarding the stimuli.

We emerge from the two-pilot process with reliable scales for the sixteen norms and seven different argumentative outcomes (typicality, argument quality, pleasantness, content goal attainment, relational goal attainment, future willingness to argue, and quarrel probability), and 27 (out of 30) norm manipulations that have shown significant differences from their normative companions. This includes at least one functional manipulation per norm.

Overall, the revised N7 and N16 manipulations proved to be far more effective than the original versions from Study 1, and the N11 manipulation was verified to be statistically significant. This study has thus aided the ability to test stimuli in the areas of personal persuasion, identity, and play. The N6, N8, and N10 manipulations, however, did not show well in the results of their given norm subscales, although all three did prove different from the

normative conditions on at least one *other* norm subscale. Thus, there remain one persuasion vignette and two inquiry vignettes that have not shown manipulation effectiveness.

Though the failure of three of the manipulations, and the continued marginality of a fourth, was not the desired result, it nevertheless is generative in its own right. The fact that so many of the manipulations worked on the first try in Study 1, often with quite strong effect sizes, and yet a few remain imperceptible despite a larger sample size and stronger manipulations, invites reflection on why this might be. For reasons elaborated upon further in Discussion, I elected to proceed into Study 3 with the vignettes unchanged, to see if the differences that *were* perceived (norms besides those that were manipulated) translated to lower argument quality and pleasantness ratings.

Discussion

The main point of Study 2 was to improve the quality of the experimental materials – the instruments and the vignettes. I will discuss these efforts in that order.

Measurements

The most important outcome of this study is that it showed that all of the argumentative norms are now measurable. All 16 now have reliable scales. They began with face validity, and various correlational and other results indicate that the norm scales are moving in conformity with general theoretical understandings. In combination with the reliability of the outcome scales demonstrated in Study 1, these pilot studies have now created and tested scales for twenty-three important argument variables. Thus, the measures that were tested and refined in the pilot studies can be carried forth into the main studies. This not only sets up the feasibility of Studies 3 and 4, but also facilitates any other research that involves these argumentative constructs.

Stimuli

The revisions of the vignettes were, in general, less successful than the revisions of the scales, and given the persistence of issues with a few of them, results merit some thought about why participants may struggle to differentiate manipulations of these particular norms in some cases. It is, of course, possible that the vignettes are simply poorly worded or lack sufficient manipulative strength, but the issues also may point toward particular factors about content and relational contexts and specific norms.

For example, consider the weakly successful N11 manipulation (see Table 4.5). The durability of positive identity evaluations reinforces just how safe people often perceive identity arguments to be—it proves difficult, if not impossible, to manipulate the identity in question into one that is perceived negatively. The context of the vignette set here is a social identity—music fandom—that is important to some, but generally not *the* most important social identity to a person, nor one that often invites intergroup conflict. Despite the N11 manipulation invoking extreme genres of music and an associated rebellious personality, participants still judged it not only similar to the normative music fan identity display, but at a particularly high value—5.61 on the 1-7 scale. This may be an indication of the high leeway individuals have in displaying social identities that don't invite intergroup conflict—perhaps others, at least in an isolated context like a short vignette, will write it off under optimal distinctiveness theory (Brewer, 1991). Given the higher *n* size in Study 2, it can at least be affirmed that there is a statistically significant difference at play (i.e., technically the manipulation was successful), but the proximity of the judgments of identity positivity between the normative and violation conditions is striking nonetheless.

A different set of factors may be at play with the inquiry norms, where two manipulation failures could not be repaired here (see Table 4.4). As I discussed in Chapter 3, one of the

important features of the vignettes is that they don't reach definitive argumentative conclusions. The normative persuasion vignettes do not conclude with one person persuading the other, the normative inquiry vignettes do not conclude with an agreement on the decision at hand, the normative identity arguments do not conclude with one person saying "Well, it was sure great to share this with you" or "It was fascinating to hear about this from you today," and the play arguments do not end on "Well, that was sure fun!" And likewise, the non-normative arguments don't conclude with the normative arguer losing their patience and saying "Hey, you [violated the given norm]!" and storming out of the room in exasperation at their partner's ineptitude. This incompleteness was an intentional design feature: ending the vignettes at the presumed end of the argument would invite evaluation based on the argumentative outcome, rather than the quality of the arguments₁ that got there.

But the norms differ in how much their violations might stand out in such a context. Any of the norms that deal with a persistent failure to listen, let the other person voice their argument, or respond in an appropriate way are fairly easy to detect, because they quickly appear to be a defining feature of the person's turn-taking. Something like an N8 violation, though—going back on something you've already established—can be far more momentary, and whether or not it poses a major impediment to argumentative resolution is highly context-driven. People do not *only* argue in commitment retractions (N8 violations), or in circular arguments (N10 violations), but they may argue persistently for a position once taking it (N9 violations, if the argument was supposed to be an inquiry). In our N8 violation condition, we see an arguer initially say that the most important thing to them about their philosophy course is that it's easy, but then when presented with an easy option where the commitment ought to be reinforced, pivots to saying that the most important thing is how relevant the material is. It's clearly a violation, but does it

doom the possibility of resolution, or does it just delay that resolution by a few seconds? That depends on whether the doubling back is just a one-time quirk or the arguer continually presents a moving target. If the vignette had the other arguer call attention to it—“Hey, that’s not what you said before!”—then it would more clearly signal that the violation was problematic, but that lack of context may allow for N8 violations to slip through more easily than violations of other norms, which can often come across more stridently.

It is also worth noting, on the subject of the inquiry vignettes, that in Study 1, we observed some fairly significant differences in effect sizes between the two vignette sets. In conjunction with the issues getting the first manipulation of N8 to be perceptible, these invite some comments about the differences between the two sets. Two are clear: first, the arguers in the first vignette set are college friends (or perhaps one could think they are romantic partners), and in the other, they are siblings; and second, the decision in the second set is more necessary (and perhaps more important) than the first. After all, the two friends don’t *have* to take the same philosophy class, but the siblings have to buy presents. The relatively low-stakes context of this first set, on both the content and relational levels, may make violations harder to detect, since they could prove less consequential in those instances and thus easier to ignore.

The second difference is what I will define as *low-information* versus *high-information* inquiries. As I noted in Chapter 2, inquiries often arise when arguers collectively recognize what Marchionini (1995) termed “information problems”—exigencies that demand information to satisfy them. But the vignettes illustrate two different ways this occurs. In the second set, where two siblings are trying to figure out what to buy their mother for her birthday, the information search is *internal*—each sibling asks the other what ideas he or she has, and they may remind each other what they have bought in the past, etc. They each enter the inquiry with shared

knowledge on this history and their mother—hence, it is a high-information inquiry—and so they simply need to share an idea or two and verify that they are thinking alike. By contrast, in the first vignette set, the arguers need to do an *external* information search—rather than exchanging information that they individually possess, they have to look for information neither of them knows (a low-information inquiry). This sort of inquiry thus necessitates a preceding information-seeking step. What classes are available? What do these philosophy words mean? How are we supposed to make sense of the information we’re discovering? Arguers always make provisional inferences, but the provisionality is perhaps heightened in this context, which may make going back on claims (N8 violations) and circular arguments (N10 violations) appear more forgivable. They are bad argumentative moves, but they don’t necessarily mean the arguer isn’t trying to help, at least. In high-information inquiries, we may figure that arguers ought to know better.

This distinction was not an intentional one in designing the vignettes, but it is an interesting possibility nonetheless, hence my interest in carrying forward to see if these violation vignettes generated any significant results with respect to argument quality and pleasantness in Study 3 (since they did at least show statistically significant differences in perceived frame synchronization). Moreover, I felt that the features of the vignettes did not invite much additional sharpening of the violations: to make them much more apparent might also make it hard for them to seem authentic. If the theory does not seem to hold in low-information inquiries, that might be interesting to test in future work.

Moving Forward

Since all of the norms do have at least *one* vignette that displayed a clearly effective manipulation, it is less problematic to proceed forward, in any case. With all of the scales

showing reliability and the vast majority of the vignettes exhibiting manipulation effectiveness, the main investigations into the Theory of Argumentative Norms can commence. No specific combination of good violation and good measurement is missing, even assuming that the manipulations do not work better in the next two studies. The next two chapters describe those investigations and what they reveal about the nature of domain-specific argumentative norms.

Chapter 5: A Test of Validity (Study 3)

After two pilot studies, the various constructs of the Theory of Argumentative Norms can be measured. Reliable scales for each norm and several important outcome measures have been created, tested, and found reliable, and each norm violation has at least one successful manipulation. That allows us to proceed to a full test of the theory. This and the next chapter detail that testing.

Perhaps a brief summary of the theory might be in order. The basic idea of the Theory of Argumentative Norms is that face-to-face arguing, like other kinds of interpersonal episodes, is characterized by various norms. Following Walton's (1998) notice that there are different kinds of argument dialogues, the theory went on in that path to distinguish several argument domains. Walton's list of dialogue types and this project's list of domains differ considerably. In particular, Walton's work has been uninterested in psychological/interactive phenomena such as play or identity display. The Theory of Argumentative Norms holds that different norms accompany different argument domains, or types of interpersonal projects. Many dialogues and domains might be specified, but this project focuses on four of them: persuasion, inquiry, identity, and play. The first two domains are in Walton's list and are traditional in the long history of argument studies; they fall under the umbrella of the "utility frame," to use Hamble's (2003) terminology. The last two are asserting some recent importance as being argumentative episodes that are, in some loose sense, more interpersonal than epistemological in nature. The theory has described norms that fit each of the domains (as well as one "meta" norm, frame synchronization, that seems to apply to everything). The project aims to test whether the norms have conventional validity—that is, whether ordinary arguers register them in practice.

Let us recall the hypotheses and research question of this project:

Figure 5.1.

Hypotheses and Research Question, Restated

H1: An argument₁ (embedded within an argument₂) that follows the norms of its domain will be seen as higher-quality than one that does not.

H2: An argument₂ will be viewed as a less pleasant experience if one of the arguers committed a norm violation.

H3: Arguments that contain norm violations will be perceived as more out of sync with the other arguer than arguments that do not.

H4: a) Arguers who commit norm violations will be seen as attaining their content goals less than arguers that do not. b) The same will be true with respect to relational goal perceptions.

H5: Arguers who commit norm violations will be seen as worse future argumentative partners than those who do not.

H6: Arguments in which a violation is committed will be seen as more likely to escalate into quarrels than those that do not.

H7: Violations of the norms of inquiry and persuasion arguments will lead to more content-goal failures than violations of the norms of identity and play arguments.

H8: Violating arguments in the identity and play domains will be seen as more likely to lead to quarrels than in persuasion and inquiry arguments.

H9: Violating arguments in the identity and play domains will lead to larger decreases in willingness to argue with the violating arguer in the future than violating arguments in the persuasion and inquiry domains.

H10: a) When frames are out of sync, arguers in a persuasion or inquiry frame will perceive the primary implication of the frame sync issue to be on the content level. b) When frames are out of sync, arguers in an identity or play frame will perceive the primary implication of the frame sync issue to be on the relational level.

RQ: Do norm violations differ from each other in magnitude of effect or type of effect (other than the predictions made in H7-H10)?

These predictions break down into three main groups. The first three hypotheses concern in-the-moment outcomes of norm violations: they combine to predict that arguments containing norm violations produce immediate negative perceptions of arguments (in three different ways) relative to normative arguments. H4-H6 deal with argumentative outcomes—effects that persist after the argument has ended—and again predict that violating argument norms will elicit worse outcomes than normative arguments. Finally, H7-H10 predict that violations in identity and play will have certain patterns of effects that differ from those in persuasion and inquiry, and the

research question wonders if these hypothesized differences also exist on the norm-to-norm level, rather than between domains.

All of these were tested in Study 1, where the data mostly supported the first two groups of hypotheses and did not support the third. However, that study came with clear caveats—measurement and stimulus issues, low power, and some concern regarding Type I error given the large number of tests. Thus, Studies 3 and 4 increase the overall sample size of the project considerably, provide opportunities for replication, and are conducted with more reliable stimuli and measures to come to clearer conclusions about the Theory of Argumentative Norms and its predictions.

Study 3, the subject of this chapter, tests exclusively the first set of hypotheses: H1-H3. It seeks to answer the fundamental question regarding the theory developed in Chapter 2: Are the sixteen argumentative norms indeed normative? Such a question is quite broad, of course, but confirmatory results on the first three hypotheses would certainly indicate clear perceptual differences between normative and non-normative arguments in each domain. Study 4 will also include tests of these predictions, but its primary focus is on argumentative outcomes. Study 3 has the benefit of increased power relative to Study 1, Study 4 incorporates methodological triangulation by asking participants to describe and rate problematic arguments from their own lives, and both studies also examine whether argumentation traits may add to our understanding of argumentative judgments. Studies 3 and 4 were conducted concurrently at the completion of the pilot process, with approval from the University's Institutional Review Board.

Method

Procedure

The procedure for Study 3 followed a similar path as that of Study 1. Again, the study was an online Qualtrics survey administered through the University of Maryland communication department's SONA research system, where participants participate in studies in exchange for course credit. Upon signing up, participants were shown a consent form. If they agreed to participate, they first filled out demographic measures (gender, age, and ethnic identity), and then saw and rated four vignettes. Each participant saw one persuasion vignette, one inquiry vignette, one identity vignette, and one play vignette, each selected randomly from the set of vignettes developed in the pilot process (sixteen persuasion, eight each for inquiry, identity, and play) and ordered randomly.

There were two ways in which Study 3's procedure differed from that of Study 1. The first is a difference in some of the stimuli and measures—the edits to the vignettes and scales that were made for Study 2 were retained for Study 3. The second is a difference in what scales participants filled out. They did not evaluate the vignettes on goal attainment, future willingness to argue, or quarrel probability, which participants in Study 1 did. (These scales will be re-introduced in Study 4). However, after completing their ratings of the four vignettes, participants completed scales for argumentativeness (Infante & Rancer, 1982), verbal aggressiveness (Infante & Wigley, 1986), argument frames (Hample, 2003), and epistemological orientation (Schraw et al., 2002). These are trait measures that capture beliefs or inclinations participants have about the nature of arguing, and were employed to see if any of them affected judgments of the vignettes in addition to the norm perceptions.

Participants

Recruitment for Study 3 occurred in the same fashion as that of the pilot studies—the survey was posted on the departmental SONA server, where students from undergraduate

communication courses could sign up to take the survey in exchange for course credit. They were granted one hour of credit for participating.

It is worth noting that unlike Studies 1 and 2, Study 3's data collection took place during the COVID-19 pandemic (data collection started in April 2020 and was completed in May 2021), during which the University was primarily operating with remote instruction. In this timeframe, response rates were significantly lowered and it took significantly longer to get samples of satisfactory size than it did in the two pilots. Whether this was due to certain courses changing their research participation policies, more studies being backlogged in the system, or a smaller subgroup of students opting to complete the research requirements, it is possible the circumstances led to a slightly different sampling of UMD students in some way. It also means that the setting the survey was taken in was likely quite different than is typical for studies that sample college students (e.g., more were at their parents' homes and had a room to themselves).

Five hundred and one participants completed the study. Of these, 244 (48.7%) identified as male, 249 as female, five as non-binary, and three chose not to reveal their gender identity. The average age of participants was 19.17 years ($SD = 1.65$). 43.9% identified as being of European descent, followed by 10.8% East Asian, 9.0% Southern Asian, and 7.0% African as the other widely-reported ethnic identities (13.8% marked "Other," as well). The demographic profile was thus broadly in line with that of Studies 1 and 2, other than the average age of participants being slightly lower here.

Materials and Measures

Like Study 1, this study employed forty vignettes as its stimuli: ten "normative" base condition vignettes and thirty vignettes with norm violations in them. Sixteen of the vignettes were persuasion (twelve public and four personal), with eight in each of the other three domains.

Vignettes that were edited between Study 1 and Study 2 were used in their Study 2 versions, with their altered manipulations. As a refresher for what the vignette topics are, see Figure 5.2.

Figure 5.2.

Topics and Implied Relationships in Vignettes, Study 3

<u>Domain</u>	<u>First Vignette Set Topic</u>	<u>(Implied) Relationship Between Arguers</u>	<u>Second Vignette Set Topic</u>	<u>(Implied) Relationship Between Arguers</u>
Persuasion (Public)	Library food and drink rules	College friends/acquaintances	Construction of a new shopping center	n/a
Persuasion (Personal)	Doing the dishes	Roommates	Weekend plans	Friends
Inquiry	Taking the same class	College friends	Buying mother's birthday presents	Siblings
Identity	Liking live music concerts	n/a	Volunteering at the library	n/a
Play	Baseball teams	n/a	Rock bands	n/a

As with Studies 1 and 2, the perceived typicality of the vignettes was measured to ensure that none of the vignettes were seen as atypical events meant to provoke harsh judgments. In those two studies, no red flags emerged; all of the vignettes were rated above the neutral midpoint of 4.0, indicating they were seen as fairly typical even when they included violations.

Table 5.1 presents participants' judgments of the typicality of the vignettes in Study 3.

Table 5.1.

Typicality Judgments of Argument Vignettes, Study 3

<u>Condition</u>		<u>Set 1</u>	<u>Set 2</u>
Public Persuasion Normative	<i>M</i>	5.17	5.39
	<i>SD</i>	0.82	1.38
N2 Violation (not allowing the opponent to argue)	<i>M</i>	4.58	4.55
	<i>SD</i>	0.98	0.83
N3 Violation (off-topic rebuttal)	<i>M</i>	4.45	4.73
	<i>SD</i>	1.00	0.92
N4 Violation (non-argumentative defense)	<i>M</i>	4.48	4.59

	<i>SD</i>	0.98	1.10
N5 Violation (premature claim of victory)	<i>M</i>	5.12	4.97
	<i>SD</i>	0.98	0.81
N6 Violation (failure to retract when disproven)	<i>M</i>	4.63	4.93
	<i>SD</i>	0.89	0.74
Personal Persuasion Normative	<i>M</i>	4.97	5.16
	<i>SD</i>	0.83	0.72
N7 Violation (unreasonable relational priority)	<i>M</i>	5.00	4.80
	<i>SD</i>	1.03	0.84
Inquiry Normative	<i>M</i>	5.51	5.95
	<i>SD</i>	1.01	1.00
N8 Violation (commitment retraction)	<i>M</i>	5.22	5.53
	<i>SD</i>	1.33	0.96
N9 Violation (premature adoption of a position)	<i>M</i>	5.32	5.49
	<i>SD</i>	0.94	1.03
N10 Violation (circular argument)	<i>M</i>	5.63	5.55
	<i>SD</i>	0.98	0.92
Identity Normative	<i>M</i>	5.89	5.39
	<i>SD</i>	1.07	1.12
N11 Violation (negative identity)	<i>M</i>	6.19	5.63
	<i>SD</i>	0.72	1.04
N12 Violation (identity contradiction or condemnation)	<i>M</i>	5.57	5.56
	<i>SD</i>	0.97	0.99
N13 Violation (disaffected listening)	<i>M</i>	5.29	5.23
	<i>SD</i>	1.08	0.86
Play Normative	<i>M</i>	5.68	5.49
	<i>SD</i>	1.16	1.01
N14 Violation (inappropriate play)	<i>M</i>	5.45	4.97
	<i>SD</i>	0.88	1.03
N15 Violation (serious framing)	<i>M</i>	5.44	5.46
	<i>SD</i>	0.96	1.13
N16 Violation (non-playful response)	<i>M</i>	5.32	5.36
	<i>SD</i>	0.96	0.88

As with the typicality perceptions in the pilot studies, all vignettes yielded scores above 4.0; participants did not find any of the vignettes to be notably atypical. In fact, outside of the persuasion domain, every vignette scored above a 5.0 on the 1-7 scale. There is again no

evidence that the any of the stimuli were perceived as artificial manipulations designed to elicit negative responses from the participants.

Like the vignettes, a few of the norm measures underwent some revision between Study 1 and Study 2; for those that were edited, their Study 2 edits were also retained here. Otherwise, the norm measures are unchanged from Study 1. The argument quality and pleasantness measures are also retained; as a reminder, the argument quality measure refers to the quality of *a particular arguer's argument*₁, while pleasantness refers to the pleasantness of the *dyadic interaction*. Reliabilities were again calculated for all of these scales: they appear in Table 5.2. All measures for Study 3 appear in Appendix C.

Table 5.2.
Cronbach's Alpha Reliabilities for New Measures, Study 3

<u>Global Scales (each participant rates 4x)</u>	<u># Items</u>	<u>Alpha</u>
N1 (frame synchronization)	6	.85
Typicality	7	.88
Argument Quality	5	.83
Pleasantness	8	.96
<u>Domain-Specific Norm Scales (each participant rates once)</u>		
N2 (allowing the opponent to argue)	6	.81
N3 (responding on topic)	8	.82
N4 (argumentative defense)	6	.73
N5 (not claiming victory prematurely)	11	.86
N6 (retracting when proven wrong)	6	.82
N7 (reasonable relational priority)	6	.76
N8 (not going back on commitments)	9	.75
N9 (not taking a position too early)	11	.87
N10 (avoiding circularity)	6	.82
N11 (non-negative identity projection)	6	.83
N12 (not contracting/condemning identity)	6	.89
N13 (therapeutic listening)	6	.88
N14 (dyadically appropriate play)	6	.76
N15 (non-seriousness)	8	.77

N16 (playful response) 10 .80

Notes. The N8 subscale was reduced to six items in the Study 2 test but was reliable in nine-item form here. The N15 subscale was originally .67 with ten items; stepwise deletion of the first and seventh items yielded the .77 alpha.

All measures were statistically reliable ($\alpha > .70$). Further results for the N15 measure omit the two deleted items.

Participants also completed four established scales at the conclusion of the study—argumentativeness (Infante & Rancer, 1982), verbal aggressiveness (Infante & Wigley, 1986), argument frames (Hample, 2003; Hample et al., 2009), and epistemological orientation (Schraw et al., 2002). These were used to get a general sense of the population as arguers and as possible variables to investigate in the case of surprising results. The argumentativeness scale has two subscales, argument-approach and argument-avoid, and the verbal aggressiveness scale has two subscales, VA-prosocial and VA-antisocial. The frames scale has seven subscales: utility, identity, play, dominance, cooperation, civility, and blurting. Epistemological orientation measures the extent to which the participant has more of an absolutist (lower score) or relativist/evaluativist (higher score) understanding of the nature of knowledge. Absolutists have simpler, more concrete beliefs about knowledge, while evaluativists have more sophisticated, complex beliefs. These twelve trait measures were used in some supplementary analyses, such as multiple regressions, to clarify some hypothesis-testing results. For some descriptive context about these variables, see Table 5.3.

Table 5.3.
Descriptive Statistics of Trait Variables, Study 3

<u>Scale</u>	<u>N</u>	<u>Alpha</u>	<u>M</u>	<u>SD</u>
Argumentativeness (approach)	497	.86	4.31	1.02
Argumentativeness (avoid)	497	.86	4.51	1.00

Verbal Agg. (prosocial)	497	.79	4.89	0.81
Verbal Agg. (antisocial)	497	.83	3.49	0.99
Utility	495	.72	4.01	0.54
Identity	496	.77	4.80	0.87
Play	496	.76	3.82	1.29
Dominance	496	.79	3.47	1.07
Cooperation	497	.79	5.03	0.79
Civility	496	.79	4.43	0.79
Blurting	495	.71	3.88	0.62
Epistemological orientation	497	.79	4.41	0.60

As in Study 1, the power achieved in this study again differed between the persuasion domain and the others, since there are twice as many persuasion conditions (sixteen) as inquiry, identity, or play (eight each), and thus the sample sizes are half as large in each persuasion condition relative to the other domains. At an effect size of $d = 0.30$ and a significance level of $p < .05$, power in the persuasion domain was approximately .21, rising to approximately .62 for $d = 0.60$ and .96 for $d = .90$. In the other three domains, power was approximately .39 at $d = 0.30$, .91 at $d = 0.60$, and .9997 at $d = 0.90$. Statistical sensitivity at a power of .80 was approximately $d = 0.74$ in the persuasion domain and $d = 0.50$ elsewhere. In Study 1, these sensitivity values were 0.86 and 0.60, so Study 3 does bring an increased ability to discern medium effect sizes. Many of the effects observed in Study 1 exceeded $d = 1.0$, so with greater sensitivity and power here, many effects should be detectable.

Analysis

As with the first two studies, the main analyses in this study were conducted via a series of independent-samples t -tests that compared a base (normative) vignette to a manipulation condition (non-normative) vignette on the relevant variables. Cohen's d is used to estimate the effect sizes of each test. In addition, multiple regressions were employed to incorporate possible effects from the trait variables, in addition to getting a clearer sense of the proportion of variance

in the outcomes (frame synchronization, argument quality, and pleasantness) explained by the norm judgments. As discussed in Chapter 3, I am not employing any direct Type I error control measures in the analysis, since such measures do not work particularly well in the conditions of this research (many group comparisons on highly correlated variables), but the statistical tests run here are also run in Studies 1 and 4, and I will make final conclusions on their bearing on the hypotheses at the conclusion of all three studies. There, the possibility of replication will weigh more heavily than the possibility of Type I errors for small-effect findings.

Results

This study was designed to test the first three hypotheses of the project. They are:

H1: An argument₁ (embedded within an argument₂) that follows the norms of its domain will be seen as higher-quality than one that does not.

H2: An argument₂ will be viewed as a less pleasant experience if one of the arguers committed a norm violation.

H3: Arguments that contain norm violations will be perceived as more out of sync with the other arguer than arguments that do not.

If the hypotheses are correct, we would expect the normative vignettes to be rated more highly than the violation vignettes on perceived argument₁ quality (H1), perceived argument₂ pleasantness (H2), and perceived frame synchronization (i.e., N1) (H3). In spite of the directional hypotheses, two-tailed tests will be conducted. Given the domain-specific nature of both the theory and the experimental design, each hypothesis may prove compelling in certain domains but not in others (e.g., the persuasion norms being conventionally valid but not the identity norms, identity violations detracting from pleasantness but not inquiry violations, etc.). Thus, for

ease of analysis and presentation, the results section of this chapter is organized domain-specifically, followed by a summary.

In each domain section, we will be looking at three sorts of data. First, we will examine the correlations between the variables in the domain, noting any clear-cut differences from Study 1. Second, we will proceed to examine the results of the independent-samples *t*-tests that compare violation vignettes to their normative counterparts on the norm perceptions and dependent variables. With the *t*-tests, there are three things to focus on: first, whether the manipulation of the norm was successful; second, whether the hypotheses are supported; third, what sort of perceptual reach is exhibited (i.e., how many norms, beyond the one directly manipulated, also show statistically significant reductions, and how powerful are those reductions?). Again, we will be mindful of which evidence corroborates or disagrees with Study 1 here.

Finally, I will proceed to a multiple regression analysis that brings in the thirteen trait variables, to see if they have an impact on the outcome judgments. To do this, I will construct three models: a “norms-only” model (e.g., attempting to predict perceived pleasantness of an inquiry with N8, N9, and N10 judgments), a “traits-only” model (e.g., attempting to predict perceived pleasantness with just the twelve trait variables), and a “norms and traits” model (that incorporates both the domain’s norms and the twelve traits as predictors). Here, we will be looking to compare the proportion of variance explained by the norms and the traits and see if (or where) certain traits can add explanatory power in predicting perceptions of the dependent variables of interest.

Persuasion

First, we will examine results in the persuasion domain. We begin by examining the correlations among the variables in Table 5.4.

Table 5.4.
Correlations Among Persuasion Variables, Study 3

<u>Measure</u>	<u>N1</u>	<u>N2</u>	<u>N3</u>	<u>N4</u>	<u>N5</u>	<u>N6</u>	<u>N7</u>	<u>Quality</u>	<u>Pleas.</u>
N1 (frame synchronization)	1								
N2 (allowing arg.)	.55	1							
N3 (on-topic response)	.36	.54	1						
N4 (arg. defense)	.18	.41	.59	1					
N5 (not claiming victory early)	.43	.56	.43	.44	1				
N6 (retracting if necessary)	.49	.56	.31	.25	.70	1			
N7 (reasonable rel. priority)	.45	.55	.52	.35	.61	.60	1		
Arg. Quality	.32	.42	.54	.53	.61	.50	.60	1	
Pleasantness	.56	.60	.39	.30	.61	.64	.66	.56	1

Notes. $N = 472$. All correlations significant at $p < .001$.

This matrix is generally quite similar to the correlation matrix in Study 1 in this domain—statistically significant correlations all around, with most clustering in the $r = .30$ to $r = .60$ range. I want to call particular attention to two things. First, it is worth highlighting the particularly strong correlation between N5 and N6, slightly higher than in Study 1 (.62, with the original unreliable six-item N5 scale). These two norms—not claiming victory prematurely and being willing to concede if disproven—both concern awareness of meeting a standard of proof. Participants perhaps sense this common thread and see these norms as particularly intertwined. Second, we see these two norms, along with showing reasonable relational priorities (N7) correlate particularly strongly with pleasantness.

Next, let us proceed to examine Table 5.5, which shows the t -test results comparing the norm violation conditions to the normative ones on the norms, argument quality, and pleasantness. As with the previous studies, manipulation checks appear in bold, in diagonals. The “Argument Quality” column tests H1, the “Pleasantness” column tests H2, and the “N1” column tests H3.

Table 5.5.
Norm Perceptions of Persuasion Argument Vignettes, Study 3

<u>Condition</u>		<u>N1</u>	<u>N2</u>	<u>N3</u>	<u>N4</u>	<u>N5</u>	<u>N6</u>	<u>N7</u>	<u>Argument Quality</u>	<u>Pleasantness</u>
Public Normative 1	<i>M</i>	3.84	4.69	4.71	4.63	4.12	3.82	4.48	3.75	3.99
	<i>SD</i>	0.85	0.88	1.09	1.09	0.67	1.02	0.96	1.07	1.18
N2 Violation 1 (not allowing the opponent to argue)	<i>M</i>	3.00	2.25	4.08	3.84	2.73	2.12	3.08	2.76	2.12
	<i>SD</i>	0.76	0.95	0.75	1.35	0.88	0.78	0.81	1.17	0.99
	<i>t</i>	4.13***	10.47***	2.71**	2.50*	7.00***	7.47***	6.27***	3.46***	6.84***
	<i>df</i>	61	61	61	61	61	61	61	61	61
	<i>d</i>	1.04	2.65	0.68	0.63	1.77	1.89	1.58	0.88	1.73
N3 Violation 1 (off-topic rebuttal)	<i>M</i>	3.13	3.24	3.71	3.67	3.61	3.13	3.61	3.09	2.93
	<i>SD</i>	0.73	0.93	0.87	1.34	0.77	0.88	0.88	1.23	1.24
	<i>t</i>	3.48***	6.24***	3.98***	3.03**	2.76**	2.85**	3.69***	2.21*	3.41***
N4 Violation 1 (non-argumentative defense)	<i>M</i>	3.16	3.97	3.87	3.43	3.20	3.04	3.71	3.06	2.94
	<i>SD</i>	0.84	1.04	0.88	1.45	0.81	1.06	0.73	1.15	1.19
	<i>t</i>	3.07**	2.83**	3.21**	3.57***	4.73***	2.85**	3.42***	2.37*	3.37***
	<i>df</i>	56	56	56	56	56	56	56	56	56
N5 Violation 1 (prematurely claiming victory)	<i>M</i>	3.47	3.89	4.39	4.42	3.31	2.83	3.89	3.51	3.04
	<i>SD</i>	0.66	0.80	1.05	1.16	0.72	0.98	0.92	1.25	1.21
	<i>t</i>	1.95	3.78***	1.17	0.70	4.60***	3.91***	2.49**	0.82	3.14**
	<i>df</i>	61	61	60	60	61	60	61	61	61
N6 Violation 1 (failure to retract)	<i>M</i>	3.33	3.30	3.57	2.76	2.99	3.03	3.52	2.89	2.43
	<i>SD</i>	0.74	1.04	1.07	1.20	0.65	0.74	0.77	1.53	0.82
	<i>t</i>	2.30*	5.31***	3.87***	5.99***	6.27***	3.23**	4.00***	2.43*	5.55***
	<i>df</i>	52	52	52	52	52	52	52	52	52
Personal Normative 1	<i>M</i>	3.89	4.54	4.31	4.76	3.90	3.57	3.88	3.66	2.91
	<i>SD</i>	1.32	0.96	1.00	0.95	0.90	1.10	1.18	1.33	1.08
	<i>M</i>	2.75	3.21	3.64	4.29	2.80	2.44	2.51	2.60	1.87
	<i>SD</i>	0.58	0.67	1.12	1.02	0.82	0.99	0.99	1.26	0.83
N7 Violation 1 (unreasonable relational priority)	<i>t</i>	4.42***	6.33***	2.47*	1.86	4.96***	4.19***	4.86***	3.20**	4.21***
	<i>df</i>	43.41	55.56	59	59	59	59	59	59	59
	<i>d</i>	1.10	1.60	0.63	0.48	1.27	1.08	1.25	0.82	1.08
	<i>M</i>	4.60	4.90	5.17	4.68	4.35	4.38	4.77	4.08	4.14
Public Normative 2	<i>SD</i>	1.00	1.07	1.11	1.24	0.68	1.07	1.10	1.05	1.44
	<i>M</i>	3.12	2.71	4.15	3.96	2.99	2.74	3.27	3.46	2.38
N2 Violation 2 (not allowing the opponent to argue)	<i>SD</i>	0.78	0.96	0.79	1.11	0.78	0.89	0.90	0.96	0.99
	<i>t</i>	6.50***	8.50***	4.09***	2.40*	7.25***	6.56***	5.90***	2.42*	5.71***
	<i>df</i>	60	60	60	60	60	60	60	60	60
	<i>d</i>	1.66	2.17	1.08	0.61	1.85	1.67	1.51	0.62	1.46
	<i>M</i>	3.27	3.52	3.66	3.58	3.63	2.81	3.55	2.95	2.93
N3 Violation 2 (off-topic rebuttal)	<i>SD</i>	1.24	1.20	0.94	1.15	0.82	0.95	0.82	1.16	1.19
	<i>t</i>	4.34***	4.48***	5.38***	3.37***	3.55***	5.67***	4.64***	3.76***	3.35**
	<i>df</i>	52	52	52	52	52	52	49.76	52	52

	<i>d</i>	1.18	1.22	1.47	0.92	0.97	1.54	1.25	1.02	0.91
N4 Violation 2	<i>M</i>	3.25	3.67	3.78	3.31	2.80	2.47	3.12	2.52	2.23
(non-argumentative	<i>SD</i>	0.89	0.86	0.97	1.27	0.87	0.94	0.98	1.01	1.00
defense)	<i>t</i>	5.20***	4.65***	4.90***	3.98***	7.34***	6.92***	5.82***	5.56***	5.63***
	<i>df</i>	52	52	52	52	52	52	52	52	52
	<i>d</i>	1.42	1.27	1.34	1.08	2.00	1.88	1.59	1.52	1.54
N5 Violation 2	<i>M</i>	3.86	4.29	4.69	4.25	3.39	3.00	3.76	3.25	2.97
(prematurely	<i>SD</i>	0.88	1.11	1.15	1.30	0.84	0.94	1.12	1.41	1.07
claiming victory)	<i>t</i>	3.05**	2.20*	1.65	1.30	4.87***	5.34***	3.56***	2.58*	3.66***
	<i>df</i>	59	59	59	59	59	59	59	59	59
	<i>d</i>	0.78	0.57	0.42	0.33	1.25	1.37	0.91	0.66	0.94
N6 Violation 2	<i>M</i>	3.48	3.76	4.43	4.18	3.57	3.11	3.63	3.49	3.10
(failure to retract)	<i>SD</i>	0.74	0.97	1.17	0.95	0.90	0.91	0.94	1.03	1.16
	<i>t</i>	4.44***	3.96***	2.29*	1.57	3.53***	4.50***	3.94***	2.04*	2.80**
	<i>df</i>	49	49	49	49	49	49	49	49	49
	<i>d</i>	1.25	1.12	0.65	0.44	0.99	1.27	1.11	0.57	0.79
Personal Normative 2	<i>M</i>	3.64	4.58	4.63	4.93	3.95	3.50	3.88	3.96	3.26
	<i>SD</i>	0.79	1.00	0.82	1.08	0.92	0.76	1.00	1.14	1.22
N7 Violation 2	<i>M</i>	3.11	4.11	4.20	4.59	3.04	2.70	3.27	3.11	2.31
(unreasonable	<i>SD</i>	0.79	0.90	0.97	1.20	0.73	0.97	1.04	0.98	1.03
relational priority)	<i>t</i>	2.55*	1.90	1.78	1.15	4.23***	3.48***	2.25*	3.03**	3.23**
	<i>df</i>	56	56	56	56	56	56	56	56	56
	<i>d</i>	0.67	0.50	0.47	0.30	1.11	0.92	0.59	0.80	0.85

Notes. $N = 472$ (approx. 30 per condition). The N2-N6 manipulations are compared to their respective *public* normative vignette; the N7 manipulations are compared to their respective *personal* normative vignette. The N1 column measures perceived frame synchronization; the N2-N7 columns measure perceptions of each persuasion-specific norm.

* $p < .05$

** $p < .01$

*** $p < .001$

Table 5.5 offers many important results. First, all of the norm manipulations were registered to a statistically significant extent. Notably, this includes the first N6 manipulation, which was not effective in its original form in Study 1 or in its strengthened form (also used here) in Study 2.

Second, we do observe statistically significant differences between normative and non-normative conditions on pleasantness in all twelve tests (all $p < .01$) and on argument quality and frame synchronization in all but one case ($p < .05$). This outlier case is the first manipulation of N5, which did elicit a statistically significant reduction in frame synchronization in Study 1 (and is close, at $p = .056$, here), but did not elicit a change in perceived argument quality in those data

either. These data, especially in conjunction with those in Study 1, strongly supported H2: persuasion norm violations were associated with decreases in perceived pleasantness of the interaction, usually at strong levels ($d > .8$).

H3 received solid, though slightly less emphatic support, as nine of the twelve manipulations elicited statistically significant differences on frame synchronization at $p < .01$ and $d > .8$, including at least one of each violation. H1 was more weakly, though still fairly solidly supported. Though significant effects on argument quality at $p < .05$ were present in eleven of the twelve manipulation conditions, the effect sizes were somewhat modest overall. The five strongest effect sizes on argument quality still come from four different norms (N2, N3, N4, and N7), so these are the norms for which we have the strongest support for violations causing changes in perceived argument quality. In Study 1, four of the twelve manipulations produced effect sizes greater than .8 on argument quality, and six were not associated with reductions in perceived argument quality at all. We will have additional data on this in Study 4 to get additional clarity, but at present, we have positive though imperfect evidence in support of H1.

It is worth noting that the two alterations made in Study 2, strengthening the first N6 violation condition and softening the first normative personal persuasion vignette, both now yield data that support the hypotheses. In particular, perceptions of pleasantness differed strongly between the public normative condition and the N6 violation condition, as well as between the personal normative condition and the N7 violation condition. The personal persuasion manipulation also came with a strong change in frame synchronization and a significant reduction in argument quality.

The strong support for H2, and the somewhat weaker support for H1, further cast doubt on the set of hypotheses that predicted persuasion norm violations would cause more significant content-level damage than relational-level damage. Argument quality is not exclusively a content-level perception, and pleasantness is not exclusively a relational-level perception, but they would seem to lean in those directions. Certainly, we observed a much stronger correlation between pleasantness and relational goal attainment in Study 1 ($r = .80$ in the persuasion domain) than argument quality and relational goal attainment ($r = .46$). We will explore this more directly in Study 4, but for now, we continue to see little reason to expect persuasion violations to impact the content level of the argument more than the relational one (as was hypothesized), at least in the sort of design employed in this project.

There is again a wide perceptual reach cast by persuasion norm violations. The N2, N3, and N4 violation conditions were associated with reductions on all six persuasion norm perceptions, suggesting that these norm violations have a particularly strong perceptual reach. Violations of N6 nearly matched this pattern, with only N5 and N7 violations exhibiting a more limited reach. Judgments of persuasion normativity seem to be quite interconnected.

Finally, let us examine the multiple regression results for persuasion. Table 5.6 displays the results of three different multiple regressions on each of the three dependent variables. The first, the norms-only model, attempts to predict each dependent variable using the six persuasion norms. The second, the traits-only model, attempts to predict each dependent variable using the two argumentativeness, two verbal aggressiveness, seven frames, and epistemological orientation measures. Finally, the norms and traits model attempts to predict each dependent variable using both the norms and the traits.

Table 5.6.
Norm-Based and Trait-Based Persuasion Multiple Regressions, Study 3

Argument Quality								
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.54***		Model Adj. R^2	.08***		Model Adj. R^2	.55***	
F	89.75		F	4.46		F	32.53	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N2	-.14**	-3.05	Cooperation	-.20*	-2.06	N2	-.12**	-2.71
N3	.21***	4.09	Epistemology	-.29**	-2.68	N3	.22***	4.13
N4	.23***	5.87				N4	.23***	5.90
N5	.33***	4.98				N5	.30***	4.48
N6	.14*	2.50				N6	.12*	2.19
N7	.31***	5.83				N7	.29***	5.51
Pleasantness								
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.57***		Model Adj. R^2	.12***		Model Adj. R^2	.59***	
F	102.95		F	6.18		F	37.70	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N2	.24***	5.51	Play	.15**	2.61	Arg-avoid	-.14*	-2.43
N5	.19**	2.85	Cooperation	-.29**	-2.98	Cooperation	-.15*	-2.18
N6	.26***	4.80	Epistemology	-.34**	-3.16	N2	.26***	5.95
N7	.39***	7.60				N5	.14*	2.16
						N6	.23***	4.19
						N7	.34***	6.67
Frame Synchronization								
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.37***		Model Adj. R^2	.01		Model Adj. R^2	.36***	
F	46.55		F	1.31		F	15.66	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N2	.29***	7.08	Play	.14	2.14	N2	.29***	6.86
N3	.11*	2.30				N3	.12*	2.48
N4	-.11**	-2.99				N4	-.11**	-3.00
N6	.19***	3.80				N6	.18***	3.42
						Play	.09*	2.23

Note. Norms-only models conducted with $df(6,464)$, traits-only ($12,453$), and norms and traits ($18,446$).

* $p < .05$

** $p < .01$

*** $p < .001$

In all three cases, the norms do a far superior job predicting the dependent variables than do the traits, and the norms and traits models do not explain noticeably more variance than the norms-only models. This supports the idea that it is the norm judgments that play the key role in judgments of these three variables, not argumentative traits of the participants. Given the large trait literature in this domain (e.g., Rancer & Avtgis, 2014), this is a pattern worth underlining.

The size of the adjusted R^2 results is also worth attention. These are very large results, corresponding to simple r values between .61 and .75 for the norms-only models. The Theory of Argumentative Norms appears to be quite on target in identifying key considerations in these general judgments of persuasion arguments.

Interestingly, though the manipulations tended to elicit weaker reductions in perceived argument quality than on pleasantness or frame synchronization, the norms did quite a good job of explaining argument quality, and all six are significant predictors. This helps bolster the notion that all six are indeed involved in affecting argument quality judgments in some way. With the other two dependent variables, the norms reduce to four significant predictors (once the others are statistically controlled), suggesting that there is some conceptual overlap in how ordinary arguers actually parse their argumentative judgments in the persuasion domain. This helps lend an additional perspective to the perceptual reach of persuasion arguments. I will offer more about the insight this sort of analysis brings, and the limitations it has, in the Discussion section of this chapter.

The data also bring a few additional interesting relationships to the forefront. First, in two cases, we see norm judgments that *negatively* correlate with argumentative outcomes when we control for all other norm judgments: N2 judgments were negatively associated with argument quality, and N4 judgments were negatively associated with frame synchronization. Finally, there are two notable patterns in the traits. There is some trait evidence that participants who see argument as a more playful endeavor were more likely to judge persuasion arguments positively (significant positive correlations in two cases), and that participants who see argument as more cooperative were more likely to judge the arguments negatively (significant negative correlations in two cases). It may be that playful arguers are more comfortable with the persuasion domain,

whereas more cooperative arguers wish to make exchanges of viewpoints in more of an inquiry-style framework.

Inquiry

Next, we turn to the inquiry domain. Again, we will begin by examining the correlations among the variables in this domain, shown in Table 5.7.

Table 5.7.
Correlations Among Inquiry Variables, Study 3

<u>Measure</u>	<u>N1</u>	<u>N8</u>	<u>N9</u>	<u>N10</u>	<u>Quality</u>	<u>Pleas.</u>
N1 (frame synchronization)	1					
N8 (commitment maintenance)	.25***	1				
N9 (not taking a position)	.25***	.04	1			
N10 (avd. circularity)	.28***	.51***	-.15***	1		
Argument Quality	.11*	.33***	-.27***	.67***	1	
Pleasantness	.55***	.33***	.26***	.54***	.38***	1

Note. $N = 501$.

* $p < .05$

** $p < .001$

The N8 and N9 subscales received revisions after Study 1, and we see an interesting effect of that here: the N9 scale (not taking a position too early), which was positively correlated with the other variables in its original (unreliable) six-item form, is now *negatively* correlated with judgments of circularity and argument quality. It also bears no association with N8, commitment maintenance, though it retains a positive association with pleasantness and frame synchronization. Otherwise, we see a similar pattern to Study 1: several small positive correlations and a few more powerful ones.

Next, we will examine the t -test results comparing the inquiry violation conditions to their normative companions. These results are shown in Table 5.8. Manipulation checks are bold-faced.

Table 5.8.
Inquiry Manipulations and Effects, Study 3

Condition		N1	N8	N9	N10	Argument	
						Quality	Pleasantness
Normative 1	<i>M</i>	5.41	4.43	3.85	4.68	4.72	4.72
	<i>SD</i>	1.12	0.76	1.00	0.77	0.83	1.32
N8 Violation 1 (commitment retraction)	<i>M</i>	4.67	3.79	4.12	4.05	4.12	4.56
	<i>SD</i>	1.29	0.91	0.76	1.12	1.28	1.22
	<i>t</i>	3.37***	4.20***	-1.69	3.56***	2.99**	0.68
	<i>df</i>	119	119	116.39	119	93.79	119
	<i>d</i>	0.61	0.76	-0.30	0.66	0.56	0.12
N9 Violation 1 (taking a position too early)	<i>M</i>	4.71	4.24	2.92	4.13	4.22	3.65
	<i>SD</i>	1.27	0.83	1.04	0.88	1.07	1.23
	<i>t</i>	3.29***	1.30	5.12***	3.72***	2.93**	4.64***
	<i>df</i>	122	122	122	122	122	122
N10 Violation 1 (circular argument)	<i>M</i>	5.05	4.44	4.50	3.56	3.67	4.02
	<i>SD</i>	1.18	0.77	0.92	1.45	1.45	1.35
	<i>t</i>	1.79	-0.08	-3.76***	5.42***	4.99***	2.94**
	<i>df</i>	125	124	124	92.21	98.12	125
	<i>d</i>	0.32	-0.01	-0.67	0.97	0.89	0.52
Normative 2	<i>M</i>	5.92	4.76	4.56	4.81	4.73	5.22
	<i>SD</i>	0.97	0.77	0.62	1.07	1.02	1.11
N8 Violation 2 (commitment retraction)	<i>M</i>	4.83	3.36	4.56	2.95	3.17	3.77
	<i>SD</i>	1.26	0.88	0.76	0.97	1.11	1.13
	<i>t</i>	5.30***	9.26***	-0.01	9.94***	7.99***	7.10***
	<i>df</i>	118	118	118	118	118	118
N9 Violation 2 (taking a position too early)	<i>M</i>	3.96	4.60	3.37	4.27	4.78	3.77
	<i>SD</i>	0.99	0.81	0.95	0.71	1.07	1.04
	<i>t</i>	11.21***	1.18	8.37***	3.28**	-0.27	7.54***
	<i>df</i>	124	124	124	124	124	124
	<i>d</i>	2.00	0.21	1.47	0.59	-0.05	1.34
N10 Violation 2 (circular argument)	<i>M</i>	4.96	4.65	4.77	3.90	3.85	4.29
	<i>SD</i>	1.21	0.83	0.79	1.02	1.23	1.09
	<i>t</i>	5.11***	0.78	-1.73	5.02***	4.42***	4.87***
	<i>df</i>	131	131	131	131	131	131
	<i>d</i>	0.87	0.14	-0.30	0.87	0.77	0.85

Note. $N = 501$ (approx. 63 per condition).

* $p < .05$

** $p < .01$

*** $p < .001$

As with the persuasion domain, all of the manipulations worked. This is somewhat surprising, since the N8 and N10 manipulations in the first set (where two friends attempt to figure out what

class they want to take) did not work in their original forms in Study 1 or their stronger forms (also used here) in Study 2. It may be that this is where we see the effects of participants taking this survey while the University was operating remotely—perhaps more participants took the survey on computers (rather than phones) or in less distracting environments, thus making it easier to look back at the vignette and check for things like commitment retractions and circularity if they did not jump out on first read.

All three hypotheses are mostly, but not completely, supported by these data. Each is supported in five of the six conditions at $p < .01$, with d values often exceeding .8. In Study 1, this was true in four of the six conditions (the four with successful manipulations, in that case). The two formerly problematic manipulations working is not the only significant deviation from earlier results here: strikingly, the effect size on argument quality in the second N9 violation condition has gone from $d = 1.25$ in Study 1 to $d = -0.05$ here, with the mean rising a full scale point. Despite their newfound success as manipulations, the first N8 violation condition did not produce a statistically significant effect on pleasantness and the N10 violation condition did not produce a statistically significant effect on frame synchronization (the latter effect actually was significant at $p < .001$, $d = .82$ in Study 2 despite the N10 manipulation being unsuccessful). Still, these violation conditions were associated with significant drops on two of the three dependent variables each. We do still see the effect sizes in the second (high-information inquiry) set of vignettes typically outpace those of the first (low-information) set, suggesting the informational context of the vignettes that may have made the manipulations ineffective in the pilot studies does lead to lessened effects on the variables of interest.

The perceptual reach of inquiry violations appears to be significantly weaker than that of persuasion violations. No violation conditions were associated with reduced perceptions of all

three inquiry norms, and in all but one case, the manipulated norm was associated with the highest d value (this was only true in five of the twelve persuasion violation conditions). The separation of prematurely taking a position (N9) from the other two norms in the correlation matrix clearly manifests here, in particular: both N9 violation conditions produce significantly lowered N9 perceptions, somewhat lowered N10 perceptions, and no difference in N8 perceptions. The lighter pattern of other norms showing significant results was prefigured in the sometimes modest correlations among the norm measures already reported in Table 5.7.

Again, we will also examine multiple regression analyses here, comparing a norms-only model, traits-only model, and norms and traits model on each of the three dependent variables. The results of the multiple regressions are in Table 5.9.

Table 5.9.
Norm-Based and Trait-Based Inquiry Multiple Regressions, Study 3

			<u>Argument Quality</u>					
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.47***		Model Adj. R^2	.03**		Model Adj. R^2	.51***	
F	148.68		F	2.38		F	27.39	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N9	-.20***	-5.16	none			Arg-avoid	.18**	2.90
N10	.69***	16.46				VA-antisocial	.15*	2.57
						Civility	.15*	2.34
						N9	-.21***	-5.34
						N10	.69***	16.45
			<u>Pleasantness</u>					
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.40***		Model Adj. R^2	.02*		Model Adj. R^2	.42***	
F	112.93		F	2.00		F	24.40	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N9	.42***	9.79	Civility	.24**	2.67	Civility	.24***	3.36
N10	.64***	13.99	Blurting	.27*	2.37	N9	.42***	9.78
						N10	.64***	13.93
			<u>Frame Synchronization</u>					
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.17***		Model Adj. R^2	.01		Model Adj. R^2	.19***	
F	35.26		F	1.39		F	8.75	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t

N8	.13*	2.00	none	VA-prosocial	-.21*	-2.33
N9	.35*	7.04		Identity	.16*	1.99
N10	.31**	5.76		Cooperation	.20*	2.17
				N9	.37***	7.41
				N10	.32***	6.00

Note. Norms-only models conducted with df (3,496), traits-only (12,482), and norms and traits (15,478).

* $p < .05$

** $p < .01$

*** $p < .001$

These regressions were less successful than those for the persuasion domain (Table 5.6), with lower adjusted R^2 values here. But as before, the norms appear to be far and away the primary drivers of quality, pleasantness, and effectiveness judgments. There is some evidence that individuals who see argument as a more civil endeavor give higher ratings in this domain, as do individuals who are more verbally aggressive (an odd combination), but in general, the explanatory power resides with two norms: not taking a position too early, and argument circularity.

It is worth mentioning here—and I elaborate upon this in Discussion later—that of all the measures employed in this research, the N10 measure (the circularity norm) likely has the weakest construct validity. Since ordinary arguers do not know what a circular argument is (from a technical perspective, at least), the N10 scale is somewhat more general, and may be better termed to measure “logical assistance provided to the inquiry.” This more general emphasis explains the outsized importance the measure takes in these regressions (especially with respect to argument quality), and it may subsume the N8 (holding to commitments) subscale in these regression frameworks ($r = .51$, Table 5.6). We also see a negative relationship between N9 (not taking a position too early) and argument quality here; it joins N2 (allowing the other arguer to advance arguments) in showing a negative effect on argument quality in this sort of framework. However, hewing to N9 *is* associated with making the argument more pleasant and synchronized, an interesting split effect.

Identity

Next, we move to the identity domain, which provided the most striking set of results in Study 1. In that study, violations of identity norms were associated with particularly strong effect sizes, often $d > 1.5$, on the variables of interest. First, Table 5.10 shows the correlational landscape in this domain.

Table 5.10.
Correlations Among Identity Variables, Study 3

<u>Measure</u>	<u>N1</u>	<u>N11</u>	<u>N12</u>	<u>N13</u>	<u>Quality</u>	<u>Pleas.</u>
N1 (frame synchronization)	1					
N11 (non-neg. identity)	.13**	1				
N12 (avd. contradiction)	.61***	.13***	1			
N13 (therapeutic listening)	.64***	-.01	.58***	1		
Argument Quality	.53***	-.03	.55***	.55***	1	
Pleasantness	.71***	.04	.72***	.71***	.68***	1

Note. $N = 500$.

** $p < .01$

*** $p < .001$

This is familiar: we have noticeably stronger correlations here than in persuasion or inquiry, except that the norm for the producer of the identity argument (N11—projecting a non-negative identity) doesn't correlate strongly with anything. These measures are all unchanged from Study 1 and match its correlation matrix closely.

Next, we proceed to the t -test results, shown in Table 5.11.

Table 5.11.
Identity Manipulations and Effects, Study 3

<u>Condition</u>		<u>N1</u>	<u>N11</u>	<u>N12</u>	<u>N13</u>	<u>Argument Quality</u>	<u>Pleasantness</u>
Normative 1	<i>M</i>	5.49	5.92	6.17	5.87	4.93	6.02
	<i>SD</i>	0.84	0.78	0.67	0.77	0.95	0.80
N11 Violation 1 (negative identity)	<i>M</i>	4.78	5.65	4.86	5.10	4.80	4.94
	<i>SD</i>	0.89	0.93	1.10	0.95	0.80	1.09
	<i>t</i>	4.36***	1.70	7.79***	4.75***	0.81	6.08***
	<i>df</i>	113	113	99.06	111.46	113	113

	<i>d</i>	0.81	0.32	1.43	0.88	0.15	1.12
N12 Violation 1	<i>M</i>	3.65	5.99	3.37	4.09	3.06	3.16
(identity	<i>SD</i>	0.95	0.87	0.88	1.07	1.18	1.35
contradiction)	<i>t</i>	10.87***	-0.39	19.02***	10.12***	9.26***	13.75***
	<i>df</i>	111	111	111	103.86	111	93.21
	<i>d</i>	2.05	-0.07	3.55	1.89	1.74	2.55
N13 Violation 1	<i>M</i>	3.32	5.78	4.00	2.68	3.34	2.82
(disaffected	<i>SD</i>	1.07	0.91	1.18	1.08	1.11	1.33
listening)	<i>t</i>	12.61***	0.91	12.85***	19.06***	8.43***	16.61***
	<i>df</i>	121.99	122	122	120.67	122	114.12
	<i>d</i>	2.22	0.16	2.19	3.32	1.52	2.85
Normative 2	<i>M</i>	5.44	6.16	5.83	5.66	4.87	5.43
	<i>SD</i>	0.98	0.76	1.01	1.04	0.95	1.31
N11 Violation 2	<i>M</i>	4.31	4.71	4.59	5.27	4.13	4.07
(negative	<i>SD</i>	1.07	0.86	1.01	0.93	0.94	1.25
identity)	<i>t</i>	6.18***	10.00***	6.92***	2.22*	4.40***	5.99***
	<i>df</i>	126	126	126	125	126	126
	<i>d</i>	1.10	1.78	1.23	0.39	0.78	0.69
N12 Violation 2	<i>M</i>	4.15	6.02	3.87	4.34	3.75	3.78
(identity	<i>SD</i>	1.02	0.85	1.43	1.14	1.21	1.25
contradiction)	<i>t</i>	7.11***	0.95	8.78***	6.62***	5.66***	7.06***
	<i>df</i>	119	119	111.33	119	118	118
	<i>d</i>	1.29	0.17	1.57	1.20	1.03	1.29
N13 Violation 2	<i>M</i>	3.49	5.94	3.83	2.74	3.18	2.76
(disaffected	<i>SD</i>	0.96	0.96	1.01	0.86	1.07	1.21
listening)	<i>t</i>	11.27***	1.41	11.07***	17.18***	9.33***	11.83***
	<i>df</i>	123	123	123	123	123	123
	<i>d</i>	2.02	0.25	1.99	3.08	1.67	2.12

Note. $N = 500$ (approx. 63 per condition).

* $p < .05$

** $p < .01$

*** $p < .001$

Here, we do have a violation condition that failed the manipulation check: the first manipulation of N11 ($d = 0.32$), which also failed in Study 1 ($d = 0.40$) but succeeded in Study 2 ($d = 0.45$).

These are fairly consistent effect sizes, even though the p values were on different sides of .05.

This continues to reinforce the difficulty of manipulating normally reasonable identities to be

negative. In fact, in my effort to show that the identity is negative *in the context of the*

conversation (i.e., the other arguer won't like the identity projection), participants simply judged

the listener to be condemning the identity (violating N12) and doing worse listening (violating

N13) more than in the normative condition (though still well above the scale midpoint), rather than judging the identity display negatively. The attendant drop in pleasantness and frame synchronization is likely more due to those perceptions than the identity display itself. Either way, other than reinforcing the expressional latitude individuals are afforded in low-threat identity arguments, this condition is fairly unhelpful to us.

Otherwise, the results remain positive, with very significant differences between the normative and violation conditions on all three outcome variables. Both receiver norms continued to display perhaps the strongest effects on perceptions of synchronization, argument quality, and pleasantness of any norm violation in any domain. H1, H2, and H3 enjoy strong support thus far in the project, with the caveat that it appears that the instances of N11 violations in the sort of casual context of the vignettes are perhaps less frequent than anticipated. As I noted with Study 1, the confirmation of these norms as important in governing judgments in this domain is a notable finding in this project, since little has been done before in developing an evaluative schema for identity arguments.

We again see a more limited perceptual reach here than in persuasion; in each of the five successful manipulations, the manipulated norm has the strongest d value, and N11 perceptions are unaffected in the conditions where the listener violates N12 or N13. Still, when N12 or N13 are violated, the perceptions of both norms were strongly impacted—participants noted which was more pointedly violated, but saw them as intertwined. Identity contradiction and therapeutic listening seemed to cause particularly strong effects when manipulated.

We thus proceed to the multiple regression framework for a different examination of just how strong the judgments of the norms' predictive power were. Table 5.12 presents the multiple regressions in the identity domain.

Table 5.12.
Norm-Based and Trait-Based Identity Multiple Regressions, Study 3

Norms-Only			Argument Quality			Norms and Traits		
Traits-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.39***		Model Adj. R^2	.02**		Model Adj. R^2	.40***	
F	105.44		F	1.89		F	22.68	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N11	-.10**	-2.17	Civility	-.18*	-1.99	Epistemology	-.24**	-2.67
N12	.33***	8.22	Epistemology	-.32**	-2.92	N12	.32***	7.92
N13	.28***	7.93				N13	.29***	7.83
Norms-Only			Pleasantness			Norms and Traits		
Traits-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.64***		Model Adj. R^2	.01		Model Adj. R^2	.65***	
F	296.89		F	1.4		F	61.20	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N12	.55***	13.72	Epistemology	-.30**	-2.03	Epistemology	-.20**	-2.19
N13	.48***	13.37				N12	.54***	13.41
						N13	.49***	13.21
Norms-Only			Frame Synchronization			Norms and Traits		
Traits-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.50***		Model Adj. R^2	.02		Model Adj. R^2	.51***	
F	167.35		F	1.62		F		
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N11	.10*	2.52	none			N11	.12*	2.60
N12	.31***	8.78				N12	.30*	8.41
N13	.36***	11.21				N13	.36*	11.21

Note. Norms-only models conducted with $df(3,495)$, traits-only (12,481), and norms and traits (15,477).

* $p < .05$

** $p < .01$

*** $p < .001$

Indeed, N12 and N13 emerge as the primary drivers of these argumentative outcomes, far more than the identity projection itself (though it plays a small role in frame synchronization judgments). We also see some evidence that more epistemologically sophisticated individuals viewed identity arguments as lower-quality and less pleasant, though its presence adds little to the norm judgments. As in the persuasion domain, quite considerable amounts of variance are explained by the norms.

Play

The final domain to investigate is play. We again begin with the correlations among the play variables, shown in Table 5.13.

Table 5.13.
Correlations Among Play Variables, Study 3

<u>Measure</u>	<u>N1</u>	<u>N14</u>	<u>N15</u>	<u>N16</u>	<u>Quality</u>	<u>Pleas.</u>
N1 (frame synchronization)	1					
N14 (appropriate play)	.61***	1				
N15 (nonseriousness)	.16***	.41***	1			
N16 (playful response)	.46***	.52***	.14**	1		
Argument Quality	.14**	.21***	-.02	.08	1	
Pleasantness	.43***	.69***	.29***	.61***	.28***	1

Note. $N = 500$.

** $p < .01$

*** $p < .001$

The variables retain a similar correlational structure to that of Study 1. Particularly notable here is how both N15 (non-seriousness) and argument quality do not have particularly strong correlations with any of the other variables.

Next, we proceed to the t -tests, shown in Table 5.14.

Table 5.14.
Play Manipulations and Effects, Study 3

<u>Condition</u>		<u>N1</u>	<u>N14</u>	<u>N15</u>	<u>N16</u>	<u>Argument Quality</u>	<u>Pleasantness</u>
Normative 1	M	3.77	4.14	4.12	4.70	4.21	4.77
	SD	0.96	0.97	0.87	0.99	0.97	1.34
N14 Violation 1 (dyadically inappropriate play)	M	3.02	3.32	4.10	3.54	4.03	3.66
	SD	0.77	1.12	0.95	0.77	0.88	1.52
	t	4.63***	4.25***	0.09	7.16***	1.07	4.23***
	df	117	117	117	116	117	117
	d	0.85	0.78	0.02	1.29	0.20	0.78
N15 Violation 1 (serious framing)	M	3.60	3.54***	3.09	3.94	4.78	3.96
	SD	0.85	0.88	0.89	0.72	0.88	1.26
	t	1.11	3.76***	6.77***	5.02***	-3.56***	3.63***
	df	133	133	133	116.34	133	133
	d	0.19	0.65	1.17	0.88	-0.61	0.62
N16 Violation 1 (non-playful response)	M	3.24	3.10	3.88	3.20	4.09	3.14
	SD	0.84	1.13	1.00	0.83	0.99	1.54
	t	3.38***	5.63***	1.43	9.39***	0.70	6.50***
	df	130	130	130	124.47	130	130

	<i>d</i>	0.59	0.98	0.25	1.64	0.12	1.13
Normative 2	<i>M</i>	4.08	4.18	4.14	4.62	4.30	4.58
	<i>SD</i>	0.83	0.97	0.69	0.77	0.71	1.41
N14 Violation 2 (dyadically inappropriate play)	<i>M</i>	3.16	3.01	3.78	3.39	3.97	2.98
	<i>SD</i>	0.89	0.84	0.93	0.79	0.98	1.14
	<i>t</i>	5.95***	7.08***	2.51*	8.74***	2.13*	6.89***
	<i>df</i>	121	121	121	121	121	121
	<i>d</i>	1.07	1.28	0.45	1.58	0.38	0.85
N15 Violation 2 (serious framing)	<i>M</i>	3.83	3.53	3.83	3.93	4.33	4.33
	<i>SD</i>	0.87	0.95	0.87	0.93	0.95	1.55
	<i>t</i>	1.65	3.66***	2.20*	4.46***	-0.23	0.92
	<i>df</i>	118	118	118	118	118	118
	<i>d</i>	0.30	0.67	0.40	0.82	-0.04	0.17
N16 Violation 2 (non-playful response)	<i>M</i>	3.78	3.49	3.54	4.07	3.70	3.74
	<i>SD</i>	0.93	0.96	0.88	0.73	0.96	1.24
	<i>t</i>	1.93	4.04***	4.32***	4.22***	4.04***	3.60***
	<i>df</i>	128	128	128	128	119.27	128
	<i>d</i>	0.34	0.71	0.76	0.74	0.71	0.63

Note. *N* = 500 (approx. 63 per condition).

**p* < .05

***p* < .01

****p* < .001

All six manipulations were statistically significant here, but one—the second manipulation of N15 (nonseriousness)—was not strongly so (*d* = 0.40). This particular condition did not elicit statistically significant differences in any of the three dependent variables. This outcome differed from the Study 1 results of this vignette, where the manipulation was more effective (*d* = 0.63), and also was associated with reductions in both N1 (*d* = .85) and pleasantness (*d* = .67). The first manipulation of N15 was borne out in the data, but it also did not come with a statistically significant difference in perceived frame synchronization; further, it came with an *increase* in argument quality. This particular vignette actually received the *fourth-highest* argument quality score of all forty vignettes. However, it did receive significantly lower pleasantness ratings than its normative companion. With this being the only positive result on the six tests of N15, it is the norm with clearly the weakest support of all fifteen domain-specific norms as being important to argumentative judgments and outcomes.

Even aside from the troubles with N15, we have the least support for the other hypotheses here compared to the other domains of argument. H1, in particular, enjoys very little support in this domain, with only one out of the six norm violation conditions showing a reduction in perceived argument quality relative to its normative counterpart. H2 enjoys clearly the most support of the three hypotheses, with five of the six violation conditions showing a negative impact on pleasantness judgments, including both manipulations of N14 and N16, with d values ranging from .62 to 1.24. The results on H3 are more mixed: both N15 manipulations failed to produce a statistically significant difference in frame synchronization, and the second N16 manipulation was no different from its normative counterpart in this judgment either here or in Study 1. However, it does seem that maintaining dyadically appropriate playful ground is more clearly important to synchronization perceptions, as both N14 manipulations were clearly significant in this regard here (only the second was in Study 1).

These findings, negative as they are in places, do extend a trend noted in Study 1: this is the only domain where we see a more relational variable (dyadic pleasantness) take the brunt of the impact of violations, relative to a more content-oriented variable (argument₁ quality). Logically sound arguments are not required for play, and thus, violating a play norm does not mean one has made a logically unsound argument; it simply means one has not made an interpersonally kairotic one.

We did see somewhat wider perceptual reach here than in inquiry or identity, with judgments of dyadic appropriateness being reduced in all six violation conditions, and three conditions showing statistically significant reductions on all three norms (in spite of the low correlation between N15 and N16; $r = .14$, Table 5.13). Violations seem to elicit fairly broad

negative judgments of non-normativity, and perhaps N14, being quite general, serves as a summary judgment of sorts.

If so, we would expect that to be borne out in the multiple regressions, which are detailed in Table 5.15.

Table 5.15.
Norm-Based and Trait-Based Play Multiple Regressions, Study 3

Norms-Only			Argument Quality			Norms and Traits		
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.05***		Model Adj. R^2	.00		Model Adj. R^2	.05***	
F	10.53		F	0.73		F	2.78	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N14	.27***	5.26	none			N14	.28***	5.31
N15	-.14**	-2.84				N15	-.14**	-2.77
Norms-Only			Pleasantness			Norms and Traits		
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.57***		Model Adj. R^2	.07***		Model Adj. R^2	.60***	
F	217.87		F	4.07		F	50.02	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N14	.71***	13.32	Arg-avoid	-.29**	-2.93	Arg-avoid	-.21**	-3.17
N16	.54***	10.01	VA-prosocial	.30**	2.77	Dominance	.15**	2.63
			VA-antisocial	.21*	2.27	N14	.68***	12.94
						N16	.55***	10.63
Norms-Only			Frame Synchronization			Norms and Traits		
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.40**		Model Adj. R^2	.01		Model Adj. R^2	.41***	
F	113.57		F	1.20		F	23.46	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N14	.48***	12.47	none			VA-prosocial	-.13*	-2.33
N15	-.09*	-2.46				VA-antisocial	-.11*	-2.45
N16	.19***	4.72				N14	.48***	12.29
						N15	-.08*	-2.13
						N16	.19***	4.84

Note. Norms-only models conducted with $df(3,497)$, traits-only ($12,483$), and norms and traits ($15,479$).

* $p < .05$

** $p < .01$

*** $p < .001$

Strikingly, the play domain system of variables is nearly irrelevant to judgments of argument quality. This was not the case for the other three domains.

Otherwise, we see norms, not traits, as the most important predictors of argumentative outcomes in this domain, as we did for the other domains. Overwhelmingly, this again falls to dyadic appropriateness and playful response, with non-seriousness (N15) actually being negative when significant. This continues to cast some doubt about whether nonseriousness is actually a legitimate play norm, or whether either its operationalization or the vignette contexts cause its effects to be muted in some way. We also see very little influence of the norms or traits in making much headway in explaining argument quality, but a very strong impact on pleasantness, furthering the idea that pleasantness may be the clearly more important aim in playful arguments.

Summary

This study, especially in conjunction with Study 1, generally offers strong support for H1-H3. H1 predicted that norm violations would result in lower perceptions of argument quality than normative arguments, and this has mostly held true in Studies 1 and 3 in all domains except play. H2 predicted that norm violations would result in lower perceptions of dyadic pleasantness than normative arguments, and this hypothesis has received strong support across all four domains in both Studies 1 and 3. H3 predicted that norm violations would result in lower perceptions of frame synchronization, and apart from a couple of norms (N5 and N15, in particular), this has received strong support thus far as well.

Taken in combination, this presents a clear picture: norm violations lead to negative judgments of how an argument is going in the moment. A few of the norms may not affect judgments of all three dependent variables of interest, but all except N15 seem to clearly impact at least one of them. This provides significant support to the general thesis of the Theory of Argumentative Norms: that when these norms are violated, arguments go awry in some detectable way.

Discussion

Study 3 is this project's most powerful and complete test of the first three hypotheses, and thus the theory's basic claim that the proposed norms are in fact normative, i.e., that following them is seen as better argumentative behavior than violating them. As noted above, this claim, and the three particular hypotheses tested here, received significant support, but with somewhat different patterns of effects in the four domains. In addition, the multiple regression framework gave us a slightly different view of the norm-to-judgment interactions than did the *t*-tests, allowing us to see which norm perceptions predicted the outcomes in question when others were statistically controlled. In the rest of this chapter, I will go through each domain and comment on possible explanations for some of the trends that are observed in the data, touching on particular features, norms, and effects that stand out, and some limitations of the methods and analyses used here.

Persuasion

The results in the persuasion domain were generally consistent with expectations. In both vignette sets, all six persuasion norm violations were associated with lower perceived frame synchronization and argument pleasantness. In all but one case, they were also associated with lower perceived argument quality. Effect sizes were often quite large, usually exceeding .8 regarding pleasantness and frame synchronization, and .6 on argument quality. As van Eemeren et al. (2009) have found support for the notion that the pragmadialectical rules have some degree of conventional validity, the results here support a parallel finding (to the extent N2-N6 are distillations of the rules, as Walton (1998) notes) and add context to its meaning, by specifying what argumentative impacts occur when these rules are not followed. In addition, the personal-

issue norm of N7—showing reasonable relational priorities if personal-issue concerns are salient in the argument—is supported as an additional force at work in persuasion arguments.

It bears noting that across all three studies, persuasion arguments have received clearly the worst ratings. Even the normative vignettes tend to score right at or slightly above the neutral midpoint of 4 on the norm subscales and the outcome variables. This tendency was especially pronounced in the personal-issue vignettes. The competitive nature of the persuasion domain seems to imply a higher baseline level of experiential difficulty and thus cognitive load, which works against pleasantness in particular. The other domains—inquiry, identity, and play—make competition either inappropriate or unnecessary, so the forceful and unilateral characters of persuasion might be useful clues to these ratings.

We might suspect that these issues would lead to particularly pronounced reductions in evaluations the moment a norm violation is committed, and there is some support in the data for this notion. Most of the norm violations caused lower perceptions of all of the other persuasion norms, and four conditions were associated with over 1.5 point reductions in pleasantness (with $d > 1.40$). Large dropoffs were less apparent in the perceived frame synchronization and argument quality variables, however. It is possible that to some extent, the lowered evaluations of even the normative vignettes somewhat diminish the impact of violations in these areas—people don't often go into persuasion dialogues expecting to be persuaded or expecting a cooperative framework to emerge. The bar of expectations is set low here, and so arguers are less surprised when their already-low expectations are not met.

When it comes to the effects of the specific norms, a few particular trends are interesting. One is that violations of N2—allowing the other party to participate in the argument freely—are seen as the most damning among all of the violations, resulting in the lowest perceived domain

synchronization and pleasantness scores in both public-issue vignette sets and the lowest argument quality evaluation in one. This violation is subject to perhaps the most extreme manifestations of all of the persuasion norms, since it can essentially constitute monologic screeds of dominance. The global nature this violation can have (i.e., it can be re-violated constantly throughout the argument), relative to some of the other norms, might help explain its perceived abrasiveness.

The other end of the spectrum is violating N5—prematurely claiming victory in the argument. The first manipulation of this norm, in the vignette set concerning a college’s library food rules, received higher scores in perceived frame synchronization, argument quality, and pleasantness than all of the other violation conditions in that vignette set. In the second vignette set—discussing where a new shopping center was to be constructed—the N5 violation condition also attained the highest perceived frame synchronization score of all the violation conditions (statistically significantly higher than five of them, in a Tukey HSD analysis), though its pleasantness and argument quality scores ranked slightly below the N6 violation condition, the norm of retracting a claim if its defense fails. Perhaps participants were less apt to notice that the arguments were not conclusively proven, or perhaps that the claim of victory doesn’t represent an insistence on rightness as much as an end to the person’s desire to discuss the (in this case, fairly trivial) issue. Further study, perhaps with close interviews of argument recipients, might supply clues as to why certain norms seem to be weightier than others.

The persuasion domain was the domain in which violations most affected perceptions of *all* of the domain’s norms, thus exhibiting the widest perceptual reach. Since these norms, unlike those in identity and play, are derived from well-established dialogue rules, this is unlikely to be a reflection of any sort of conceptual overlap in the norms. Rather, what it suggests is that

persuasion norm violations operate in a sort of good faith/bad faith dichotomy. Once an arguer violates *a* norm, he or she may be seen as operating in bad faith. “Bad faith” is defined by Allen et al. (2010) as “suppressing or faking expressions.” In the context of argumentation, the object of suppression is dominance; i.e., perceived “bad faith” means “I can see you’re trying to laminate eristic, but it’s not working.”

If it seems that an arguer is vaguely going along with the persuasion *domain* but is, in fact, in a dominance *frame*, then we see that arguer as *willing* to violate any of the persuasion domain’s norms, whether they have done so or not. If someone’s frame of mind is win-at-all-costs, then of course they will pay no attention to norms that get in the way of that victory. Since real utility is often at stake in persuasion, and since individuals clearly come in somewhat wary of even normative persuasion arguments, they are primed to react in a more globally negative way when a violation occurs. Since the other domains are more cooperative and possibly lower in stakes, this seeming on-off switch of perceived good faith does not apply as strongly in those contexts.

Finally, it is worth briefly discussing the multiple regression result that showed perceptions of N2 (allowing the opponent to advance arguments), despite their general force, were significantly negatively correlated with argument quality when controlling for the other norm judgments, yet positively correlated with pleasantness and frame synchronization. This shows a particularly discerning judgment on the part of participants. The other (public) norms all comment on argument quality more directly than N2 does. N3 violations (not responding to the other person’s position) may show a defect in moving from one’s own illative core to the dialectical tier (see R. Johnson, 2000). N4 violations involve not using argument to defend a position, which shows an absence or misunderstanding of reasoning. N5 and N6 violations deal

with prematurely claiming victory or refusing to admit defeat, and thus show a lack of awareness of proof mechanisms. But N2 is just silencing the other person. It may be clearly rude and boorish, and may often be employed in situations where the person feels like they have to win the argument or else they'll lose (this was not really the case in the vignettes, due to using fairly casual topics), but on its face it does not mean the argument₁ being advanced is unsound. I suppose it also avoids any consideration of the dialectical tier, but does so less overtly, since there is no opposing point to misunderstand or avoid.

Overall, the persuasion results indicate that there is considerable uniqueness to this domain. Persuasion arguments, even when conducted normatively, are not viewed particularly positively, and are seen in quite a negative light when violations occur. Further, the perceptual reach of persuasion violations is quite strong; when a violation is committed, it seems to drag down the perception of the argument across the board. There is also some evidence that norm violations may differ in how negatively they affect these perceptions, with N2 and N5 standing out as particularly strong and weak, respectively. The general trends in the data almost universally support the central claim of the Theory of Argumentative Norms, but lend additional clarity to how persuasion arguments are perceived. Of the four domains in this study, persuasion is the one that most dominates the field of argument studies, with only inquiry being comparable. Consequently, the findings here are commentaries on nearly all the prior theory since Aristotle.

Inquiry

The results in the inquiry domain also strengthen the claims of the theory. In both vignette sets, all of the norm violation conditions were associated with lower perceived domain synchronization and argument pleasantness. In all but one case (the N9 violation in the second

vignette set), they also came with lower argument quality evaluations. Generally, this was the predicted pattern.

The anomaly of this N9 violation—taking a position before sorting through an appropriate amount of evidence—merits some scrutiny, since the N9 violation condition in the first vignette set, while showing a statistically significant drop in argument quality from its normative counterpart, was still the least impactful of the three norm violations on argument quality ($d = 0.53$). In fact, both N9 violation conditions scored *higher* on quality (4.22 and 4.78) than all four normative persuasion vignettes (all below 4.0), and N9 perceptions were negatively correlated with quality perceptions both with and without controlling for other variables (see Tables 5.7 and 5.9). It joins N2 (not allowing the other arguer to advance arguments) in this negative correlation when controlling for other norm judgments, and there is an important parallel between the two—neither implies the argument is *wrong* or even poorly supported, simply that the interaction is not respecting the dialogic rules of its argumentative domain.

This comparison to the persuasion domain speaks to how a modicum of cooperation—even if quickly abandoned—might buy some argumentative goodwill. The sharp drops in perceived pleasantness, however, indicate a more complicated picture. In addition, the second N9 violation condition, which received the highest argument quality score of all eight inquiry conditions, had by far the *lowest* perceived frame synchronization, statistically significantly lower than all of the other inquiry vignettes in a Tukey HSD comparison. Thus, when it comes to the adoption of positions in inquiries, the effects are clearly not uniform.

These data point toward a different sort of distinction: that N9 violations are primarily relational in nature. Adopting a persuasive position “too early” in an inquiry argument does not necessarily mean that the position taken is wrong, or even that the reasoning behind it is

problematic. Instead, N9 violations are expectancy violations of the cooperation and evidence-gathering of inquiry. Their persistent nature—once a position is taken, the arguer may continue to argue for it over and over, whereas people do not tend to argue *solely* in circular arguments (N10) or in retractions of previous positions (N8)—leads to sharp feelings of being out of sync and a high impact on pleasantness. But it still does not preclude the argument₁ from being logically sound or persuasive in the end. This may especially apply in high-information inquiries like the second set here, where both participants enter the argument having most of the knowledge needed to take a position.

Unlike in Study 2, the N8 and N10 manipulations in the first vignette set were detected in this study (see the manipulation checks in Tables 4.4 and 5.8), but their effects remained weaker than in the second set. As detailed in Chapter 4, this may imply a distinction between low-information and high-information inquiries. In these high-information contexts, arguers may assume that each other has made some sense of the facts around the issue and is ready to productively synthesize. But in low-information inquiries, inferences are made on the fly as a reaction to newly found information. These latter inferences are provisional (Ohm, 2005). If they are temporarily manifested in circular arguments or prove to be wrong later in the inquiry, necessitating retraction, their provisional status makes their ultimate lack of soundness more forgivable.

It is also worth noting that violations of other norms did not cause the perceptions of commitment maintenance (N8) or avoiding premature position-taking (N9) to drop significantly, which contrasted with the persuasion norms' tendency for one violation to lead to lowered perceptions of all or most norms. Here, it seems that norm violations do not cause the same sort of perceptual cascade, which may mean that participants see them as more discrete, or perhaps

that the cooperative framework of inquiry better insulates arguers from stigmatized charges of acting in “bad faith” though there is still utility at stake.

Indeed, it is only the circular argument norm that appears to be reached by violations of the other two, but as noted in the Results section, this may be a product of difficulty operationalizing this particular norm. Ordinary arguers do not know what circular arguments are. For that matter, they don’t know what therapeutic listening is, or even what an identity argument is, in most cases. The Theory of Argumentative Norms holds that ordinary arguers have domain-specific expectations, but it does not assume that they have good cognitive differentiation of these expectations, or any technical vocabulary. In the inquiry domain, for instance, ordinary arguers certainly do not orient themselves to what they are doing in the way Walton (1998) would: they don’t clear-headedly think “Okay, our guiding principle is cumulateness; let’s work toward that.” Walton’s notion of cumulateness—the idea that mutually-agreed-on reasons accumulate throughout the inquiry, slowly pushing the arguers to a logically following conclusion—is highly technical and specific.

Still, the theory holds that *when cumulateness is disrupted, ordinary arguers notice something is wrong*, and that this will be true of any of the three inquiry norms, which each disrupt cumulateness in a different way. The N10 measure is indeed more general than just circular arguments: there is one item that references circularity, but the subscale measures a more general logical contribution: one could term it “clarity of thought provided,” “assistance to cumulateness,” or something in that vein. Because the scale is more general, it also would likely be affected by N8 violations, going back on commitments—which, in their own way, leads the inquiry to *circle* back to an earlier point.

The point of the N10 measure, like all of the norm measures, was to detect whether participants reacted to the manipulation, and in this study, when a circular argument was included, they *did indeed* rate the argument negatively on this scale relative to the normative condition. Thus, it provided the information we need to conclude that the manipulations worked. However, when employing it in the multiple regression framework, it proceeded to swallow up the proportion of variance explained in the dependent variables by the N8 measure (Table 5.9), and this was possibly a reflection of the more general items employed in the scale rather than anything about circular arguing in particular. It would thus be unfair to conclude that N8 judgments, which are positively correlated with all three outcomes, have no bearing on judgments of inquiry arguments.

The concerns I have expressed here about cognitive differentiation do lead me to caution about reading too far into relative proportions of variance explained by the norms in the multiple regression frameworks. The overall patterns are unmistakable, and the correlations are strong, but we should proceed with caution when reading implications into specific beta weights, especially when several are of comparable size and direction. What the multiple regressions tell us is which norm judgments are cognitive harbingers of argumentative outcome judgments. These may or may not be the same as *which norms were actually violated*. The wide perceptual reach of persuasion arguments, and my comments about bad faith perceptions there, is another sort of trend that demonstrates the difference between the actual violation that happened (from a problem-valid standpoint) and the intermediary judgments of what happened, which then lead to the judgments of the argument as a whole. Nevertheless, these patterns, to the extent that they differ from what *t*-tests show, are valuable to us, because they illustrate what is happening on a different level from the theoretical predictions. The N10 subscale is simply a special case where

the measure is far enough removed from the concept that we should be careful about generalizing the multiple regression findings back to the notion of circular arguments. Other norm subscales may have slight imprecisions in their approaches to the underlying construct (e.g., therapeutic listening), but not as much as N10.

Identity

The results in the identity domain were consistent with the project's hypotheses. With the exception of the first manipulation of identity negativity (N11), all of the norm violations were clearly detected, and all of them were associated with worse domain synchronization (N1), argument quality, and argument pleasantness (see Table 5.11).

Identity arguments, as Hample and Irions (2015) have previously found, are generally quite pleasant experiences when conducted normatively. The normative identity vignettes received the highest scores of all vignettes in both argument effectiveness and argument pleasantness, the latter by a wide margin (compare Table 5.11 with Tables 5.5, 5.8, and 5.14). This extends to the norm perceptions, as well—when an identity argument is normative, it is perceived as *very* normative. Identity arguments are often free of conflict, and their argumentative structure often arises from a desire to simply elaborate on the claim to provide context for a particular self-disclosure rather than a usual argumentative exigency or felt need to “prove” the identity claim to be accurate. They therefore do not necessarily come with the risk of possible conflict or the cognitive strain of searching for persuasive reasons.

But this high baseline gives identity arguments a lot of room to fall, relative to something like persuasion. People enter into identity arguments expecting to be able to convey their identities (and/or learn about those of the other arguer(s)) and have a pleasant time. When a violation occurs, then, it may come as a bigger surprise and lead to a particular sort of

disheartenment, especially given the personal nature of the issue(s) at hand, rendering problematic identity exchanges as similarly unpleasant to the violation conditions in other domains.

In both vignette sets, it was the manipulations of N13—therapeutic listening—that were associated with the largest drops in perceived synchronization and argument pleasantness ($d > 2.0$). Violations of N12—condemning or disagreeing with the identity claim—provoked slightly smaller but still stark differences in these outcomes, with violations of N11—projecting a non-negative identity—showing much milder effects (d consistently below 1.2). The multiple regressions showed the two receiver norms to have similarly strong bearings on outcome judgments (Table 5.12). With respect to frame synchronization, there are some clear explanations for this effect size hierarchy. While a condemnation or disagreement with an identity claim does represent a sync issue—effectively turning the dialogue into a persuasion encounter—it at least still remains on the *topic* of the original identity claim. A failure to appropriately listen, however, may be an indication that not only does the listener not understand the frame of the argument, but is not even attending to the topic of the argument.

These effects reveal a sort of stratification of synchronization by the violation committed. We can imagine in the case of identity contradiction or condemnation how one might be able to rectify a momentary conflict over the identity and re-frame the argument back toward its original intention, much as the momentary inquiry violations (N8 and N10) are more easily repaired than those of N9. Listening issues, on the other hand, often manifest from the outset of the episode and may represent dramatically different interest levels in the topic, where the producer of the identity argument is eager to share the identity and self-disclose, and the receiver is indifferent. Finally, N11 violations show the weakest effect on frame synchronization because they do not

necessarily have to come with any at all—if the listener follows the other norms, the argument may proceed with both participants firmly in the identity frame. However, contextually negative identities may invite rebuke, intentionally (e.g., “I am worthless”) or unintentionally, and thus their projection does unlock heightened potential for discord to arise.

As a whole, the identity results sharpen our understanding of this domain. Identity arguments are quite pleasant experiences when conducted normatively, but become profoundly affected by norm violations, especially when the argument is not appropriately received. The findings here both conform to the central claim of the Theory of Argumentative Norms and considerably strengthen its overall utility as a theory, in that it demonstrates large explanatory power on the perceptions of identity arguments. Though these arguments have not received a large amount of attention in the literature, they are frequent, everyday occurrences, and demonstrate the potential to be perceived either quite positively or quite negatively. The fact that the three norms seemed to exercise a great degree of predictive power on these perceptions is compelling.

Play

The play results were somewhat in line with theoretical expectations. Five of the six norm violations were clearly detected, and all five of these were associated with lower pleasantness than the two normative conditions (Table 5.14).

A concern with any investigation into playful argument is whether participants will be able to accurately detect the playful context. As Hample et al. (2010) point out, not everyone makes use of, or is even aware of, the playful potential of argument. Humor also is notoriously hard to translate to text. Stoltz (2019) even pointed out that two different sorts of play are theoretically distinct. If participants cannot perceive the play, even the normative play vignettes

may come off as eristic and aggressive, contextualizing all subsequent perceptions. However, we can see that this was not the case in this study, as the normative playful vignettes were evaluated as being fairly pleasant, roughly as much as inquiries (compare Table 5.14 with Table 5.8).

Despite its overtly fun purpose, play did not contend with identity for the title of most pleasant argumentative domain. Whether this was due to some portion of the participants not understanding the context or simply being more alert for negative outcomes in this domain is not clear. Still, evaluations of the normative play vignettes were reflective of their context as pleasant and fun experiences.

None of the play norm violation conditions were associated with any change in argument quality, a significant break from the patterns in the other three domains of argument. The explanation for this is simple: playful arguments₁ are not intended to be high-quality in a traditional sense. In fact, if they were (i.e., persuasive), they would take the interaction largely out of the play domain and into a persuasive context. It is possible for argumentative encounters (e.g., interscholastic debate, “playing devil’s advocate”) to straddle this line, creating a sort of playful persuasive attempt or playful inquiry, in what I have termed “substantive playful argument” (Stoltz, 2019). But neither of the vignette sets here attempt to capture substantive play, instead representing superficial playful argument: playful pokes back and forth (Hample et al., 2010; Stoltz, 2019). In both cases, this takes the form of a sort of intergroup teasing: in the first, about baseball team fandom, and in the second, about music fandom. In neither case are the arguers attempting to actually convert each other to their fan allegiance, and though the arguments₁ are not necessarily false, they are generally subjective or specious and simply intended to stimulate a brief, silly exchange of group bravado.

It is not that the *notion* of argument quality ceases to matter; the context changes. In a superficial play context, “quality” ought no longer refer to how convincing an argument₁ proves to be, or how sound it is. Instead “quality” refers to a sort of psychological arousal. A playful argument₂ reaches its goal if it is fun over several turns; thus, the content goal one is trying to attain is simply to keep the play going, and stimulate more. This is accomplished through dyadically appropriate humor and outrageousness, not traditionally sound logic. As such, it is no wonder that not only did participants fail to differentiate argument quality between the conditions, but that in many cases, the quality judgment was not far off the neutral midpoint of 4.

An interesting story arises with the manipulations of N15—the norm of constructing arguments in a way that implies they are not to be taken seriously. Unlike in Study 1, here the second manipulation did not register in its norm perceptions, and unlike the other vignettes for which this was the case, the vignette registered no significant differences in any relevant variables. The first manipulation *was* clearly felt, but it did not register a significant difference in perceived frame synchronization and only attained a fairly modest difference in argument pleasantness. Strikingly, both arguments were actually perceived as being equal or higher-quality to their normative counterparts, perhaps because their seriousness makes them easier to register as traditional arguments₁.

Again, this shows that participants were fairly discerning in understanding which norms actually have a direct bearing on argument quality. N2 (not allowing the other person to advance an argument, N9 (taking a position too early in an inquiry), and N15 (being non-serious) judgments were not (or negatively) associated with argument quality judgments, when controlling for the other norms (see Tables 5.6, 5.9, and 5.15). Indeed, there is nothing that precludes arguments made in violation of these norms from being logically sound. In other

words, from a standpoint of problem validity, violating any of them does not necessarily indicate a poor-quality argument₁ is being advanced. The essential problems appear to be interactional. The theory predicted that ordinary arguers would still associate these violations with problematic argument quality because of their violations' indication of a lack of situational understanding. In some cases, this does hold—for instance, the first manipulation of N2 was judged as quite low in argument quality—but it seems that participants often blame other violations for this result. These thoughts highlight the academic reality that argument₁ quality is defined with persuasion or inquiry in mind.

There are two other possible explanations for the lack of concern for N15 violations. The first is that, of the four normative domains of argument, play is the one that is least commonly understood. As noted in Table 5.3, participants viewed argument as significantly less playful than identity-oriented (a *t*-test between the two is significant at $t = 17.31$; $p < .001$; $d = .79$), and utility-oriented ($t = 3.40$; $p < .001$; $d = .16$). In addition, the play frame had a particularly wide standard deviation (1.29, compared to 0.87 for identity and 0.54 for utility; see Table 5.3) relative to these other frames, indicating that a portion of the sample saw arguments as quite disconnected from play. To those who do not see or value the playful potential of argument, turning a conversation from play to persuasion offers it some functional grounding, bringing it into a context they know and understand. A second possibility is that playful arguments, especially the superficial sort exemplified in the vignettes, are often quite short exchanges, and since they do not need a traditional resolution like the other three domains (persuasion or at least “agreeing to disagree,” reaching a conclusion on the object of inquiry, successfully self-disclosing an aspect of one’s identity), they are quite permeable. A turn from playfully poking at each other’s favorite sports teams to actually discussing the merits of their players or statistics is

not necessarily an unwelcome one. Thus, once the move toward a different frame is made by one of the arguers, it may not be viewed problematically. In Walton's (1998) terms, perhaps shifts out of the play domain into something else can more easily be perceived as licit.

The only norm violation that was associated with a drop in perceived domain synchronization in both manipulations was N14—the adaptation of play to individual and dyadic preferences. This difference likely owes to the fact that a fail to adapt to dyadic preferences itself implies a disconnect in what the argument ought to entail.

Hample et al. (2010) argue that a primary problem with playful argument is its association with verbal aggressiveness—that it acts as a lamination of eristic, and that lamination can wear thin. One person's playful teasing can be another's bruised ego. The norms point toward a second issue in this domain, though: not “getting it.” Not understanding humor, silliness, or other argumentative play moves can leave the listener confused and the “player” feeling misunderstood, their play unappreciated. These are not necessarily attempted laminations of eristic; they can also be laminations of persuasion or inquiry. But like the tease that goes too far and proves insulting, these laminations can fail, and the argument can be perceived as a straightforward persuasive attempt or desire for a cooperative inquiry.

The data here suggest this is a real impact, but that its effects are less dire than misunderstandings or frustrations in more serious and consequential contexts of argument. In short, the stakes (Hample et al., 2016) involved here are often lower than those in the other argument frames, so the impact of the norm violations discussed here is lessened relative to more “important,” high-stakes domains.

Conclusion

At this point, with data from both Study 1 and Study 3, the Theory of Argumentative Norms has received significant support. All fifteen domain-specific norm violations seem to have at least some sort of impact on argumentative discourse in their respective domains (evidence is somewhat mixed on N15), and in most cases, these effects persisted across two different argument topics and two different datasets. Thus, the case that the norms are conventionally valid is strong.

Moreover, the data reinforce the domain-specific approach the theory takes. Each of the four domains comes with a different normative baseline and different pattern of effects. Normative identity arguments₂ are seen as very positive experiences, whereas normative persuasion arguments₂ are often perceived as merely tolerable. A persuasion norm violation results in a global condemnation of the arguer's normativity, whereas an inquiry norm violation does not. Play norm violations cause little impact on perceptions of argument₁ quality. These major differences, along with other minor ones, reflect the necessity of approaching argument norms from a domain-specific standpoint. On a more micro level, we see the individual norms also exhibiting different patterns of perceptual overlap and effects on quality, pleasantness, and synchronization.

We can say at this point that normative arguments fare better than non-normative arguments, at least in some sense. The question that remains is what exactly the impacts of each violation may be. We know in general that interpersonal arguments can take nasty, conflictual turns, cause frustration and relational harm, and fail to meet their content or relational goals, but mapping particular norm violations to particular sorts of argumentative damage will more clearly reveal the real-world impact they have. To do this, we turn to Study 4 and some real-life examples.

Chapter 6: The Consequences of Norm Violations (Study 4)

Study 3 offered a significant volume of evidence that the sixteen argumentative norms are perceptible by ordinary arguers, and that violations of them are associated with at least some sort of negative argumentative outcome. All of the norm violations seem to make argumentative episodes less pleasant, and many of them make arguments seem less effective or convincing.

That is good news for the Theory of Argumentative Norms, but it does not represent a completely satisfying conclusion. Just because the norms are perceptible and elicit momentary perceptual changes in argumentative discourse does not mean they substantively matter. On some occasions, the impact of norm violations might be so momentary that no real consequences are felt—the violation is committed, one or both arguers realize it, the arguer apologizes or self-corrects, and things are immediately back on track (Jackson & Jacobs, 1980). On other occasions, violations might be persistent, unpleasant, and highly frustrating, stimulating both arguers to head down a trail of personal attacks and problematic argumentative behavior that can culminate in hurt feelings, lack of trust, or even relational termination (Paglieri, 2009; but also see Siegert & Stamp, 1994). To what extent can we expect violations to lead to the latter sort of outcome versus the former? Are some violations more prone to these sorts of disastrous outcomes than others? Do some violations, or violations in certain domains, lead to particular patterns of harms? To try to unpack this complicated picture, we turn to the final study of this project: Study 4.

Study 4 retains much of the vignette-based structure from Studies 1-3, but in addition to asking about argument quality or pleasantness perceptions in the vignettes, it asks participants to rate the vignettes on additional outcome-oriented variables: goal attainment, future willingness to argue, and likelihood of escalation. Further, it supplemented the vignette methodology by asking

participants to describe interactions they had that did not go well, allowing for the analysis of real-world arguments. What violations tend to get committed in problematic arguments, and what outcomes do people report experiencing in the aftermath of these violations?

Recall again the hypotheses and research question of the project in Figure 6.1.

Figure 6.1.

Hypotheses and Research Question, Restated

H1: An argument₁ (embedded within an argument₂) that follows the norms of its domain will be seen as higher-quality than one that does not.

H2: An argument₂ will be viewed as a less pleasant experience if one of the arguers committed a norm violation.

H3: Arguments that contain norm violations will be perceived as more out of sync with the other arguer than arguments that do not.

H4: a) Arguers that commit norm violations will be seen as attaining their content goals less than arguers that do not. b) The same will be true with respect to relational goal perceptions.

H5: Arguers who commit norm violations will be seen as worse future argumentative partners than those that do not.

H6: Arguments in which a violation is committed will be seen as more likely to escalate into quarrels than those that do not.

H7: Violations of the norms of inquiry and persuasion arguments will lead to more content-goal failures than violations of the norms of identity and play arguments.

H8: Violating arguments in the identity and play domains will be seen as more likely to lead to quarrels than in persuasion and inquiry arguments.

H9: Violating arguments in the identity and play domains will lead to larger decreases in willingness to argue with the violating arguer in the future than violating arguments in the persuasion and inquiry domains.

H10: a) When frames are out of sync, arguers in a persuasion or inquiry frame will perceive the primary implication of the frame sync issue to be on the content level. b) When frames are out of sync, arguers in an identity or play frame will perceive the primary implication of the frame sync issue to be on the relational level.

RQ: Do norm violations differ from each other in magnitude of effect or type of effect (other than the predictions made in H7-H10)?

In Chapter 5, I noted how these subdivide into three groups. The first group, H1-H3, claim that norm violations cause basic perceptual differences in how arguments are proceeding. The second group, H4-H6, claim that norm violations also impact how the argument will conclude and/or impact the relationship between the arguers later on. Finally, H7-H10 predict differences

between domains on what sorts of outcomes will be most affected by norm violations, and the research question asks if there are other differences in effect patterns.

In Study 1, preliminary tests were conducted on all of the hypotheses, but some of the stimuli did not work and some of the norm scales were unreliable; in addition, the large number of conditions led the study to have low power. In Study 3, a more precise and powerful set of analyses were conducted on the first set of hypotheses: H1-H3. Here in Study 4, this first group of hypotheses is again retested, but is not the main focus of the study. Primarily, we are concerned with the other two groups of questions, which all concern *outcomes*. In addressing these hypotheses, I both attempt to replicate the Study 1 findings with twenty of the vignettes used in the previous studies and further investigate the nature of norm-outcome relationships by collecting a sample of real-world problematic arguments. Through these two methods, a more robust test of H4-H10 can be performed, and the research question can be explored more thoroughly than the vignettes alone allow.

Method

Procedure

This study, as with the first three studies, was a Qualtrics survey administered through the SONA system for the University of Maryland's communication department. Participants were presented first with an online consent form. If they consented to participate in the study, they filled out demographic information, and were then asked to recount a discussion that didn't go well. There were four specific prompts that they responded to about the episode: what happened, what the topic of the episode was, what their goal was, and what long-term impacts the episode had. They then evaluated the discussion for goal attainment, future willingness to argue with the other person, and whether the interaction led to a quarrel.

Once participants had completed this portion of the survey, they then saw two argument vignettes: one persuasion or inquiry vignette, and one identity or play vignette. These vignettes were selected randomly from a subset of twenty total vignettes (eight persuasion, four each of inquiry, identity, and play). The vignettes chosen were those that I have been referring as “Set 2” in each of the previous three chapters, and they were chosen because they fared better than the others in eliciting statistically significant manipulations in the pilot process. Participants rated each vignette on its relevant norms, as well as the scales for argument effectiveness, argument pleasantness, argumentative goal attainment, future willingness to argue, and quarrel probability. Finally, once they had completed rating their two vignettes, participants filled out the argumentativeness, verbal aggressiveness, frames, and epistemological orientation scales, as they had in Study 3. These measures were again employed to see if there were other factors that might explain some of the judgments participants made about the vignettes, not just the norms. Recall the multiple regression analyses in Study 3 that compared “norms-only,” “traits-only,” and “norms and traits” models; a similar procedure was used here. All materials are in Appendix D.

Participants

Two hundred and fifty-two participants completed this study. As with the other studies, these participants were recruited from the University of Maryland’s undergraduate communication courses via the SONA research portal, in which they were awarded one hour of research credit for participating in the study. One hundred and twenty-two (48.4%) of participants identified with the male gender, with 125 identifying as female and two as non-binary. The average age of participants was 18.93 years ($SD = 1.20$). Participants again reported a diverse mix of ethnic identities: 100 (39.6%) identified as being of European descent, along with 11.5% Southern Asian, 11.1% African, 9.1% East Asian, 11.9% identifying simply as

“Other,” with the remaining eleven percent mixed between less common ethnic identities. Data collection for Study 4 occurred simultaneously with that of Study 3, and thus also took place during the COVID-19 pandemic (April 2020-May 2021), when the University was primarily functioning online. The extent to which this unusual situation affected the sampling of participants or the context in which they took this or any other online survey is unknown, but it took significantly longer to obtain adequately sized samples for these two studies than it did for the first two. Study 3 accumulated data at slightly more than half the speed of the pilots. Study 4 only accumulated data at half of Study 3’s speed. As with Study 3, it is possible that the circumstances may have affected the study in other ways relative to more normal times.

Materials and Measures

Real-World Episodes

To explain the problematic conversations they had, participants were given four prompts:

- 1) “Please describe a discussion that you had with another person in which you felt you and/or the other person did not act appropriately. Please include as much detail as possible on what happened.”
- 2) “What would you say was the main topic of this discussion?”
- 3) “What was your main goal in this discussion?”
- 4) “Did this discussion have any long-term impacts (change your opinion on the topic being discussed, change your view of the other person, change your relationship with the other person)? If so, please describe them briefly.”

The first prompt was intended to get the participant to describe the episode with helpful detail.

As with the other studies, I refrained from using the word “argument,” given the lay connotations of the term. The second and third prompts were there to ensure that they provided some

information about the context and domain of the argument, in case they did not in the main description, and the final prompt asked about argumentative fallout.

Much of the data gleaned about these episode descriptions was subjected to qualitative coding, the process and measures of which are described below. However, participants also filled out three scales about their episodes: the fourteen-item Argumentative Goal Attainment Scale, the six-item Future Willingness to Argue Scale, and the six-item Quarrel Probability Scale. All three of these measures were developed and piloted in Study 1 and found to be reliable and produce results that indicated validity. The Argumentative Goal Attainment Scale has two subscales: content goal and relational goal (each seven items).

Vignettes

In the vignette portion of the study, the vignettes used were the second set of vignettes from Study 3. As a refresher, they are detailed below in Figure 6.2.

Figure 6.2.

Topics and Implied Relationships in Vignettes, Study 4

<u>Domain</u>	<u>Topic</u>	<u>(Implied) Relationship Between Arguers</u>
Persuasion (Public)	Construction of a new shopping center	
Persuasion (Personal)	Weekend plans	Friends
Inquiry	Buying mother's birthday presents	Siblings
Identity	Volunteering at the library	n/a
Play	Rock bands	n/a

Each set of vignettes again had one “normative” vignette that contained no manipulated violations, whereas the others were designed to have one of the arguers commit one norm violation. All vignettes used were unchanged from Study 3. This particular half of the vignettes was chosen because almost all had been shown to be promising manipulations in Study 1, whereas there were a few vignettes in the other half that had not been effective manipulations in

the piloting process. All of these vignettes also were effective manipulations at $p < .05$ in Study 3, although one was only marginally effective.

Participants rated the vignettes for the relevant norms, as they had in the previous studies: N1 (frame synchronization) for all, N2-N7 for persuasion, N8-N10 for inquiry, N11-N13 for identity, and N14-N16 for play. They also filled out the Argumentative Goal Attainment Scale, Future Willingness to Argue Scale, and Quarrel Probability Scale about each. All scales were again 1-7, strongly disagree to strongly agree, and included some reverse-coded items.

Submitted Episode Coding Process

Coding of the real-world episodes was done by myself and another person, who has a Ph.D. in Communication and is on the Communication faculty at a nearby institution. The other coder is acquainted with contemporary argumentation theory of the sort involved in this project and has significant coding experience. We began by discussing the theory and the codes that needed to be developed: clarifying the norms and how they may manifest in the descriptions. We then collaboratively coded the first twenty-five descriptions provided by the participants, so that we could get a clearer feel for how participants tended to describe episodes and what decisions we could clearly make in our coding. We then coded thirty further descriptions individually and discussed the similarities and differences of our coding choices, which helped to improve reliability between us (it also helped sharpen my own thinking about exactly how the norms manifest—despite this being my theory, we each conceded a similar amount in the norming process). It was at this point, having read and coded 55 of the descriptions for norm violations and each taken notes on the outcomes described by participants, that we settled on a coding schema for these outcomes; this is detailed below (see “Coding Categories”). Encouraged by the reliability we attained, we then independently coded the next one hundred and two descriptions

for both norm violations and outcomes, following which I ran intercoder reliability tests on all of the variables, using Cohen's kappa calculations. These were deemed to be sufficiently reliable (all above kappa = .70; see Table 6.1), so after resolving the conflicts that we had on those episodes, we split the final one hundred descriptions in half and each coded fifty of them.

All materials are in Appendix D, including the coding manual.

Coding Categories

The primary objective of this study was to understand the relationship between norm violation contexts and argumentative outcomes. In coding the argument descriptions provided by the participants, it was thus important to explicate each side of this relationship as much as possible.

First, we had to determine whether a description was actually codable/appropriate for the study or not. A few participants recounted episodes that were not actually conversations, like car accidents or being cut in line, and a few also recounted conversations that contained no arguments and were simply awkward or otherwise off-putting. Still others provided so little detail that it was hard to ascertain anything concrete about the episode (e.g., "I stated my opinion and the other person disagreed."). A large majority (205 of 252, or 81.3%) of the participants did provide a codable episode, however. There were not any well-described arguments in the dataset in which no violations occurred, which bolsters the notion of norm violations as an explanatory framework for problematic arguments. This is a substantial finding of its own. For the 152 episodes we coded together, we mutually agreed whether or not the episode was codable; for the final 100 that we split between us, each of us decided independently if the episode was codable.

For the descriptions that were codable, first we coded the basic context: which domain the argument was in, whether the issue being discussed was public or personal (A. Johnson,

2000), and what the relationship between the arguers was. As arguments, especially problematic ones, can often shift between domains and topics (Hample et al., 2019; Walton, 1998), we coded the *original* domain and topic—i.e., what the conversation was *supposed* to be, before violations may have taken it off course.

We then coded for norm violations. The norm violation codes were all 1 (present) or 0 (absent): we did not attempt to differentiate between strong violations and weak ones, for instance. We coded all of the norm violations that were present in the episode by either party. However, knowing that this would lead to dozens of possible violation permutations, and that we were far from the sample size needed to compare every permutation (e.g., comparing arguments where norms 1, 3, 5, and 6 were violated to ones where norms 2, 3, 5, and 7 were violated), I also wanted some way to be able to put each description in a single category that may allow for a comparison. Thus, an additional category was developed: the *first* violation in the argument, on the notion that it is the first violation that often stimulates further violations by one or both parties. This would allow for two types of analysis: a) comparing arguments that somewhere contained a specific violation with ones that did not (e.g., a “N2 violated” group vs. a “N2 followed” group), and b) comparing all arguments by primary violation.

The dependent variable scales (goal attainment, future willingness to argue, and quarrel probability) provided information about the possible repercussions these problematic arguments had, but we also wanted to note more specific outcomes participants reported these episodes having. We decided on categories after reading through the first 55 descriptions and taking notes on the main outcomes. Ultimately, we settled on six:

- 1) The argument ended the relationship.
- 2) The argument weakened the relationship.

- 3) The argument caused a temporary break in communication (a few days, or longer, but eventually resumed).
- 4) The argument made the person avoid the *domain*, or similar sorts of arguments, with the other person in the future.
- 5) The argument made the person avoid arguing about that *topic* with the person, or in general, in the future.
- 6) The argument made at least one of the participants viewed more negatively than before by the other person.

We did not treat these categories as mutually exclusive. We treated the first one as superseding codes 2-5, but otherwise, it was possible for an argument to receive any combination of the outcome codes. As with the norms, then, these were all simply coded 0 (did not occur) or 1 (did occur). Many of the arguments did not come with any sort of long-term impact, so they received zeroes in all six of these categories. A few other outcomes were reported in the descriptions (leaving a job, distrusting an organization the other person represents, the conflict spreading to people outside of the initial episode), but none applied frequently enough to make for any sort of helpful analytic category.

The intercoder reliabilities for each measure are displayed in Table 6.1.

Table 6.1.
Intercoder Reliabilities, Study 4

<u>Measure</u>	<u>Cohen's Kappa</u>
Domain	.90
Public/Personal	.91
Relationship	.87
First Violation	.81
N1 (Frame synchronization)	.76
N2 (Allowing arguments to be advanced)	.85
N3 (Attack relevance)	.72

N4 (Argumentative support)	.81
N5 (Not claiming victory prematurely)	.73
N6 (Not refusing to accept defeat)	.81
N7 (Appropriate relational priority)	.91
N8 (Not retracting commitments)	.82
N9 (Waiting before persuading)	.75
N10 (Avoiding circularity)	.75
N11 (Identity appropriateness)	.73
N12 (Not contradicting)	.85
N13 (Therapeutic listening)	.75
N14 (Play appropriateness)	.85
N15 (Non-seriousness)	1.00
N16 (Playful response)	1.00
Relationship ending	.89
Relationship weakening	.94
Communicative break	.85
Future avoidance of domain	.90
Future avoidance of topic	.85
Negative change in perception of other arguer	.89

Analysis

Overall, to replicate the Study 1 results, this study again uses the vignettes (albeit only half of those that appeared in the previous studies) to examine relationships between norm violations and perceptions of argument quality, pleasantness, content and relational goal attainment, future willingness to argue, and quarrel probability. As with the previous studies, I used independent-samples *t*-tests to determine differences between normative and non-normative conditions in each of the four domains. Like Study 3, I also employed multiple regressions that incorporated the twelve outside trait variables—the two argumentativeness measures, two verbal aggressiveness measures, seven frame measures, and epistemological orientation—to examine relationships between norms, argumentative traits, and dependent variables (in this case, goal attainment, future willingness to argue, and quarrel probability).

Power varied by domain, since again, there was an unequal number of groups (eight in persuasion, four each in inquiry, identity, and play), and in this case, there was also unequal assignment, since participants saw one persuasion *or* inquiry vignette and one identity *or* play vignette. Power to detect an effect size of $d = 0.30$ was approximately .16 in the persuasion and inquiry domains, and approximately .22 in identity and play. At $d = 0.60$, power rises to approximately .48 in persuasion and inquiry and .66 in identity and play. At $d = 0.90$, it rises to .90 in persuasion and inquiry and .97 in identity and play. At a power of .80, statistical sensitivity is to effect sizes of $d = .88$ in persuasion and inquiry and .72 in identity and play. Thus, the analyses are powered similarly to those of Study 1. Recall that effect sizes in the vignette analyses in Studies 1 and 3 often surpassed 1.0, and were above .80 in a large portion of cases.

The goal attainment variables, future willingness to argue, and quarrel probability were also employed as dependent variables in the analysis of episodes provided by the participants. The other dependent variables in that set of analyses were the outcomes we coded: the relationship ending as a result of the argument, the relationship weakening as a result of the argument, the argument causing a break in communication, avoidance of the particular domain with the other person in the future, avoidance of the topic with the other person in the future, and the argument changing the perception of the other person for the worse. Since 205 people supplied codable argument descriptions, the power of these tests was higher than for the vignette analyses. For an effect size of .30, the power ranged from .76 to .96, and for an effect size of .60, power was essentially 1.

There are several different levels of examination that were conducted on these different outcomes in the analysis of the descriptions. I tested differences between domains, differences between public and personal contexts, and differences between relationship types. I also tested

differences between first violation groups in each domain. Finally, I tested differences between arguments “with/without” specific norm violations, e.g., comparing all persuasion arguments with N2 violations to all persuasion arguments that avoided N2 violations.

Tests on the ordinal dependent variables (goal attainment, future willingness to argue, and quarrel probability) were done with one-way ANOVA tests in the cases of more than two groups (e.g., domains, relationship types, first violation) and independent-samples *t*-tests in the cases of two groups (e.g., public vs. personal, N2 violated vs. N2 not violated). Tests on the binary dependent variables (the particular coded outcomes) were mostly done with Fisher-Freeman-Halton Exact Tests, though in one case a chi-square analysis was employed. I have already addressed issues regarding experiment-wise error rates in Chapter 3, and will do so again in Chapter 7.

Results

As this study employs two distinctly different methodologies, the results section is split into two sections. The first will cover the vignette analyses, which replicate the testing in Study 1 and give further clarity regarding the ten hypotheses of the project. The second portion will cover the testing that was done on the episodes described by participants. That portion provides a second angle on the third group of hypotheses (H7-H10, which concern the relational focus of identity and play and the content focus of persuasion and inquiry) and allows for clearer exploration of the research question, which asks if there are notable differences between magnitudes and/or types of effects elicited by different norm violations (e.g., N3 violations being felt more strongly than N12 violations, N15 violations dramatically lowering future willingness to argue but not changing the likelihood of escalation). The first section thus seeks to replicate and clarify what we have found in the earlier studies, while the second is more exploratory.

In the first section, I will proceed through the analysis in a similar manner as in Chapter 5. After discussing descriptive statistics, I will proceed through the domains in the same order as other chapters—persuasion, then inquiry, then identity, then play—examining the results in each. Within each domain, we will first examine the correlations between the variables, then proceed to examine the *t*-tests comparing the normative and violation conditions on each of the norms and dependent variables, allowing for hypothesis conclusions to be drawn. Finally, we will proceed to examine multiple regressions comparing “norms-only,” “traits-only,” and “norms and traits” models in their proportions of variance explained in content goal attainment, relational goal attainment, future willingness to argue, and quarrel probability.

Vignette Data

Descriptive Statistics

This study employed twenty-two novel scales developed for this project: the sixteen norm subscales, argument quality, pleasantness, content goal attainment, relational goal attainment, future willingness to argue, and quarrel probability. In previous studies in the project, each of these has attained statistical reliability in some form. Reliabilities in this dataset are displayed in Table 6.2. Note that this does *not* include the ratings of the goal attainment scales, future willingness to argue, and quarrel probability participants filled out about *their own argumentative episodes*; those are presented later in this chapter (Table 6.19).

Table 6.2.
Cronbach’s alpha reliabilities for novel measures, Study 4 (Vignette Portion)

<u>Measure</u>	<u># Items</u>	<u>Alpha</u>
<i>Global Scales (displayed with every vignette; each participant rates twice)</i>		
N1 (frame synchronization)	6	.78
Argument quality	5	.80
Pleasantness	8	.92
Content goal attainment	7	.79

Relational goal attainment	7	.86
Future willingness to argue	6	.85
Quarrel probability	6	.86
<i>Norm-specific scales (each participant rates once)</i>		
N2 (allowing the opponent to argue)	6	.82
N3 (responding on topic)	8	.84
N4 (argumentative defense)	5 ^a	.72
N5 (not claiming victory prematurely)	11	.84
N6 (retracting when proven wrong)	6	.76
N7 (reasonable relational priority)	6	.81
N8 (not going back on commitments)	5 ^b	.81
N9 (not taking a position too early)	11	.72
N10 (avoiding circularity)	6	.81
N11 (non-negative identity projection)	6	.86
N12 (not contracting/condemning identity)	6	.86
N13 (therapeutic listening)	6	.87
N14 (dyadically appropriate play)	6	.80
N15 (non-seriousness)	8 ^c	.79
N16 (playful response)	10	.79

^aOriginally six items at .62; the fifth item was deleted to get this result.

^bOriginally nine items at .70; stepwise deletion yielded an optimal scale of five items.

^cOriginally ten items at .73, but more reliable in eight-item form (same eight items as Study 3, with the first and seventh items deleted).

Most of the measures in the vignette portion of the study retained their strong reliability ratings from the previous studies. The scales that participants saw twice (N1 and the outcome variables) were all quite reliable, all attaining alpha levels above .75. Three of the norm scales, N5, N8, and N15 were trimmed to smaller versions to optimize their reliability, but only one was short of the .70 threshold in its original form.

In addition, Table 6.3 displays the reliabilities, means and standard deviations of the established trait scales, which will be used in the multiple regression frameworks in each domain.

Table 6.3.

Descriptive Statistics of Trait Variables, Study 4

<u>Scale</u>	<u>Alpha</u>	<u>M</u>	<u>SD</u>
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Argumentativeness (approach)	.84	4.34	0.99
Argumentativeness (avoid)	.84	4.38	1.01
Verbal Agg. (prosocial)	.82	4.84	0.93
Verbal Agg. (antisocial)	.84	3.49	1.05
Utility	.72	4.17	0.69
Identity	.75	4.49	0.90
Play	.81	3.95	1.37
Dominance	.80	3.56	1.17
Cooperation	.78	4.97	0.88
Civility	.76	4.62	0.85
Blurting	.76	3.90	0.68
Epistemological orientation	.78	4.35	0.63

Note. $N = 252$ for all variables.

In terms of these traits, the sample was very similar to that of Study 3: none of these means differed by more than 0.2 from the Study 3 means.

Persuasion

One hundred and sixty-six participants saw and rated one of the eight persuasion vignettes. Table 6.4 displays the correlations among the variables within the persuasion dataset.

Table 6.4.
Correlations Among Persuasion Variables, Study 4

Measure	<u>N1</u>	<u>N2</u>	<u>N3</u>	<u>N4</u>	<u>N5</u>	<u>N6</u>	<u>N7</u>	<u>Eff.</u>	<u>Pleas.</u>	<u>CG</u>	<u>RG</u>	<u>FWTA</u>	<u>QP</u>
N1	1												
N2	.63	1											
N3	.47	.53	1										
N4	.45	.47	.70	1									
N5	.36	.57	.40	.40	1								
N6	.45	.52	.41	.45	.63	1							
N7	.49	.58	.66	.60	.60	.56	1						
Arg. Quality	.28	.32	.53	.59	.51	.50	.57	1					
Pleasantness	.62	.58	.51	.47	.56	.62	.64	.52	1				
Cont. Goal	.40	.39	.31	.29	.29	.34	.41	.36	.55	1			
Rel. Goal	.43	.51	.36	.35	.40	.38	.50	.36	.55	.60	1		
Future Will. to Argue	.26	.43	.33	.29	.38	.32	.45	.30	.35	.42	.70	1	
Quarrel Prob.	-.51	-.54	-.43	-.42	-.49	-.52	-.61	-.41	-.62	-.39	-.50	-.43	1

Notes. $N = 166$. All correlations significant at $p < .001$. N1 refers to frame synchronization, N2 to allowing the other person to argue, N3 to

replying to the actual argument advanced by the other person, N4 to defending standpoints with argumentation, N5 to avoiding premature claims of victory, N6 to being willing to concede if disproven, and N7 to displaying reasonable relational priorities.

The correlations in this area, as with Studies 1 and 3, are fairly strong. In particular, the norm subscales almost always correlate with each other at $r > .40$. In the previous studies, we have seen that perceptual reach in the persuasion domain is quite strong: when the vignette operationalizes a single violation, participants tend to perceive the violating arguer as violating most or all of the six persuasion norms, plus the frame synchronization norm. As we saw in Study 1, the outcome scales also all correlate with each other fairly strongly, though in this particular domain the outcome correlations are not much different in size from the norm correlations.

Next, we move to the t -tests comparing the violation conditions to the normative ones on each norm subscale and dependent variable. These are shown in Table 6.5. Manipulation checks appear in bold.

Table 6.5.
Persuasion Norm and Outcome Perceptions, Study 4

Condition		<u>N1</u>	<u>N2</u>	<u>N3</u>	<u>N4</u>	<u>N5</u>	<u>N6</u>	<u>N7</u>	<u>Quality</u>	<u>Pleas.</u>	<u>Cont.</u> <u>Goal</u>	<u>Rel.</u> <u>Goal</u>	<u>FWTA</u>	<u>QP</u>
Pub. Norm.	<i>M</i>	4.36	5.01	5.12	4.11	4.28	4.07	4.82	3.82	3.94	4.28	4.38	4.38	2.94
	<i>SD</i>	1.24	1.08	1.10	1.20	0.76	0.81	1.13	1.42	1.32	0.73	0.68	0.71	1.36
N2 Vio.	<i>M</i>	2.47	2.14	4.10	3.38	2.77	2.55	3.39	3.05	2.44	2.99	2.87	3.19	4.77
(not	<i>SD</i>	0.70	0.76	0.85	0.82	0.88	0.86	1.21	1.02	1.11	1.17	0.98	1.10	0.91
allowing	<i>t</i>	6.52***	10.76***	3.63	2.47*	6.42***	6.37***	4.27***	2.18*	4.33***	4.66***	6.25***	4.47***	-5.52***
opponent	<i>df</i>	36.05	47	43.38	40.32	47	47	47	47	47	40.59	47	47	39.90
to argue)	<i>d</i>	1.88	3.07	1.04	0.71	1.83	1.82	1.22	0.62	1.24	1.32	1.79	1.28	-1.59
N3 Vio.	<i>M</i>	2.61	3.04	2.85	2.89	3.56	2.77	3.35	2.41	2.16	2.74	2.97	3.19	4.40
(off-topic	<i>SD</i>	0.89	0.70	0.95	0.82	0.75	1.10	0.96	0.96	1.03	0.92	0.97	0.81	0.98
rebuttal)	<i>t</i>	4.64***	6.81***	6.45***	3.72***	2.82**	4.18***	4.09**	3.29**	4.32***	5.68***	4.82***	4.76***	-3.51***
	<i>df</i>	36	35.47	36	35.02	36	36	36	36	36	36	20.56	36	36
	<i>d</i>	1.56	2.05	2.17	1.13	0.95	1.40	1.38	1.11	1.45	1.91	1.78	1.60	-1.18
N4 Vio.	<i>M</i>	2.88	3.55	3.47	3.19	2.99	2.88	3.47	2.67	2.68	4.64	4.66	4.75	4.31
(non-arg.	<i>SD</i>	0.66	0.77	0.83	0.82	0.77	0.93	0.76	1.10	0.93	1.16	0.81	1.16	0.89
defense)	<i>t</i>	5.06***	5.22***	5.68***	3.01**	5.56***	4.57***	4.55***	2.95**	3.60***	-1.27	-1.22	-1.23	-4.00***
	<i>df</i>	36.18	41.07	41.61	40.54	42	42	42	42	42	42	42	30.34	39.93
	<i>d</i>	1.45	1.53	1.67	0.88	1.68	1.38	1.38	0.89	1.09	-0.39	-0.37	-0.39	-1.17
N5 Vio.	<i>M</i>	3.30	4.16	4.51	3.50	3.80	3.20**	4.57	3.61	3.63	3.85	4.01	4.09	3.50
(premature	<i>SD</i>	0.71	1.00	1.13	1.06	0.92	1.13	1.12	1.26	1.24	0.93	0.69	0.94	1.36
claim of	<i>t</i>	3.59***	2.77**	1.84	1.81	1.92	3.01	0.74	0.52	0.81	1.74	1.83	1.20	-1.39
victory)	<i>df</i>	37.20	44	44	44	44	44	44	44	44	44	44	44	44
	<i>d</i>	1.04	0.82	0.54	0.53	0.57	0.89	0.22	0.15	0.24	0.51	0.54	0.35	-0.41
N6 Vio.	<i>M</i>	2.81	3.38	3.97	2.86	3.01	2.89	3.51	2.77	2.46	3.10	3.27	3.53	4.61
(failure to	<i>SD</i>	0.43	0.77	0.91	0.84	0.91	0.98	0.68	1.34	0.97	1.06	0.84	0.73	1.23
retract)	<i>t</i>	5.58***	4.94***	3.30**	3.41**	4.62***	4.00***	4.45***	2.24*	3.64***	4.08***	4.49***	3.54***	-3.77***
	<i>df</i>	31.21	36	36	36	36	36	35.93	36	36	36	36	36	36
	<i>d</i>	1.52	1.66	1.11	1.15	1.55	1.35	1.32	0.75	1.22	1.37	1.51	1.19	-1.27
Pers. Norm.	<i>M</i>	3.45	4.60	4.66	4.32	4.00	3.49	4.42	3.86	3.03	3.47	3.76	4.14	3.87
	<i>SD</i>	0.71	0.84	0.93	1.09	0.93	0.95	0.87	1.27	1.09	1.06	0.83	1.01	1.30
N7 Vio.	<i>M</i>	3.04	3.74	4.06	3.55	3.17	3.17	3.64	3.31	2.44	3.04	3.34	3.93	4.48
(unreas.	<i>SD</i>	0.61	1.17	1.12	1.17	1.14	0.74	0.97	1.19	0.88	0.93	1.36	1.05	1.08
relational	<i>t</i>	2.11*	2.90**	2.00	2.33*	2.76**	1.24	2.89**	1.52	2.03*	1.43	1.27	0.69	-1.72
priority)	<i>df</i>	45	45	45	45	45	45	45	45	45	44	44	45	45
	<i>d</i>	0.62	0.85	0.58	0.68	0.81	0.36	0.84	0.44	0.59	0.42	0.38	0.20	-0.50

Notes. $N = 166$. N2-N6 violation conditions each compared to public normative condition. N7 violation condition compared to personal normative condition. FWTA refers to future willingness to argue. QP refers to quarrel probability.

* $p < .05$

** $p < .01$

*** $p < .001$

Three of the norm violation conditions were associated with more negative perceptions of argumentative outcomes across the board, thus supporting H1-H6 completely. These three violations were N2 (not allowing the other arguer to advance arguments), N3 (off-topic rebuttal), and N6 (refusal to retract after a failed defense). These three violations were associated with lowered perceptions of frame synchronization, argument quality, pleasantness, content and relational goal attainment, future willingness to argue, and quarrel probability. Effect sizes ranged from 0.66 to 1.52, and most were between 0.8 and 1.2.

However, the other norms deviated from this trend notably. First, the N5 violation condition (prematurely claiming victory) was not a particularly successful manipulation ($p = .06$, $d = 0.57$), nor did it show significant associations with most of the dependent variables. Second, though the N4 violation (non-argumentative defense) was felt ($d = 0.88$), that condition only differed from the normative one on quarrel probability (among the four novel dependent variables here; its effect on argument quality and pleasantness replicated the findings from Study 3). Finally, the N7 manipulation condition (inappropriate relational priority) differed from the personal normative condition only on pleasantness. Interestingly, all three of these cases still supported H3: they were associated with lower frame synchronization. The negative results in these three cases often contradict those in previous studies, leaving us with a somewhat mixed picture on exactly which effects result from violations of these three particular norms. In Chapter 7, I will present full visualizations of which tests succeeded and failed on each norm violation across the three hypothesis-testing studies.

H10 predicted that when frames were perceived to be out of sync, persuasion arguments would be more impacted on the relational level than the content level. But there was no notable pattern on the level of the argument that was more impacted by violations: in fact, the d measures show that content goal attainment and relational goal attainment perceptions hewed quite tightly to each other (and the future willingness to argue variable) throughout the conditions. In general, the effects that were felt seem to spread equally across goal attainment, future willingness to argue, and quarrel probability, with the notable exception being the N4 violation condition only being associated with a higher quarrel probability (and fairly strongly). We also continue to see quite strong perceptual reach in the persuasion domain, with most of the violation conditions affecting all six persuasion norm perceptions.

We next move on to the multiple regression analyses that incorporate the twelve traits. Table 6.6 displays the results of multiple regressions on content goal attainment, relational goal attainment, future willingness to argue, and quarrel probability.

Table 6.6.
Norm-Based and Trait-Based Persuasion Multiple Regressions, Study 4

Content Goal Attainment								
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.20***		Model Adj. R^2	.07*		Model Adj. R^2	.21***	
F	6.95		F	2.00		F	3.40	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N2	.19*	2.07	VA-antisocial	.36*	2.50	Arg-approach	-.27*	-2.05
N7	.26*	2.21	Epistemology	-.58**	-3.25	VA-antisocial	.32*	2.35
						Epistemology	-.53**	-3.19
						N2	.22*	2.43
						N7	.27*	2.24
Relational Goal Attainment								
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.30***		Model Adj. R^2	.03		Model Adj. R^2	.30***	
F	12.73		F	1.44		F	4.83	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N2	.28***	3.66	Epistemology	-.39*	-2.30	Epistemology	-.32*	-2.14
N7	.28*	2.81				N2	.31***	3.83
						N7	.29**	2.73

Future Willingness to Argue								
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.23***		Model Adj. R^2	.05		Model Adj. R^2	.23***	
F	8.99		F	1.71		F	3.69	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N2	.19*	2.46	Dominance	-.30*	-2.54	VA-prosocial	.27*	2.01
N7	.26*	2.53				N2	.19*	2.35
						N7	.30**	2.68
Quarrel Probability								
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.43***		Model Adj. R^2	.04		Model Adj. R^2	.46***	
F	21.81		F	1.61		F	8.68	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N2	-.22**	-2.69	Blurting	.44*	2.30	Blurting	.30*	2.10
N6	-.22*	-2.19				N2	-.23**	-2.78
N7	-.42***	-3.91				N6	-.27*	-2.49
						N7	-.42***	-3.78

Note. Norms-only models conducted with df (6,159), traits-only (12,149), and norms and traits (18,143).

* $p < .05$

** $p < .01$

*** $p < .001$

Several patterns jump out here. The most obvious is that these regressions indicate that perceptual judgments of persuasion argument outcomes are usually very efficiently predicted by a two-norm approach: N2 (letting the other person advance arguments) and N7 (reasonable relational priorities). This is especially notable for two reasons. First, N7 is the novel contribution the Theory of Argumentative Norms makes in the persuasion domain (particularly compared to Walton's (1998) distillation of the pragmadialectical rules), and it often has the most important predictive impact on these judgments. Second, N7's effects exist in spite of its manipulation showing null results on each of these four outcomes (see Table 6.5). Participants' perceptions seem to (usually) reduce to this judgment of whether a person allowed the other person to argue and showed them appropriate relational consideration. This contrasted with the multiple regressions from Study 3 on argument quality, pleasantness, and frame synchronization, which found that these immediate judgments were best predicted by most or all of the persuasion

norms together. It seems that in moving from these immediate judgments (H1-H3) to outcome judgments (H4-H6), the salient factors condense somewhat. The high perceptual reach of persuasion violations may contribute to the collapsibility of norm judgments into these categories.

Relative to what we often observed in Chapter 5 (i.e., R^2 often exceeding .50), these models had relatively poor predictive power on argumentative outcomes, but this appears to be a particular feature of this domain. As will soon be evident in the rest of the results, the norms here had lower correlations with the outcomes here than in the other three domains, and the multiple regression framework only explained about half of the variance in outcomes relative to the other domains. This is especially striking since there are *more* norms here than any other domain, and they each tend to offer somewhat more specific guidance on argumentative behavior than do the norms in the other domains.

As in the models in Chapter 5, the traits here were generally not of much assistance in raising this predictive power, and this is another noteworthy pattern in the results. More epistemologically sophisticated individuals had lower goal evaluations on both levels; they also had lower evaluations of argument quality and pleasantness in the Study 3 models, though in those cases neither was significant in the “norms and traits” models. There does seem to be a general trend toward persuasion arguments being seen in less positive lights by those who are more epistemologically savvy.

In sum, the findings here are generally supportive of the hypotheses with several of the norms. They are less so with N5, which is hamstrung by its marginal manipulation, and N4, which comes as a surprise given previous data. The collapse into the two-factor N2/N7 models in predicting argumentative outcomes is of additional interest, and merits further study.

Inquiry

On account of the design of the study (each participant saw one of the eight persuasion vignettes *or* one of the four inquiry vignettes, then one of the four identity vignettes *or* one of the four play vignettes), the inquiry domain accumulated the smallest sample. Eighty-six participants saw and rated one of the four inquiry vignettes. Table 6.7 displays the correlations among the variables within the inquiry dataset.

Table 6.7.
Correlations Among Inquiry Variables, Study 4

Measure	<u>N1</u>	<u>N8</u>	<u>N9</u>	<u>N10</u>	<u>Quality</u>	<u>Pleas.</u>	<u>CG</u>	<u>RG</u>	<u>FWTA</u>	<u>QP</u>
N1 (frame sync)	1									
N8 (commit. maintenance)	.55***	1								
N9 (not taking position early)	.14	-.08	1							
N10 (avd. circularity)	.63***	.58***	-.08	1						
Argument Quality	.42***	.52***	-.16	.71***	1					
Pleasantness	.76***	.60***	.01	.74***	.60***	1				
Cont. Goal	.64***	.64***	.03	.71***	.59***	.70***	1			
Rel. Goal	.66***	.65***	.00	.69***	.47***	.80***	.66***	1		
Future Willingness to Argue	.68***	.65***	-.09	.69***	.56***	.77***	.69***	.80***	1	
Quarrel Prob.	-.65***	-.49***	-.07	-.53***	-.36***	-.71***	-.50***	-.74***	-.74***	1

Note. $N = 86$.

*** $p < .001$

We see a strong set of correlations among the dependent variables here, in particular. The relationships among pleasantness, relational goal attainment, and future willingness to argue are especially strong, usually $|.70|$ or more. The norm perceptions also show strong relationships, with the clear exception of N9 (taking a position too early), which does not have statistically significant correlations with any other variables, similar to what was shown in Study 3.

Perceptions of frame synchronization (N1) and argument circularity (N10) seem to have stronger relationships with the dependent variables than does commitment retraction (N8), but even this exceeds $r = .60$ in most cases. The correlation table indicates that all norms except N9 are heavily intertwined with the dependent variables of interest.

Let us next examine the results of the t -tests, shown in Table 6.8.

Table 6.8.
Inquiry Norm and Outcome Perceptions, Study 4

Condition		N1	N8	N9	N10	Quality	Pleas.	Content			
								Goal	Rel. Goal	FWTA	QP
Normative	<i>M</i>	5.58	5.25	4.90	4.90	4.59	5.53	5.03	5.43	5.60	2.01
	<i>SD</i>	0.99	1.20	0.85	1.00	1.39	1.47	1.36	0.98	1.29	0.91
N8 Vio. (commitment retraction)	<i>M</i>	3.67	3.47	4.54	2.97	3.30	3.35	3.14	3.69	3.93	3.59
	<i>SD</i>	0.90	1.19	0.83	0.97	1.13	1.19	1.19	0.63	0.91	1.18
	<i>t</i>	6.88***	5.07***	1.46	6.64***	3.47***	5.53***	4.97***	7.17***	5.05***	-4.95***
	<i>df</i>	44	44	44	44	44	44	43	43	43	43
	<i>d</i>	2.03	1.50	0.43	1.96	1.02	1.63	1.49	2.14	1.51	-1.48
N9 Vio. (taking a position too early)	<i>M</i>	3.79	4.53	3.72	4.11	4.59	3.67	3.83	4.28	4.69	3.20
	<i>SD</i>	0.74	1.06	0.80	0.82	1.16	1.14	0.67	0.76	0.88	1.09
	<i>t</i>	6.82***	2.13*	4.76***	2.87**	0.00	4.69***	3.64***	4.31***	2.69***	-3.87***
	<i>df</i>	42	42	42	42	42	42	28.90	41	41	41
	<i>d</i>	2.06	0.64	1.43	0.87	0.00	1.42	1.13	1.32	0.82	-1.18
N10 Vio (circular argument)	<i>M</i>	4.27	4.42	4.62	3.86	3.83	3.71	4.18	3.98	4.16	3.46
	<i>SD</i>	1.02	1.01	0.75	0.93	0.95	1.05	0.62	0.78	0.98	1.11
	<i>t</i>	4.11***	2.34*	1.10	3.39**	1.97	4.41***	2.58*	5.07***	3.85***	-4.47***
	<i>df</i>	38	38	38	38	38	38	28.94	37	37	37
	<i>d</i>	1.31	0.74	0.35	1.08	0.63	1.40	0.79	1.63	1.24	-1.44

* $p < .05$

** $p < .01$

*** $p < .001$

Like they did in previous studies, all three vignettes passed their manipulation checks, with all the *d* results higher than 1.0. Further, each violation condition was associated with worse levels of each dependent variable when compared to the normative condition, with the exception of the N9 violation condition (premature adoption of a position) showing no difference from the normative condition on argument quality. Each violation condition was associated with lowered perceived goal attainment on both the content and relational levels, lower willingness to argue with the violator in the future, and a higher likelihood of the interaction leading to a quarrel. The *d* values were generally quite strong, ranging from around .6 to over 2.0; most clustered in the 1.0-1.5 area. Thus, H1-H6 all receive support for the inquiry domain, with the exception of H1 (violation conditions being associated with argument quality reductions) being unsupported with respect to N9, a finding that replicates the null result in Study 3.

H10 predicted that inquiry violations would be more prone to content damage than relational damage. This was not true in any of the three violation conditions—the *d* values for relational goal attainment were actually higher than those for content goal attainment in all three conditions. When these vignettes were originally tested in Study 1, this was not the case (*ds* for

content goal attainment exceeded those for relational goal attainment in the N8 and N10 violation conditions), but there is overall little support for H10 in the inquiry domain.

Next, let us consider the perceptual picture shown by the multiple regression framework.

Table 6.9 displays the multiple regression results in the inquiry domain.

Table 6.9.
Norm-Based and Trait-Based Inquiry Multiple Regressions, Study 4

Content Goal Attainment								
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.58***		Model Adj. R^2	.04		Model Adj. R^2	.61***	
F	40.12		F	1.31		F	9.60	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N8	.34***	4.09	VA-antisocial	.43*	2.28	VA-antisocial	.26*	2.07
N10	.55***	6.01	Blurting	-.55*	-2.09	N8	.27**	3.04
						N10	.57***	6.14
Relational Goal Attainment								
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.56***		Model Adj. R^2	-.04		Model Adj. R^2	.56***	
F	36.62		F	.77		F	7.81	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N8	.30***	4.28	none			N8	.26**	3.24
N10	.42***	5.41				N10	.47***	5.60
Future Willingness to Argue								
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.56***		Model Adj. R^2	.02		Model Adj. R^2	.59***	
F	36.07		F	1.12		F	8.83	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N8	.34***	4.15	Utility	-.62*	-2.24	N8	.24**	2.71
N10	.49***	5.38				N10	.57***	6.25
Quarrel Probability								
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.33***		Model Adj. R^2	.07		Model Adj. R^2	.41***	
F	14.56		F	1.54		F	4.81	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N8	-.28**	-2.63	Dominance	.31*	2.06	VA-prosocial	-.54**	-2.76
N10	-.40***	-3.43				Dominance	.26*	2.10
						Blurting	-.52*	-2.40
						N10	-.53***	-4.57

Note. Norms-only models conducted with $df(3,81)$, traits-only (12,70), and norms and traits (15,67).

* $p < .05$

** $p < .01$

*** $p < .001$

Like the multiple regressions on frame synchronization, argument quality, and pleasantness in Study 3, we see the dependent variables here explained primarily by two norm factors, in particular N10. The caveats noted in Chapter 5 about the N10 measure's construct validity—being significantly more general than just “argument circularity”—still apply. However, notably the *other* norm that proves to be a helpful predictor here is commitment preservation (N8), not waiting to take a position (N9). N8 and N9 are essentially uncorrelated (Table 6.7), so neither can be functioning as a proxy for the other. This supports the notion that N8 judgments do play some sort of a role in argumentative outcomes. N9 judgments do not seem to; recall their pattern of near-zero correlations in Table 6.7. This a particularly interesting feature in light of the fact that the N9 manipulations have been unambiguously successful in almost all of the hypothesis tests in this project. It may be that this itemization is somewhat attributable to the lack of perceptual reach with this norm—the N8 and N10 violation conditions were not associated with any reductions in perceptions of N9, so the only condition where there was a substantive perceptual deviation in N9 was the one where it was directly manipulated.

Interestingly, the inquiry norms explain the four outcome variables in an inverse pattern to persuasion. Whereas the persuasion norms explained quarrel probability perceptions significantly more than they explained goal attainment perceptions or future willingness to argue, here it is quarrel probability that is least predicted by the inquiry norms. This may be because inquiries are seen as less prone to escalation and thus exhibit less marked deviations in this variable than do persuasion arguments.

The trait variables again do a poor job of predicting these outcomes, with none of the four traits-only models attaining statistical significance. What little variance they do explain does seem to be separate from that of the norms; the norms-and-traits models of both content goal

attainment and quarrel probability yield adjusted R^2 values that are similar to the sums of variance explained by both of the other two models.

Identity

As the design split participants between identity and play, 127 participants saw and rated one of the four identity vignettes. Table 6.10 displays the correlations among the variables within the identity dataset.

Table 6.10.
Correlations Among Identity Variables, Study 4

Measure	N1	N11	N12	N13	Quality	Pleas.	CG	RG	FWTA	QP
N1 (frame sync)	1									
N11 (approp. identity)	.06	1								
N12 (avd. identity contrad.)	.49***	.24**	1							
N13 (therapeutic listening)	.63***	-.07	.41***	1						
Argument Quality	.41***	-.02	.52***	.38***	1					
Pleasantness	.72***	.04	.59***	.70***	.63***	1				
Cont. Goal	.62***	-.03	.43***	.61***	.67***	.71***	1			
Rel. Goal	.70***	.20*	.65***	.60***	.58***	.84***	.69***	1		
Future Willingness to Argue	.64***	.16	.54***	.61***	.49***	.79***	.58***	.81***	1	
Quarrel Prob.	-.52***	-.35***	-.58***	-.40***	-.33***	-.55***	-.36***	-.61***	-.61***	1

* $p < .05$

** $p < .01$

*** $p < .001$

As they have throughout the project in the identity domain, the dependent variables exhibit quite strong relationships. Especially of note is the very strong relationship between pleasantness, relational goal attainment, and future willingness to argue, with r values of about .80. N1 (perceived frame synchronization), N12 (not contradicting or condemning the expressed identity), and N13 (therapeutic listening) also display strong correlations with each of the dependent variables. Notably, N11 (identity non-negativity) does not, only showing a strongly significant correlation with perceived quarrel probability. As noted in previous chapters, the bifurcated nature of the identity norms (N11 applies to identity argument *production*, while N12 and N13 apply to *reception*) may well explain why N11 doesn't tend to track with the rest of the norms.

Next, we turn to the *t*-test results. These vignettes produced results that conformed to the hypotheses in Studies 1 and 3. Table 6.11 presents the *t*-test results.

Table 6.11.
Identity Norms and Outcomes, Study 4

Condition		N1	N11	N12	N13	Quality	Pleas.	CG	RG	FWTA	QP
Normative	<i>M</i>	5.25	5.67	5.46	5.41	5.04	5.44	5.12	5.47	5.17	2.61
	<i>SD</i>	1.12	1.24	1.19	1.19	1.15	1.39	0.87	1.10	1.14	1.11
N11 Vio. (negative identity)	<i>M</i>	4.60	4.74	4.30	5.18	4.00	4.33	4.15	4.03	4.56	2.87
	<i>SD</i>	1.00	1.03	1.09	0.99	1.06	0.91	0.87	0.88	1.29	1.18
	<i>t</i>	2.36*	3.15**	3.92***	0.82	3.67***	3.62***	4.28***	5.52***	1.91	-0.84
	<i>df</i>	58	58	58	58	58	45.39	57	51.73	57	57
N12 Vio. (identity contradict)	<i>d</i>	0.61	0.81	1.01	0.21	0.95	0.96	1.11	1.46	0.50	-0.22
	<i>M</i>	4.21	6.13	3.95	4.46	3.30	3.73	3.58	4.21	4.33	3.08
	<i>SD</i>	1.09	0.95	1.46	1.16	1.22	1.36	0.96	1.23	1.34	1.10
	<i>t</i>	3.64***	-1.59	4.35***	3.14**	5.65***	4.80***	6.46***	4.17***	2.59*	-1.62
N13 Vio (disaffected listening)	<i>df</i>	58	50.03	58	58	58	58	58	58	58	58
	<i>d</i>	0.94	-0.42	1.13	0.81	1.46	1.24	1.67	1.08	0.67	-0.42
	<i>M</i>	3.50	6.03	4.39	2.87	3.57	2.98	3.15	3.43	3.38	3.25
	<i>SD</i>	1.21	0.84	1.08	1.06	1.18	1.53	1.06	1.14	1.18	0.97
	<i>t</i>	5.90***	-1.32	3.72***	8.95***	4.99***	6.63***	7.91***	7.17***	6.06***	-2.42*
	<i>df</i>	61	45.62	61	61	61	61	61	61	61	61
	<i>d</i>	1.50	-0.35	0.94	2.27	1.27	1.68	2.01	1.82	1.54	-0.61

**p* < .05

***p* < .01

****p* < .001

In addition to replicating the Study 3 results with respect to argument quality, pleasantness, and frame synchronization, these results are largely positive for H4-H6. All three violation conditions were associated with lower attainment of goals on both the content and relational levels, with effect sizes greater than 1.0. There was, however, no significant difference in which goal was *more* impacted, in general (average content goal *d* 1.60; average relational goal *d* 1.46; *z* = 0.69; *p* = .54), which again fails to support H10. The N12 and N13 violation conditions were associated with lowered future willingness to argue with the violating arguer, whereas the N11 violation condition did not quite achieve statistical significance in this area. Only the N13 violation condition was shown to have a statistically significant effect on the perceived likelihood the argument would turn into a quarrel (*d* = -.61; others -.22 and -.42), however. Therefore, H5 is mostly supported and H6 only receives support with respect to N13. In Study 1, all three of these vignettes did show statistically significant differences from the normative

condition in future willingness to argue and quarrel probability, thus leaving us with a mixed-to-positive picture overall.

Now that we have examined results in the persuasion, inquiry, and identity domains, we can also begin to evaluate H7-H9, which predicted that persuasion and inquiry arguments would suffer more content goal damage than identity and play arguments when violations are committed, but that future willingness to argue and quarrel probability would be more affected by violations in identity and play than persuasion or inquiry. In fact, we see here that the effect sizes on content goal attainment in the identity domain (average 1.60) are similar or greater than most of those in persuasion (average 0.86) or inquiry (average 1.14), while future willingness to argue and quarrel probability have significantly weaker effect sizes (average .90 and -.42) than in some of the persuasion and inquiry violation conditions (overall averages of .71 and -1.02 in persuasion and 1.19 and -1.37 in inquiry). Thus far, these hypotheses are unsupported.

In looking purely at the manipulation conditions, it seems that the N13 violation was associated with the worst argumentative outcomes, in that it was the only condition with a significant effect on perceived quarrel probability and had the largest effect sizes on both relational goal attainment (1.82, relative to 1.46 and 1.23) and future willingness to argue (1.54, relative to 0.50 and 1.18) by a notable margin. However, the N13 violation was also felt the strongest in the first place.

Multiple regression analysis can help us tease out how perceptions of each norm violation affect perceptions of outcomes in identity arguments. The multiple regression results are shown in Table 6.12.

Table 6.12.
Norm-Based and Trait-Based Identity Multiple Regressions, Study 4

Norms-Only	<u>Content Goal Attainment</u> Traits-Only	Norms and Traits
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Model Adj. R^2	.39***		Model Adj. R^2	.01		Model Adj. R^2	.44***	
F	28.06		F	1.10		F	7.42	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N12	.21**	2.94	Arg-approach	.33*	1.99	N12	.24**	3.22
N13	.40***	6.52				N13	.42***	6.14

Relational Goal Attainment

Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.56***		Model Adj. R^2	.00		Model Adj. R^2	.58***	
F	52.89		F	.99		F	12.16	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N11	.15*	2.02	none			Identity	-.25*	-2.10
N12	.44***	6.49				N11	.23**	2.69
N13	.38***	6.42				N12	.42***	5.89
						N13	.42***	6.56

Future Willingness to Argue

Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.48***		Model Adj. R^2	.02		Model Adj. R^2	.50***	
F	39.62		F	1.18		F	9.25	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N12	.32***	4.18	none			Identity	-.39**	-2.80
N13	.47***	6.95				N11	.25*	2.52
						N12	.26**	3.08
						N13	.54***	7.28

Quarrel Probability

Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.42***		Model Adj. R^2	.16**		Model Adj. R^2	.45***	
F	31.17		F	2.95		F	7.73	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N11	-.27***	-3.84	Blurting	-.47*	-2.40	N11	-.20*	-2.48
N12	-.34***	-5.28				N12	-.29***	-4.26
N13	-.19***	-3.33				N13	-.20**	-3.28

Note. Norms-only models conducted with df (3,122), traits-only (12,110), and norms and traits (15,107).

* $p < .05$

** $p < .01$

*** $p < .001$

In three of the four norms and traits models, all three norms survive to be statistically significant predictors of the outcome variables, which supports the idea that all three are important perceptual conduits to outcome judgments. As with argument quality, pleasantness, and frame synchronization, the receiver norms (N12 and N13) take on a higher weight than the producer norm (N11). Interestingly, in two of these regression frameworks, the identity frame is

a negative predictor. This might seem odd—we would typically guess that high-identity individuals would be more favorable in judging identity arguments—but since three-fourths of the participants read an identity vignette that included a violation, perhaps high-identity individuals get particularly dismayed to see this sort of argument go off track.

Overall, what emerges from this analysis is that the projection of a negative identity (in this case, slacking off at work) has a negative impact on argumentative outcomes, but a fairly modest one. However, violations of the two norms of receiving identity arguments result in the episode feeling asynchronized and the goals of the argument falling considerably short of being met. These violations also show strong impacts on future willingness to argue, which hints at more long-term consequences relationally as well.

Play

As with identity, roughly half of the sample, 125 participants, saw and rated one of the four play vignettes. Table 6.13 displays the correlations among the variables within the play dataset.

Table 6.13.
Correlations Among Play Variables, Study 4

<u>Measure</u>	<u>N1</u>	<u>N14</u>	<u>N15</u>	<u>N16</u>	<u>Quality</u>	<u>Pleas.</u>	<u>CG</u>	<u>RG</u>	<u>FWTA</u>	<u>QP</u>
N1	1									
N14	.56	1								
N15	.40	.43	1							
N16	.61	.64	.50	1						
Argument Quality	.35	.39	.35	.43	1					
Pleasantness	.57	.73	.56	.74	.56	1				
Cont. Goal	.56	.59	.42	.68	.63	.70	1			
Rel. Goal	.62	.66	.45	.73	.59	.81	.78	1		
Future Willingness to Argue	.46	.49	.43	.58	.54	.73	.62	.79	1	
Quarrel Prob.	-.45	-.51	-.48	-.56	-.48	-.72	-.65	-.75	-.84	1

Notes. $N = 125$. All correlations significant at $p < .001$.

The pattern here is quite similar to the patterns we see in the other domains: the dependent variables all tend to correlate in the $r = .60$ to $.80$ range, particularly pleasantness, relational goal attainment, and future willingness to argue showing close relationships. The norm perceptions

also each show significant correlations with each other and the dependent variables, with N16 (playful response) showing particularly strong correlational tendencies. A surprise is the relatively strong correlational tendencies of N15 (non-seriousness), since it did not display many significant correlations in Study 3.

Next, we proceed to the *t*-tests, shown in Table 6.14.

Table 6.14.
Play Norms and Outcomes, Study 4

Condition		N1	N14	N15	N16	Quality	Pleas.	CG	RG	FWTA	QP
Normative	<i>M</i>	4.44	4.30	4.54	4.89	4.30	5.17	4.73	5.27	5.29	2.54
	<i>SD</i>	1.17	0.92	0.84	1.02	0.88	1.45	0.86	1.09	1.07	1.16
N14 Vio. (dyadically inappr. play)	<i>M</i>	3.14	2.70	3.77	3.37	3.69	3.15	3.35	3.52	4.05	3.94
	<i>SD</i>	0.93	0.94	0.76	0.78	1.23	1.28	1.01	1.09	1.21	1.23
	<i>t</i>	4.79***	6.65***	3.73***	6.53***	2.18*	5.72***	5.66***	6.17***	4.13***	-4.50***
	<i>df</i>	58	58	58	58	58	58	58	58	57	57
	<i>d</i>	1.24	1.72	0.96	1.69	0.56	1.48	1.46	1.60	1.08	-1.17
N15 Vio. (serious framing)	<i>M</i>	3.94	3.67	4.19	4.29	4.59	4.71	4.29	4.55	4.88	3.11
	<i>SD</i>	1.03	1.02	0.68	0.82	0.88	1.27	0.98	1.05	0.91	1.03
	<i>t</i>	1.72	2.45*	1.78	2.48*	-1.25	1.30	1.80	2.55*	1.55	-1.97
	<i>df</i>	56	56	56	56	56	56	56	56	56	56
	<i>d</i>	0.45	0.64	0.47	0.65	-0.33	0.34	0.47	0.67	0.41	-0.52
N16 Vio (non- playful response)	<i>M</i>	4.31	3.34	3.90	4.31	4.30	4.26	4.39	4.51	4.63	3.28
	<i>SD</i>	0.88	0.90	0.85	0.73	0.89	1.36	0.85	1.10	1.27	1.25
	<i>t</i>	0.51	4.14***	2.99**	2.54*	-0.03	2.57*	1.56	2.73**	2.17*	-2.42*
	<i>df</i>	61	61	61	47.65	61	61	61	61	61	61
	<i>d</i>	0.13	1.05	0.76	0.67	-0.01	0.65	0.40	0.69	0.55	-0.61

* $p < .05$

** $p < .01$

*** $p < .001$

The pattern that is clear here is that the effectiveness of the norm manipulations seems to predict the overall outcome of the argument. The N14 manipulation was felt strongly ($d = 1.72$), and it had strong effects on all of the novel dependent variables. The N15 manipulation was felt weakly, if at all ($p = .08$, $d = .47$), and it only had a statistically significant effect on perceived relational goal attainment, also approaching statistical significance on content goal attainment ($p = .08$), and quarrel probability ($p = .05$). The N16 manipulation was felt somewhat weakly ($d = .67$), and it was associated with statistically significant but fairly moderate drops in pleasantness, relational goal attainment, future willingness to argue, and quarrel probability. The data thus

strongly support H1-H6 with respect to N14, and are generally supportive with respect to N16, but continue to be relatively unsupportive with respect to N15.

A second pattern that emerges here, largely consistent with the previous studies, is that play is the one domain where we see the clearest leaning toward relational outcomes rather than content outcomes. N14 evaluations are clearly felt in content goal attainment judgments, but N15 and N16 violations are not felt; however, all three violations are associated with relational goal attainment. Evidence from the successful manipulations of N15 in the previous studies also points toward significant impacts on pleasantness and future willingness to argue. Superficial play cases (Stoltz, 2019) like the vignette set in this study and the other set in Study 3 seem to proceed without clear definition of a content goal, so they orient to relational matters.

Thus, this offers some support for H7, which said that persuasion and inquiry violations will cause more content-level harm than identity and play violations; we see a lack of breadth in effects on content goal attainment here. However, the overall mean effect size on content goal attainment in play, $d = 0.78$, was not statistically significantly different than that in persuasion, $d = 0.86$, $z = .46$, $p = .64$, and only marginally different from that of inquiry, $d = 1.14$, $z = 1.72$, $p = .08$. Thus, the conformity to this prediction remains somewhat in question in looking at Study 4's data alone. H8 and H9 stated that identity and play violations would cause larger drops in future willingness to argue and larger rises in quarrel probability than persuasion and inquiry violations, and there is no evidence to support those claims in these data; the mean effect sizes in the play domain fell below those of persuasion and inquiry on both of these variables. H10 predicted that when frames were perceived to be asynchronized, the harms in playful arguments would load disproportionately onto the relational level, but in two cases here, there wasn't a statistically significant effect on frame synchronization to begin with.

Finally, we proceed to the multiple regression analyses, shown in Table 6.15.

Table 6.15.
Norm-Based and Trait-Based Play Multiple Regressions, Study 4

Content Goal Attainment								
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.49***		Model Adj. R^2	.09*		Model Adj. R^2	.56***	
F	41.31		F	2.05		F	11.36	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N14	.23**	2.81	Arg-avoid	.33*	2.26	Arg-avoid	.21*	2.04
N16	.53***	5.67	Cooperation	-.34*	-2.07	Blurting	-.45***	-3.73
			Utility	-.40*	-2.04	N14	.26**	3.01
			Blurting	-.44*	-2.53	N16	.53***	5.36
Relational Goal Attainment								
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.59***		Model Adj. R^2	.05		Model Adj. R^2	.63***	
F	60.58		F	1.56		F	15.01	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N14	.36***	4.15	Utility	-.48*	-2.05	Identity	.25*	2.39
N16	.62***	6.28				N14	.42***	4.46
						N16	.60***	5.66
Future Willingness to Argue								
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.36***		Model Adj. R^2	.17***		Model Adj. R^2	.45***	
F	24.32		F	3.06		F	7.70	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N14	.21*	1.98	Identity	.32*	2.11	Identity	.30*	2.44
N15	.24*	1.98	Dominance	-.29*	-2.27	N14	.27*	2.41
N16	.46***	3.80	Utility	-.49*	-2.28	N16	.39***	3.11
Quarrel Probability								
Norms-Only			Traits-Only			Norms and Traits		
Model Adj. R^2	.38***		Model Adj. R^2	.14**		Model Adj. R^2	.46***	
F	26.32		F	2.69		F	8.05	
<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t	<u>Sig. Predictors</u>	β	t
N14	-.26*	-2.40	Play	-.33**	-2.81	VA-antisocial	.30*	2.01
N15	-.37**	-2.91				N14	-.33**	-2.85
N16	-.38**	-3.08				N15	-.27*	-2.18
						N16	-.33*	-2.51

Note. Norms-only models conducted with $df(3,120)$, traits-only ($12,110$), and norms and traits ($15,107$).

* $p < .05$

** $p < .01$

*** $p < .001$

Though the *t*-tests in Table 6.14 did not always indicate strong effects of play norm violations on these dependent variables, the play norm perceptions do combine to explain a sizeable portion of the variance in all four cases. In particular, we see N16 perceptions (playful response) take on outsized importance, especially for the content and relational goals. N15 perceptions (non-seriousness) continue to be the least important of the three predictors, though they do manage to have some predictive utility regarding perceptions of whether the argument will escalate. Notably, though the play norms explained little of the variance in argument quality in Study 3 (adj. $R^2 = .05$), and violations have often not been associated with content goal attainment perceptions, they do retain significant explanatory power on content goal attainment in this framework.

As before, the norms easily outpaced the traits in predictive utility here. In all of the regressions we have examined in both Study 3 and Study 4, this has been the case. However, we do see the traits offer their strongest utility here, boosting the norms' adjusted R^2 by at least .07 in three of the four cases. This may indicate that, since play is a less-understood frame than identity or utility, argumentative traits play a larger role in shaping understanding of it. Indeed, the variables that prove predictive in the trait-only models tend to be first-order frames.

Hypothesis Conclusions (Vignettes)

The above discussion of results concludes the primary hypothesis tests for this project; the analysis of real-world episodes that participants described will give another perspective on H7-H10, but will be primarily be analyzed in service to the research question: whether individual norms exhibit differences in magnitude and/or type of effect on arguments.

Before proceeding to the analysis of the episodes, I will summarize the evidence in the vignette testing regarding each hypothesis. As I will discuss the collective findings of the project

(Studies 1, 3, and 4) in the next chapter, I will here restrict this summary to the testing in Study 4 alone.

Hypotheses 1-3 predicted that arguments that contain norm violations will be associated with reductions in perceived argument quality, pleasantness, and frame synchronization relative to arguments that do not contain any violations. Each of these hypotheses was largely supported here. Pleasantness was reduced in all of the successful manipulation conditions, and frame synchronization was reduced in all but one. The results on argument quality were more mixed, but still supported the hypothesis in a clear majority of cases.

Hypothesis 4a predicted that arguments that contain norm violations will be associated with reductions in content goal attainment relative to arguments that do not contain any violations. Hypothesis 4b predicted the same for relational goal attainment. Ten of the fifteen domain-specific norms were indeed associated with reductions in the content level (all but N4, N5, N7, N15, and N16) and twelve were associated with reductions on the relational level (all but N4, N5, and N7). The lack of association with play normativity and content level variables has persisted throughout the project; H4a clearly fails in the play domain. Otherwise, the evidence here does not support H4a or H4b applying to norms 4, 5, or 7, though the failure of the N5 manipulation makes it hard to evaluate. H4 received strong support apart from these exceptions.

Hypothesis 5 predicted that arguers who commit norm violations will be seen as worse future argumentative partners than those who do not. This was supported by the evidence in ten of the fifteen domain-specific violation conditions (all but N4, N5, N7, N11, and N15). The same caveats apply: the N5 and N15 manipulations failed, and the N4, N7, and N11 manipulations all showed the predicted association in Study 1. H5 is largely but not completely supported.

Hypothesis 6 predicted that arguments containing norm violations will be seen as more likely to lead to quarrels than those that do not. Again, ten of the fifteen norm violation conditions conformed to this prediction, all but N5, N7, N11, N12, and N15. As with H5, these five nonconforming conditions include the two failed manipulations (N5 and N15). H6 is largely but not completely supported.

Hypothesis 7 predicted that violations of the norms of inquiry and persuasion arguments will lead to larger losses in content goal attainment than violations of identity and play arguments. This prediction had some support with play and inquiry, where play violations were significantly less consistent and overall slightly less powerful at eliciting content goal reductions than inquiry violations, but fails with respect to identity and persuasion; H7 is partially supported.

Hypothesis 8 predicted that violations of the norms of identity and play arguments will be seen as more likely to lead to quarrels than violations of the norms of persuasion and inquiry arguments. This prediction has not been significantly supported by any data in the project, including here; H8 is not supported.

Hypothesis 9 predicted that violations of the norms of identity and play arguments will be associated with worse reductions in future willingness to argue than violations of persuasion and inquiry arguments. In this study, the N13 violation condition was associated with the largest reductions in future willingness to argue, but play violations had the least effect on this outcome collectively. H9 may be true with particular identity cases, but is generally not supported.

Hypothesis 10 predicted that when frames are perceived to not be synchronized, persuasion and inquiry arguments will be more impacted in content goal attainment than relational goal attainment, while inquiry and play arguments will be more impacted in relational

goal attainment than content goal attainment. Again, there is some evidence to suggest that playful arguments tend to cause more relational harm than content harm, but in this study, two of the three play violation conditions were not judged to be out of sync. Otherwise, there was little difference between content and relational goal attainment in the various conditions. Therefore, H10 is not supported.

Methodological Triangulation: Real-World Episodes

The other methodology employed in Study 4 was the solicitation and analysis of the real-world argumentative episodes provided by participants. In this portion of Results, I will go through various analyses that were performed on these data. To begin, I will first orient the reader to the descriptive statistics about the episodes. Second, I will proceed to compare the reported outcomes of the episodes across groupings (domain, public-personal topic, and relationship). Finally, I will compare the outcomes of the episodes by norms, both in a first-violation and on-off context.

Description

Two hundred and five participants provided codable descriptions of argumentative interactions. Of these, 117 (57.1%) were persuasion arguments, 35 (17.1%) were inquiries, 41 (20%) were identity arguments, and 12 (5.9%) were playful arguments. The high frequency of persuasion arguments continues to support the notion that ordinary arguers find it the most problematic of the four domains, though it may also be the cognitive default of ordinary arguers when asked to describe a discussion of any sort. Also notable is the dearth of playful arguments, which may reflect a large part of the sample not seeing argument as playful (as noted in Chapter 5, the play frame is identified with less than identity or utility), but also could indicate that these

arguments are relatively unlikely to reach problematic outcomes. As described earlier (see Table 6.1), intercoder reliability on all measures was above .70.

Seventy-six (37.1%) of the arguments began by discussing a public topic, while 128 (62.4%) began in a personal area (A. Johnson, 2000); one concerned another person's personal issues, a distinction made by Dai and Zhan (2020). This extends a finding of A. Johnson et al. (2014), who found that personal issues tended to be seen as weightier than public ones. Persuasion (58 public, 59 personal) and play (6 public, 6 personal) were evenly split between public and personal topics, while two-thirds of the inquiries and all but one of the identity arguments were personal in nature.

Seventy-nine (41.1%) of the argumentative episodes took place between the participant and one or more friends. Twenty-three were with the participant's parent or parents, 16 were with classmates or coworkers, 13 with an acquaintance, 13 with a romantic partner or interest, 13 with a sibling, 12 with an extended family member or family friend, 11 with a stranger, and seven with an authority figure (boss, teacher, pastor, etc.). Thirteen of the episodes simply said the argument occurred between the participant and "another person;" we did not attempt to code the relationship in these cases. Thus, the plurality of these arguments came between friends, with family members combining to form roughly a quarter of the sample, and about an eighth coming between arguers without a strong preexisting relationship (strangers or acquaintances).

With these basic results in mind, we will proceed to the descriptive data regarding the violations that took place. I regard it as significant that we were able to identify at least one norm violation in each of these respondent-supplied narratives. This implies that the Theory of Argumentative Norms has good breadth. First, we will examine how frequently each violation was the *first* violation in the argument, shown in Table 6.16.

Table 6.16.
Frequency of First Violations in Coded Episodes, Study 4

<u>Violation</u>	<u>Frequency of First Violation</u>	<u>% (Overall)</u>	<u>% (Within Domain)</u>
N1 (Asynchronous frames)	17	8.29%	n/a
N2 (Prevention of arguing)	13	6.34%	11.11%
N3 (Irrelevant attack)	36	17.56%	30.77%
N4 (Non-argumentative support)	18	8.78%	15.38%
N5 (Premature claim of victory)	10	4.88%	8.55%
N6 (Refusal to accept defeat)	19	9.27%	16.24%
N7 (Inappropriate relational priority)	17	8.29%	14.53%
N8 (Retraction of commitments)	10	4.88%	28.57%
N9 (Premature taking of a position)	10	4.88%	28.57%
N10 (Circular argument)	4	1.95%	11.43%
N11 (Contextually negative identity projection)	16	7.80%	39.02%
N12 (Contradiction or condemnation of identity)	15	7.32%	36.59%
N13 (Failure to listen therapeutically)	9	4.39%	21.95%
N14 (Individually or dyadically inappropriate play)	6	2.93%	50.00%
N15 (Overly serious construction)	3	1.46%	25.00%
N16 (Non-playful response)	2	0.98%	16.67%

Note. Percentages within domains do not add up to 100% because of N1 violations.

The most striking number here is the percentage of the time that N3 (irrelevant attack) is the first violation that occurs in persuasion arguments. This violation led off the non-normative portion of the argument about twice as often as any other persuasion violation. Apart from N3, the other violations span out fairly evenly, with N10 (circular argument) and N13 (therapeutic listening) being less common first violations in inquiry and identity, respectively, than the other norms. This signals that all of the violations can occur somewhat independently—each violation was the first violation at least eight percent of the time in its domain. This is also somewhat supportive of the idea that the Theory of Argumentative Norms is evenly covering various norm violation possibilities.

Next, we will examine how frequently each violation appeared at *any point* in the argument. Table 6.17 displays the frequency of norm violations appearing overall.

Table 6.17.
Frequency of Violations in Coded Episodes, Study 4

<u>Violation</u>	<u>Frequency</u>	<u>% (Overall)</u>	<u>% (Within Domain)</u>
------------------	------------------	--------------------	--------------------------

N1 (Asynchronous frames)	62	30.24%	n/a
N2 (Prevention of arguing)	30	14.63%	25.64%
N3 (Irrelevant attack)	76	37.07%	64.96%
N4 (Non-argumentative support)	64	31.22%	54.70%
N5 (Premature claim of victory)	39	19.02%	33.33%
N6 (Refusal to accept defeat)	37	18.05%	31.62%
N7 (Inappropriate relational priority)	52	25.37%	44.44%
N8 (Retraction of commitments)	18	8.78%	51.43%
N9 (Premature taking of a position)	28	13.66%	80.00%
N10 (Circular argument)	7	3.41%	20.00%
N11 (Contextually negative identity projection)	17	8.29%	41.46%
N12 (Contradiction or condemnation of identity)	29	14.15%	70.73%
N13 (Failure to listen therapeutically)	34	16.59%	82.93%
N14 (Individually or dyadically inappropriate play)	11	5.37%	91.67%
N15 (Overly serious construction)	6	2.93%	50.00%
N16 (Non-playful response)	10	4.88%	83.33%

In the persuasion domain (N2-N7), violations of N3 (irrelevant attack) and N4 (non-argumentative defense) were the most common, appearing in over half of the episodes. The significant majority of the inquiries (N8-N10) contained N9 violations (prematurely taking a position), and N10 violations (circular arguments) were fairly rare. All three identity violations (N11-N13) occurred fairly frequently, but as most of them were from the participant's point of view, the violations were more concentrated in the reception of an argument the participant made (N12 and N13), rather than in the identity projection itself (N11). It is worth noting that although violations of therapeutic listening were the most common issue in the identity domain, these violations were the least common *first* violation—generally it was the identity argument itself or a negative reaction to it that sparked discord. Most of the playful arguments contained both a dyadically inappropriate play attempt (N14) and an (understandable) non-playful reaction to said attempt (N16).

Finally, we will examine what sorts of consequences resulted from these arguments. Recall that we coded six particular outcomes that emerged in the descriptions: the argument bringing an end to the relationship, the argument weakening the relationship, the participants

taking a temporary break in communication after the argument, avoidance of the domain of the argument in the future, avoidance of arguments about the topic in the future, and the argument causing one or both participants to take a more negative view of the other person than they had before. Table 6.18 displays the frequencies of each of these outcomes in the dataset.

Table 6.18.
Frequency of Negative Outcomes in Coded Episodes, Study 4

<u>Outcome</u>	<u>Frequency</u>	<u>Percentage</u>
Relationship ended	23	11.22%
Relationship weakened	48	23.41%
Break in communication	15	7.32%
Future avoidance of domain	20	9.76%
Future avoidance of topic	13	6.34%
Negative change in perception of the other person	76	37.07%

Notes. Percentages do not add to 100 because not all episodes contained one or more of these negative outcomes. If an argument was coded as ending the relationship, we did not code it as weakening, causing a break, or causing avoidance of domain or topic; otherwise, the codes are not mutually exclusive.

Slightly over a third of respondents indicated that the argument either ended or notably weakened their relationship with the other person. Slightly over a third also reported the argument significantly changing their view of the other person for the worse. Of the 76 respondents who made this judgment, 40 either also reported an ended or weakened relationship, while 36 changed their view without the relationship changing significantly (often because the argument was with a stranger or acquaintance, where there was not a close preexisting relationship). Less common were reports of the participant changing their argumentative behavior around the other person in the future, trying to avoid the topic or domain.

Tables 6.16-6.18 account for the descriptive statistics regarding the coded variables, but there is also the matter of the dependent variables; recall that participants filled out the

Argumentative Goal Attainment Scale, Future Willingness to Argue Scale, and Quarrel

Probability Scale regarding these episodes. Table 6.19 displays summary statistics about the four dependent scales participants filled out about these episodes, and Table 6.20 displays correlations between them.

Table 6.19.
Descriptive Statistics of Outcome Variables in Episodes, Study 4

<u>Outcome</u>	<u>Alpha</u>	<u>M</u>	<u>SD</u>
Content goal attainment	.73	3.56	1.07
Relational goal attainment	.90	2.98	1.41
Future willingness to argue	.85	3.79	1.39
Quarrel probability	.76	4.55	1.18

Table 6.20.
Correlations Between Outcome Variables in Episodes, Study 4

<u>Outcome</u>	<u>Cont. Goal</u>	<u>Rel. Goal</u>	<u>Fut. Will. to Argue</u>	<u>Quarrel Prob.</u>
Content goal attainment	1			
Relational goal attainment	.38***	1		
Future willingness to argue	.27***	.46***	1	
Quarrel probability	-.40***	-.62***	-.35***	1

*** $p < .001$

All four scales proved reliable in this context, further proving their utility at measuring argumentative outcomes. The biggest effect of these negative argumentative episodes appears to have been that participants did not feel they met their relational goals. They also fell slightly below the neutral midpoint of 4.0 on both content goal attainment and future willingness to argue with the other person, and slightly above that midpoint on the perception that the argument escalated. In general, these outcomes are in line with the persuasion violation vignettes from Study 1, though notably worse than the perceptions of the violation conditions in the other domains. Since participants were recounting an episode for which they have a relational context, it makes sense that their perception of the outcomes is more sharply negative here. Of course, the majority of the arguments here *are* persuasion; perhaps this is why the ratings here are so

negative. An examination of whether domains, and other sorts of contexts, were associated with differences in outcomes proceeds in the next section.

Comparing Outcomes Across Contexts

With these episode descriptions, the analysis is largely exploratory. Participants were asked to report episodes that did not go well, so they did as they were instructed. The question is: are there any features that separated the episodes that had catastrophic outcomes from ones that were merely mildly frustrating? Does the domain matter? Does the relationship matter? Does the first violation matter? Do certain violations predict particularly poor outcomes? Unlike Study 3 (and the vignette portion of the present study), we are not comparing to a normative baseline here: we are comparing violation contexts with each other.

The first context to compare is that of argumentative domains. Tables 6.21 and 6.22 display the dependent variables—the relational outcome codes (6.21) and the four scales (6.22), broken down by domain. The coded outcomes are tested with Fisher-Freeman-Halton exact tests (rather than chi-square tests, because there some cells with $N < 5$) (Fisher, 1934; Freeman & Halton, 1951), and the ordinal scales are tested via a one-way ANOVA analysis between the domains.

Table 6.21.

Relational Outcomes in Negative Episodes by Argumentative Domain, Study 4

	Persuasion Freq. (%)	Inquiry Freq. (%)	Identity Freq. (%)	Play Freq. (%)	Exact Test Statistic	Effect Size (Cramer's V)
End relationship	12 (10.26%)	3 (8.57%)	8 (19.51%)	0 (0%)	3.82	.15
Weaken relationship	20 (17.09%)	9 (25.71%)	16 (39.02%)	3 (25%)	8.12*	.20
Communication break	9 (7.69%)	4 (11.43%)	1 (2.44%)	1 (8.33%)	2.60	.11
Avoid domain	8 (6.84%)	6 (17.14%)	5 (12.2%)	1 (8.33%)	3.80	.13
Avoid topic	4 (3.42%)	3 (8.57%)	5 (12.2%)	1 (8.33%)	5.05	.15
Change view negatively	43 (36.75%)	13 (37.14%)	18 (43.9%)	2 (16.67%)	2.88	.12

Note. Percentages do not sum to 100 because some of the episodes did not satisfy any of the six outcome categories (e.g., the argument did not result in any sort of relational change). The same will be true on the other tables that display the coded outcomes in this chapter.

* $p < .05$

Table 6.22.

Perceptions of Outcomes in Negative Episodes By Argumentative Domains, Study 4

Measure	<u>Pers.</u> <u>M</u>	<u>Pers.</u> <u>SD</u>	<u>Inq.</u> <u>M</u>	<u>Inq.</u> <u>SD</u>	<u>Id.</u> <u>M</u>	<u>Id.</u> <u>SD</u>	<u>Play</u> <u>M</u>	<u>Play</u> <u>SD</u>	<u>F</u>	<u>Effect size</u> <u>(η^2)</u>
Content goal attainment	3.54	1.11	3.64	1.19	3.41	.95	3.95	.88	0.86	.01
Relational goal attainment	2.93	1.45	3.28	1.33	2.77	1.37	3.36	1.32	1.18	.02
Future willingness to argue	3.78	1.42	3.96	1.32	3.78	1.36	3.35	1.38	0.59	.01
Quarrel probability	4.78	1.18	4.13	1.20	4.36	1.14	4.25	.77	3.71*	.05

Note. All ANOVAs calculated with df (3, 201)

* $p < .05$

Just as we have seen little difference between the outcomes of violations in different domains throughout the vignette studies, little appears here. Two statistically significant differences were found: the persuasion arguments led to more escalation than inquiries (confirmed by post-hoc Tukey HSD; $p = .02$), and problematic identity episodes were more likely to result in a weakened relationship than the other domains. These results show that while persuasion may tend to be perceived more negatively than the other three domains, all four can lead to equally negative places in practice.

Earlier, I did note that there was significant variation between public and personal issue frequency in each domain, and it is also worth considering whether this shows a significant impact. Tables 6.23 and 6.24 further subdivide the context into public and personal arguments in each domain. For simplicity, I have omitted the one public identity episode and the one episode about another person's personal issues from the tables.

Table 6.23.

Relational Outcomes in Argumentative Subject-Goal Contexts, Study 4

	<u>Public</u> <u>Persuasion</u>	<u>Personal</u> <u>Persuasion</u>	<u>Public</u> <u>Inquiry</u>	<u>Personal</u> <u>Inquiry</u>	<u>Personal</u> <u>Identity</u>	<u>Public</u> <u>Play</u>	<u>Personal</u> <u>Play</u>	<u>Exact Test</u> <u>Statistic</u>	<u>Effect Size</u> <u>(Cramer's V)</u>
End rel.	6 (10.34%)	6 (10.17%)	1 (9.09%)	2 (8.7%)	8 (20%)	0 (0%)	0 (0%)	3.28	.16
Weaken rel.	4 (6.9%)	16 (27.12%)	3 (27.27%)	6 (26.09%)	16 (40%)	0 (0%)	3 (50%)	20.68**	.32
Comm. Break	3 (5.17%)	6 (10.17%)	2 (18.18%)	2 (8.7%)	1 (.5%)	0 (0%)	1 (16.67%)	6.01	.17
Avoid domain	4 (6.9%)	4 (6.78%)	2 (18.18%)	4 (17.39%)	5 (12.5%)	0 (0%)	1 (16.67%)	5.25	.16
Avoid topic	2 (3.45%)	2 (3.39%)	2 (18.18%)	1 (4.35%)	4 (10%)	0 (0%)	1 (16.67%)	7.13	.19
Chng. view neg.	21 (36.21%)	22 (37.29%)	4 (36.36%)	9 (39.13%)	18 (45%)	1 (16.67%)	1 (16.67%)	2.96	.13

** $p < .01$

Table 6.24.

Perceptions of Outcomes in Negative Episodes By Subject-Goal Contexts. Study 4

	<u>Pub. Pers.</u>	<u>Pers. Pers.</u>	<u>Pub. Inq.</u>	<u>Pers. Inq.</u>	<u>Pers. Id.</u>	<u>Pub. Play</u>	<u>Pers. Play</u>
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	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>	η^2
Cont. goal attainment	3.40	1.01	3.68	1.18	3.49	1.02	3.67	1.28	3.43	0.96	3.60	0.73	4.31	.93	0.97	.03
Rel. goal attainment	3.03	1.45	2.83	1.46	2.95	1.26	3.37	1.36	2.73	1.37	3.93	1.17	2.79	1.29	1.09	.03
Fut. will. to argue	3.99	1.48	3.57	1.35	3.71	1.10	4.08	1.45	3.77	1.38	4.14	1.18	2.56	1.14	1.49	.04
Quarrel prob.	4.81	1.23	4.75	1.13	4.42	1.48	4.00	1.07	4.41	1.10	4.25	0.75	4.25	0.86	1.90	.06

Note. All ANOVAs calculated with *df* (6, 196)

The only statistically significant difference that emerges here is that public persuasion episodes were significantly less likely to lead to weakening of the relationship than personal persuasion, inquiry, or identity episodes. One may also note that despite the very small sample ($N = 6$ in each) of public and personal play arguments, there appears to be a large difference in future willingness to argue between them, and though it is not statistically significant in the ANOVA framework, isolating these two conditions in an independent-samples *t*-test does produce a statistically significant result, $t(10) = 2.36, p = .04; d = 1.16$. It is also interesting that the gap between content and relational goal attainment appears somewhat wider in personal persuasion than public persuasion contexts, though again this difference does not rise to a level of statistical significance. In general, though, what the argument was about had little effect on how it turned out (for the outcomes that we coded). In conjunction with the data that we have from the vignettes, there is no clear evidence to support most of the domain-specific claims made in H7-H10. We do not observe strong differences between the outcomes of utility arguments (persuasion and inquiry) and non-utility arguments (identity and play) in any notable way here.

The other large category that we have to work with is that of relationship types. Unlike in the vignette analyses, where most of the vignettes imply some sort of friendship, these arguments occurred in several different relational contexts. It is thus worth briefly exploring whether these contexts had some sort of impact on the dependent variables, both the codes and the four outcome scales. Tables 6.25 and 6.26 break down these outcomes by relationship type. Note that here, and on the remaining tables in this chapter, I am switching the orientation on the tables,

with the dependent variables in the columns and the categories in rows, since there are too many categories in the remaining tables to display clearly if they are in the columns.

Table 6.25.
Perceptions of Outcomes in Episodes By Relationship Type, Study 4

		Content Goal	Relational Goal	Willingness to Argue	Quarrel Prob.
Romantic partner	Mean	3.33	2.95	3.38	4.95
	SD	1.02	1.46	1.76	1.19
Friend	Mean	3.59	3.11	3.83	4.37
	SD	1.13	1.45	1.19	1.22
Roommate	Mean	3.03	2.83	3.60	5.00
	SD	1.19	1.61	2.43	1.33
Sibling	Mean	3.55	4.18	4.57	4.29
	SD	1.10	1.39	1.36	0.87
Parent	Mean	3.30	3.19	3.59	4.43
	SD	0.94	1.26	1.43	1.08
Peer	Mean	3.62	2.35	3.28	4.33
	SD	1.28	1.13	1.50	1.21
Stranger	Mean	4.34	2.40	3.36	4.80
	SD	0.66	1.15	1.34	0.89
Acquaintance	Mean	3.42	2.30	4.03	4.85
	SD	1.03	1.16	1.06	1.17
Extended family	Mean	3.44	2.74	4.14	5.23
	SD	1.08	1.66	2.00	1.62
Authority figure	Mean	3.55	2.26	3.85	4.72
	SD	1.16	1.28	0.66	1.01
<i>F</i>		1.02	2.41*	1.13	1.21
η^2		.048	.107	.053	.056

Note. All ANOVAs calculated with df (9, 182)

Table 6.26.
Relational Outcomes of Arguments By Relationship Type, Study 4

	End Relationship	Weaken Relationship	Communication Break	Avoid Domain	Avoid Topic	View Negatively
Romantic partner	3 (23.08%)	3 (23.08%)	4 (30.77%)	0 (0%)	0 (0%)	3 (23.08%)
Friend	11 (13.92%)	24 (30.38%)	7 (8.86%)	7 (8.86%)	4 (5.06%)	29 (36.71%)
Roommate	1 (20%)	1 (20%)	3 (60%)	0 (0%)	0 (0%)	1 (20%)
Sibling	0 (0%)	1 (7.69%)	0 (0%)	0 (0%)	1 (7.69%)	1 (7.69%)
Parent	0 (0%)	6 (26.09%)	0 (0%)	5 (21.74%)	5 (21.74%)	3 (13.04%)
Peer	4 (25%)	3 (18.75%)	0 (0%)	4 (25%)	0 (0%)	7 (43.75%)
Stranger	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	6 (54.55%)
Acquaintance	2 (15.38%)	4 (30.77%)	1 (7.69%)	2 (15.38%)	0 (0%)	9 (69.23%)
Extended family	1 (8.33%)	3 (25%)	0 (0%)	2 (16.67%)	1 (8.33%)	6 (50%)
Authority figure	0 (0%)	2 (28.57%)	0 (0%)	0 (0%)	0 (0%)	6 (85.71%)
Exact Test stat.	11.89	8.06	20.33**	10.70	9.26	27.38***
Cramer's V	.26	.20	.43	.27	.28	.38

** $p < .01$

*** $p < .001$

Again, there was many notable differences here in the ordinal scales (Table 6.25), with relational goal attainment being the only scale that showed some differences between relationship types.

Post-hoc Tukey HSD tests reveal the significant differences to be that arguments with siblings

had more positive ratings of relational goal attainment than those with coworkers/classmates ($p = .02$) and acquaintances ($p = .02$).

The particular relational outcomes (Table 6.26) were more stratified by relational context. Temporary breaks in communication occurred most often between friends or relational partners; familial relationships may be too close to allow for them, and strangers and acquaintances may be too distant for the category to clearly apply. Reports of developing a negative view of the person because of the interaction also tended to cluster into less close relationships—it was more common than not with strangers, acquaintances, and authority figures, happened about half the time with extended family/family friends and coworkers/classmates, happened sometimes with friends, and happened more rarely with romantic partners and close family members. These are likely more a reflection of the initial relationship than the argumentative episode in particular, but do at least serve to shed some light on how relational context affect argumentative outcomes.

Comparing Outcomes Across Norm Violations

Finally, we proceed to test the research question directly: Do certain norm violations cause different sorts of impacts than others? To investigate this question, we have two sorts of groupings at our disposal. The first is grouping arguments by first violation, and the second is comparing arguments in which each particular violation was committed with those in which that violation was not committed.

First, we will examine the differences between arguments in which each violation was committed first. Tables 6.27 and 6.28 break down argumentative outcomes by first violation.

Table 6.27.
Perceptions of Outcomes in Negative Episodes By First Norm Violation, Study 4

		Content Goal	Relational Goal	Willingness to Argue	Quarrel Prob.
N1 (Asynchronous frames)	Mean	3.48	3.25	3.71	4.90
	SD	0.99	1.32	1.09	0.95
N2 (Prevention of arguing)	Mean	3.05	3.08	4.35	4.95
	SD	1.03	1.74	1.09	1.37
N3 (Irrelevant attack)	Mean	3.39	2.71	3.90	5.01

	SD	0.87	1.36	1.36	1.22
N4 (Non-argumentative support)	Mean	3.10	3.25	3.82	4.81
	SD	1.26	1.51	1.69	1.25
N5 (Premature claim of victory)	Mean	3.91	3.08	3.66	4.64
	SD	1.06	1.62	1.75	0.76
N6 (Refusal to accept defeat)	Mean	4.34	3.06	3.94	4.25
	SD	1.13	1.54	1.53	1.10
N7 (Inappropriate relational priority)	Mean	3.72	2.65	3.09	4.63
	SD	1.11	1.33	1.14	1.17
N8 (Retraction of commitments)	Mean	3.73	2.84	3.77	3.67
	SD	1.57	1.40	1.57	1.17
N9 (Premature taking of a position)	Mean	3.73	3.59	3.68	3.96
	SD	1.04	1.54	1.24	1.24
N10 (Circular argument)	Mean	3.14	3.89	5.17	4.04
	SD	0.45	0.44	1.08	1.15
N11 (Contextually negative identity projection)	Mean	3.33	2.59	3.48	4.70
	SD	1.12	1.45	1.75	1.05
N12 (Contradiction/condemnation of identity)	Mean	3.61	2.76	3.98	4.37
	SD	1.05	1.35	0.96	1.20
N13 (Failure to listen therapeutically)	Mean	3.22	3.16	3.89	3.65
	SD	0.34	1.42	1.23	1.04
N14 (Inappropriate play)	Mean	4.17	3.40	3.36	4.28
	SD	1.00	1.18	1.79	1.05
N15 (Overly serious construction)	Mean	3.71	2.71	3.50	4.06
	SD	1.00	1.22	0.87	0.25
N16 (Non-playful response)	Mean	4.14	2.93	3.58	4.42
	SD	0.00	1.11	1.53	0.82
<i>F</i>		1.66	0.63	0.85	1.89*
η^2		.117	.048	.063	.13

Note. All ANOVAs calculated with *df* (15, 189)

**p* < .05

Table 6.28.
Relational Outcomes of Arguments By First Norm Violation, Study 4

	End Relationship	Weaken Relationship	Communication Break	Avoid Domain	Avoid Topic	View Negatively
N1 (Asynchronous frames)	2 (11.76%)	4 (23.53%)	2 (11.76%)	1 (5.88%)	2 (11.76%)	10 (58.82%)
N2 (Prevention of arguing)	1 (7.69%)	0 (0%)	2 (15.38%)	1 (7.69%)	0 (0%)	4 (30.77%)
N3 (Irrelevant attack)	4 (11.11%)	8 (22.22%)	1 (2.78%)	4 (11.11%)	2 (5.56%)	14 (38.89%)
N4 (Non-argumentative support)	1 (5.56%)	2 (11.11%)	1 (5.56%)	1 (5.56%)	0 (0%)	5 (27.78%)
N5 (Premature claim of victory)	1 (10%)	1 (10%)	1 (10%)	0 (0%)	0 (0%)	4 (40%)
N6 (Refusal to accept defeat)	3 (15.79%)	1 (5.26%)	2 (10.53%)	1 (5.26%)	0 (0%)	5 (26.32%)
N7 (Inappropriate relational priority)	1 (5.88%)	8 (47.06%)	1 (5.88%)	1 (5.88%)	1 (5.88%)	9 (52.94%)
N8 (Retraction of commitments)	1 (10%)	3 (30%)	2 (20%)	3 (30%)	0 (0%)	3 (30%)
N9 (Premature taking of a position)	1 (10%)	2 (20%)	1 (10%)	2 (20%)	0 (0%)	3 (30%)
N10 (Circular argument)	0 (0%)	1 (25%)	0 (0%)	0 (0%)	2 (50%)	0 (0%)
N11 (Contextually negative identity projection)	4 (25%)	6 (37.5%)	0 (0%)	2 (12.5%)	3 (18.75%)	5 (31.25%)
N12 (Contradiction/condemnation of identity)	2 (13.33%)	5 (33.33%)	1 (6.67%)	1 (6.67%)	0 (0%)	10 (66.67%)
N13 (Failure to listen therapeutically)	2 (22.22%)	4 (44.44%)	0 (0%)	2 (22.22%)	2 (22.22%)	2 (22.22%)
N14 (Inappropriate play)	0 (0%)	1 (16.67%)	0 (0%)	0 (0%)	1 (16.67%)	1 (16.67%)
N15 (Overly serious construction)	0 (0%)	1 (33.33%)	1 (33.33%)	0 (0%)	0 (0%)	0 (0%)
N16 (Non-playful response)	0 (0%)	1 (50%)	0 (0%)	1 (50%)	0 (0%)	1 (50%)
Exact Test statistic	6.80	14.65	11.88	12.50	20.05*	13.38
Cramer's V	.20	.32	.24	.27	.38	.31

**p* < .05

There is, again, little of the way in positive results here. A post-hoc Tukey HSD did reveal a statistically significant difference in content goal attainment between arguments that went off track with N4 violations and those that went off track with N6 violations ($p = .04$), but this was

the only statistically significant difference that the Tukey HSD process found between particular groups in either the ordinal scales (Table 6.27) or coded outcomes (Table 6.28). The ANOVA test was significant on quarrel probability, but this seems to be again a reflection of persuasion arguments being more prone to escalation than inquiries, which we saw in Table 6.22 already, rather than anything particularly norm-specific.

Finally, we turn to the comparison of arguments in which each norm was violated with arguments in which that norm was not violated. For these analyses, I tested the coded relational outcomes with chi-square tests and the ordinal scales with independent-samples t-tests. Each set of arguments in which a given violation occurs is compared to the arguments *in that domain* in which the violation does not occur (e.g., comparing all arguments in which N2 was violated with all persuasion arguments in which N2 was not violated). These results are in Tables 6.29 and 6.30.

Table 6.29.

Perceptions of Outcomes in Negative Episodes With/Without Norm Violations, Study 4

Norm			Content Goal	Relational Goal	Future Willingness to Argue	Quarrel Prob.
N1 (Frame synchronization)	Not Violated	<i>M</i>	3.62	2.94	3.84	4.58
		SD	1.07	1.46	1.43	1.21
	Violated	<i>M</i>	3.42	3.06	3.67	4.48
		SD	1.09	1.30	1.27	1.10
		<i>t</i>	1.21	-0.55	0.78	0.56
		df	203	203	203	203
		<i>d</i>	0.18	-0.08	0.12	0.09
N2 (Allowing arguments to be advanced)	Not Violated	<i>M</i>	3.67	3.02	3.82	4.65
		SD	1.13	1.47	1.43	1.19
	Violated	<i>M</i>	3.19	2.66	3.67	5.15
		SD	0.98	1.38	1.44	1.08
		<i>t</i>	2.05*	1.16	0.48	-2.04*
		df	115	115	115	115
		<i>d</i>	0.43	0.25	0.10	0.43
N3 (Attack relevance)	Not Violated	<i>M</i>	3.85	3.22	3.86	4.50
		SD	1.20	1.36	1.49	1.09
	Violated	<i>M</i>	3.38	2.77	3.74	4.93
		SD	1.02	1.49	1.40	1.20
		<i>t</i>	2.26*	1.62	0.46	-1.92
		df	115	115	115	115
		<i>d</i>	0.44	0.31	0.09	-0.37
N4 (Argumentative support)	Not Violated	Mean	3.64	2.99	3.82	4.59
		SD	1.05	1.43	1.34	1.11
	Violated	Mean	3.46	2.87	3.75	4.93
		SD	1.15	1.47	1.50	1.22
		<i>t</i>	0.86	0.46	0.26	-1.59
		df	115	115	115	115
		<i>d</i>	0.16	0.09	0.05	-0.30
N5 (Not prematurely)	Not Violated	<i>M</i>	3.65	3.06	3.98	4.68

claiming victory)		SD	1.09	1.46	1.45	1.23
	Violated	<i>M</i>	3.33	2.66	3.39	4.98
		SD	1.12	1.41	1.31	1.04
	<i>t</i>		1.52	1.40	2.14*	-1.30
	<i>df</i>		115	115	115	115
<i>d</i>		0.30	0.27	0.42	-0.26	
N6 (Not refusing to accept defeat)	Not Violated	<i>M</i>	3.38	3.04	3.79	4.75
		SD	1.07	1.41	1.37	1.15
	Violated	<i>M</i>	3.90	2.68	3.77	4.83
		SD	1.11	1.52	1.54	1.26
	<i>t</i>		-2.39*	1.23	0.07	-0.33
<i>df</i>		115	115	115	115	
N7 (Reasonable relational priority)	Not Violated	<i>M</i>	3.59	3.05	3.91	4.65
		SD	1.14	1.43	1.44	1.22
	Violated	<i>M</i>	3.49	2.78	3.62	4.94
		SD	1.06	1.47	1.40	1.12
	<i>t</i>		0.49	1.01	1.12	-1.30
<i>df</i>		115	115	115	115	
N8 (Not retracting commitments)	Not Violated	<i>M</i>	3.57	3.24	3.85	4.64
		SD	1.09	1.19	1.32	1.18
	Violated	<i>M</i>	3.71	3.31	4.06	3.65*
		SD	1.30	1.48	1.34	1.04
	<i>t</i>		-0.33	-0.14	-0.47	2.64
<i>df</i>		33	33	33	33	
N9 (Not taking a position too early)	Not Violated	<i>M</i>	4.39	3.49	4.12	3.50
		SD	1.53	1.56	1.43	1.28
	Violated	<i>M</i>	3.45	3.22	3.92	4.29
		SD	1.04	1.29	1.31	1.15
	<i>t</i>		1.94	0.47	0.35	-1.59
<i>df</i>		33	33	33	33	
N10 (Avoiding circularity)	Not Violated	<i>M</i>	3.82	3.30	3.86	4.08
		SD	1.19	1.39	1.30	1.27
	Violated	<i>M</i>	2.94	3.20	4.36	4.33
		SD	0.92	1.16	1.43	0.90
	<i>t</i>		1.81	0.16	-0.89	-0.50
<i>df</i>		33	33	33	33	
N11 (Identity appropriateness)	Not Violated	<i>M</i>	3.42	2.81	3.96	4.13
		SD	0.84	1.32	1.05	1.19
	Violated	<i>M</i>	3.39	2.71	3.53	4.67
		SD	1.12	1.49	1.71	1.02
	<i>t</i>		0.09	0.24	0.92	-1.51
<i>df</i>		39	39	24.45	39	
N12 (Not condemning/contradicting identity)	Not Violated	<i>M</i>	3.51	2.79	3.86	4.00
		SD	0.87	1.28	1.37	1.22
	Violated	<i>M</i>	3.37	2.76	3.75	4.50
		SD	0.99	1.43	1.38	1.09
	<i>t</i>		0.43	0.06	0.24	-1.29
<i>df</i>		39	39	39	39	
N13 (Therapeutic listening)	Not Violated	<i>M</i>	3.71	2.35	3.31	4.83
		SD	0.69	1.41	1.14	1.25
	Violated	<i>M</i>	3.35	2.85	3.88	4.26
		SD	0.99	1.37	1.39	1.11
	<i>t</i>		0.91	-0.89	-1.01	1.23
<i>df</i>		39	39	39	39	
N14 (Appropriate play)	Not Violated	<i>M</i>	4.14	3.71	4.67	3.83
		SD	n/a	n/a	n/a	n/a
	Violated	<i>M</i>	3.94	3.32	3.23	4.29
		SD	0.92	1.37	1.38	0.80
	<i>t</i>		0.22	0.27	1.00	-0.55
<i>df</i>		10	10	10	10	
N15 (Non-seriousness)	Not Violated	<i>M</i>	4.02	3.48	3.50	4.19
		<i>d</i>	0.23	0.28	1.04	-0.57

		SD	0.92	1.06	1.66	0.95
	Violated	<i>M</i>	3.88	3.24	3.19	4.31
		SD	0.91	1.63	1.19	0.63
		<i>t</i>	0.27	0.30	0.37	-0.24
		df	10	10	10	10
		<i>d</i>	0.16	0.17	0.21	-0.14
N16 (Playful response)	Not Violated	<i>M</i>	3.57	3.64	1.75	3.83
		SD	1.41	1.52	1.06	0.71
	Violated	<i>M</i>	4.03	3.30	3.67	4.33
		SD	0.82	1.36	1.24	0.79
		<i>t</i>	-0.66	0.32	-2.03	-0.83
		df	10	10	10	10
		<i>d</i>	-0.51	0.25	-1.57	-0.64

* $p < .05$ (violation committed, compared to that violation not being committed)

Table 6.30.

Relational Outcomes of Arguments With/Without Norm Violations, Study 4

		End Relationship	Weaken Relationship	Communication Break	Avoid Domain	Avoid Topic	View Negatively
N1 (Frame synchronization)	Not Violated	18 (12.59%)	28 (19.58%)	11 (7.69%)	12 (8.39%)	6 (4.20%)	48 (33.57%)
	Violated	5 (8.06%)	20 (32.26%)	4 (6.45%)	8 (12.90%)	7 (11.29%)	28 (45.16%)
	Chi-square	0.89	3.88*	0.10	1.00	3.67	2.49
	Cramer's V	.07	.14	.02	.07	.13	.11
N2 (Allowing arguments to be advanced)	Not Violated	9 (10.34%)	15 (17.24%)	4 (4.60%)	5 (5.75%)	3 (3.45%)	33 (37.93%)
	Violated	3 (10%)	5 (16.67%)	5 (16.67%)	3 (10%)	1 (3.33%)	10 (33.33%)
	Chi-square	0.00	0.01	4.58*	0.63	0.00	0.20
	Cramer's V	.01	.01	.20	.07	.00	.04
N3 (Attack relevance)	Not Violated	4 (9.76%)	6 (14.63%)	5 (12.20%)	0 (0%)	1 (2.44%)	13 (31.71%)
	Violated	8 (10.53%)	14 (18.42%)	4 (5.26%)	8 (10.53%)	3 (3.95%)	30 (39.47%)
	Chi-square	0.02	0.27	1.80	4.63*	0.18	0.69
	Cramer's V	.01	.05	.12	.20	.04	.08
N4 (Argumentative support)	Not Violated	6 (11.32%)	9 (16.98%)	5 (9.43%)	0 (0%)	3 (5.66%)	18 (33.96%)
	Violated	6 (9.38%)	11 (17.19%)	4 (6.25%)	8 (12.50%)	1 (1.56%)	25 (39.06%)
	Chi-square	0.12	0.00	0.41	7.11**	1.47	0.32
	Cramer's V	.03	.00	.06	.25	.11	.05
N5 (Not claiming victory prematurely)	Not Violated	9 (11.54%)	11 (14.10%)	7 (8.97%)	5 (6.41%)	2 (2.56%)	27 (34.62%)
	Violated	3 (7.69%)	9 (23.08%)	2 (5.13%)	3 (7.69%)	2 (5.13%)	16 (41.03%)
	Chi-square	0.42	1.48	0.54	0.07	0.52	0.46
	Cramer's V	.06	.11	.07	.02	.07	.063
N6 (Not refusing to accept defeat)	Not Violated	6 (7.50%)	18 (22.50%)	7 (8.75%)	5 (6.25%)	4 (5%)	25 (31.25%)
	Violated	6 (16.22%)	2 (5.41%)	2 (5.41%)	3 (8.11%)	0 (0%)	18 (48.65%)
	Chi-square	2.09	5.22*	0.40	0.14	1.92	3.30
	Cramer's V	.13	.21	.06	.03	.13	.17
N7 (Appropriate relational priority)	Not Violated	5 (7.69%)	6 (9.23%)	4 (6.15%)	2 (3.08%)	3 (4.62%)	20 (30.77%)
	Violated	7 (13.46%)	14 (26.92%)	5 (9.62%)	6 (11.54%)	1 (1.92%)	23 (44.23%)
	Chi-square	1.05	6.38*	0.49	3.25	0.63	2.25
	Cramer's V	.09	.23	.07	.17	.07	.14
N8 (Not retracting commitments)	Not Violated	1 (5.88%)	5 (29.41%)	2 (11.76%)	3 (17.65%)	3 (17.65%)	8 (47.06%)
	Violated	2 (11.11%)	4 (22.22%)	2 (11.11%)	3 (16.67%)	0 (0%)	5 (27.78%)
	Chi-square	0.31	0.24	0.00	0.01	3.47	1.39
	Cramer's V	.09	.08	.01	.01	.32	.20
N9 (Waiting before persuading)	Not Violated	0 (0%)	1 (14.29%)	0 (0%)	3 (42.86%)	0 (0%)	1 (14.29%)
	Violated	3 (10.71%)	8 (28.57%)	4 (14.29%)	3 (10.71%)	3 (10.71%)	12 (42.86%)
	Chi-square	0.82	0.60	1.13	4.07*	0.82	1.96
	Cramer's V	.15	.13	.18	.34	.15	.24
N10 (Avoiding circularity)	Not Violated	3 (10.71%)	7 (25%)	4 (14.29%)	4 (14.29%)	1 (3.57%)	12 (42.86%)
	Violated	0 (0%)	2 (28.57%)	0 (0%)	2 (28.57%)	2 (28.57%)	1 (14.29%)
	Chi-square	0.82	0.04	1.13	0.81	4.47*	1.96
	Cramer's V	.15	.03	.18	.15	.36	.24
N11 (Identity appropriateness)	Not Violated	4 (16.67%)	10 (41.67%)	1 (4.17%)	3 (12.50%)	2 (8.33%)	12 (50%)
	Violated	4 (23.53%)	6 (35.29%)	0 (0%)	2 (11.76%)	3 (17.65%)	6 (35.29%)
	Chi-square	0.30	0.17	0.73	0.01	0.81	0.87
	Cramer's V	.09	.06	.13	.01	.14	.15
N12 (Not contradicting)	Not Violated	4 (33.33%)	5 (41.67%)	0 (0%)	2 (16.67%)	1 (8.33%)	4 (33.33%)
	Violated	4 (13.79%)	11 (37.93%)	1 (3.45%)	3 (10.34%)	4 (13.79%)	14 (48.28%)
	Chi-square	2.06	0.05	0.42	0.32	0.24	0.77
	Cramer's V	.22	.04	.10	.09	.08	.14
N13 (Therapeutic listening)	Not Violated	2 (28.57%)	1 (14.29%)	0 (0%)	0 (0%)	0 (0%)	4 (57.14%)

	Violated	6 (17.65%)	15 (44.12%)	1 (2.94%)	5 (14.71%)	5 (14.71%)	14 (41.18%)
	Chi-square	0.44	2.17	0.21	1.17	1.17	0.60
	Cramer's V	.10	.23	.07	.17	.17	.12
N14 (Play appropriateness)	Not Violated	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	Violated	0 (0%)	3 (27.27%)	1 (9.09%)	1 (9.09%)	1 (9.09%)	2 (18.18%)
	Chi-square	n/a	0.36	0.10	0.10	0.10	0.22
	Cramer's V	n/a	.17	.09	.09	.09	.14
N15 (Non-seriousness)	Not Violated	0 (0%)	1 (16.67%)	0 (0%)	1 (16.67%)	0 (0%)	2 (33.33%)
	Violated	0 (0%)	2 (33.33%)	1 (16.67%)	0 (0%)	1 (16.67%)	0 (0%)
	Chi-square	n/a	0.44	1.09	1.09	1.09	2.40
	Cramer's V	n/a	.19	.30	.30	.30	.45
N16 (Playful response)	Not Violated	0 (0%)	1 (50%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	Violated	0 (0%)	2 (20%)	1 (10%)	1 (10%)	1 (10%)	2 (20%)
	Chi-square	n/a	0.80	0.22	0.22	0.22	0.48
	Cramer's V	n/a	.26	.14	.14	.14	.20

Note. All chi-square tests run with one degree of freedom.

* $p < .05$

** $p < .01$

Again, the dominant trend in the data here is the lack of significant effects overall; generally speaking, this analysis did not find many differences between arguments in which a specific norm was violated and arguments in which that norm was followed.

What relationships do appear may put a slightly sharper point on the trends in Tables 6.27 and 6.28. All of the persuasion norms have some sort of significant relationship with at least one outcome. Violations of N2 exhibit the most negative trend, worsening argumentative outcomes on three of the variables (content goal attainment, quarrel probability, and whether the episode caused a break in communication). Arguments with N4 violations were more likely to lead to the arguer wanting to avoid persuasion arguments with the other person in the future than arguments without N4 violations, and N3 violations were associated with lower content goal attainment. N5 violations, despite their relative lack of effect in some of the vignette analyses in this project, were associated with lowered future willingness to argue. N6 violations, however, were associated with *higher* content goal attainment, perhaps a signal that this violation is ultimately slightly less harmful than the others in the domain. Finally, violations of frame synchronization and reasonable relational priority (N1 and N7) both were associated with the relationship weakening.

Beyond the persuasion domain, the sample sizes are obviously quite low, but even considering this, other clear trends fail to emerge. When compared with each other, norm violations of particular norms in inquiry and identity arguments do not appear to show distinctly different patterns or magnitudes of effects.

The research question of this project asked if certain norm violations caused significantly different outcome patterns from one another. Though this analysis offers a few statistically significant data points (perhaps most strongly suggesting that N2 violations are particularly harmful and that N6 violations are somewhat less harmful than other persuasion norms), the overall pattern of results answers this question in the negative. More pointed investigations will be needed to discern whether there is truly little difference between the norms, or whether the methodology employed here simply is insufficient to get at what differences there are.

Discussion

This study has accomplished three particular goals. First, it has provided data that (largely) replicate the findings of Study 1. Second, it has offered a more expansive investigation into the research question. Finally, even as the qualitative investigation into the research question failed to reveal many striking trends in the data, it nevertheless as provided us with a number of interesting exemplars that help clarify the sorts of effects norm violations can have in interpersonal arguments. All in all, this chapter puts us in a better position to evaluate the Theory of Argumentative Norms.

In this section, I will discuss the findings in each domain. As the data largely replicate earlier findings, I have only a limited amount to add regarding the replications; I will be integrating the findings of this study with those of Studies 1 and 3 in Chapter 7. Thus, the focus in this section aims more toward discussing particular exemplars that show notable themes in

each domain, which may point the way forward for more specific investigations into particular norms or domains in the future.

Persuasion

The studies in this project have been quite clear in showing that persuasion arguments have the potential to have some serious negative outcomes. It was unsurprising to see this domain dominate the real-life episodes submitted by participants, and given the low baselines and outcomes associated with it in Study 3, it was not surprising to see several of the vignette manipulations of the study judged more harshly than the violations in other conditions.

The descriptions offered in the qualitative portion of the study nevertheless offered helpful context for what some of the most common forms of problematic persuasion look like. The most common first violation was N3 (irrelevant attack), and we can see in these examples how this ends up so frustrating:

- 1) “I was with a kid who had disagreeing views with me about race. We both were very emotional, he believed black people should not receive special treatment, but I said all they are receiving is equal treatment with the BLM movement and other similar works. We eventually boiled over to having a full scream fight, until we left class for the day.”
- 2) “During one of my family gatherings, one of my parents close childhood friends had come over. And they had said some very racist and demeaning things, particularly around the topic of interracial marriage and sexual orientation. I had spoken my mind up and had given clear facts and information that had proved their points/conceptions wrong and had tried to show them why what they are saying/believing is wrong. However, rather than trying to understand they had just thrown down every point saying due to my "young age" I had no understanding of how the real world worked and that all my points were just childish and too "ideal". This however made me get very defensive and lead to a very loud verbal argument.”
- 3) “I was arguing with another person. I made analogies instead of using scientific evidence. The other person also made analogies. Both of us did not consider the other side of the argument.”
- 4) “I was discussing a current social issue with a friend and he was being very ignorant and intolerant of listening to my opinion. He was saying things that were not true and had facts proving them to be false but he would not listen when I tried to tell him this, instead he was acting rude and saying my beliefs are "dumb".”

In the first two cases, the narrators were frustrated that their arguments were turned into strawmen and misrepresented. In the second two, the narrators lamented that though they are technically allowed to advance arguments (thus, following N2), in neither case do they really get considered and integrated into the other person's discourse. While these cases may not be as extreme as some violations of N2 (constantly getting cut off), it is easy to see how this is a particularly common cause of frustration.

In cases like those above, and many others, we can clearly see the escalation coming. A violation happens and begets another violation, then both arguers see each other as arguing in bad faith, and the metaphorical gloves are off (in two or three cases, these arguments actually did lead to physical fights). An interesting counter-thread, however, comes with N7 violations, where we can see fairly legitimate, but still quite frustrating, conflicts in perceived relational priorities.

- 1) "I always let my friends borrow my clothes, shoes, jewelry, etc. and one time I asked one of my friends if I could borrow this top of hers before I went to a concert with my sister and she said no. I asked her why not and she said because it is her favorite top. I told her that I am always letting her borrow my things and that it was not cool of her. She freaked out on me and told all of our friends that we had a huge falling out over something else, and then my friends became mad at me and I didn't even know why. This was a perfect example of when my friend did not act appropriately."
- 2) "I went to my friend's place to hang out and spend the night. We stayed up really late and at 4am she decided to go to a boy's place. I was extremely upset and told her not to go because I felt as though she was abandoning me and she felt I was being controlling. The next day we got into a huge argument. At first, she didn't want to talk about it but I wanted it resolved. I yelled at her for being selfish and immature and she called me controlling and judgmental. I got very emotional and left the room. Hours later, I went to apologize and we resolved it and basically acted as though nothing happened."

In the first argument, the distinction between the positions is actually quite subtle. The narrator is making an argument about reciprocity in the friendship with respect to borrowing clothes, and the other person seeks to make an exception for a particularly important item of clothing. Both

claims have some substance behind them, but are nevertheless seen as relationally inappropriate by both participants. The second argument also essentially boils down to how close or important the friendship is, measured in this case by how much spending time with each other is a priority over others. The interesting thing in this example is how even when the argument shifts over to what we might consider personal attacks—“controlling,” “selfish,” “immature,” and “judgmental” are all lobbed—all actually remain quite germane to the original topic of the discussion, even if they are delivered with increasingly lower tact. It is possible in these cases for the argument to escalate *without ever violating anything other than N7*.

In the vignette portion of the study, it was surprising to see the persuasion domain generate more null results than the others, given the sensitivity to norm violations that participants had in Study 3. Some of these findings replicate those in Study 1; others do not. It is tempting to be skeptical about the results given the fairly low sample sizes in the persuasion domain, but the generally low correlations between the norms and the outcome variables, and the significantly lower proportion of variance explained, casts further doubt on whether ordinary arguments that feature N4, N7, or especially N5 violations suffer dramatically worse outcomes than normative ones. It may be that arguers, generally wary of persuasive attempts to begin with, build in some expectations that persuaders will try to presume they hold the right position and will not always use appropriate arguments, but that they at least will concede if they are definitively disproven, allow for opposition to be voiced, and attempt to respond to opposing views appropriately. Perhaps these expectations, if true, contribute to the lower baseline evaluations of normative persuasion discourse—participants still worry these violations could come at any time.

Inquiry

Conceptually, one of the key distinctions between persuasion dialogue and inquiry dialogue is cooperation. Both dialogue types fall in Hample's (2003) utility frame—participants in either are looking to get something of value from the argument. The difference is that in inquiries, the utility is shared: participants want to reach a harmonious decision or learn from each other. In persuasion, often the utility is (perceived to be) zero-sum.

Nevertheless, we see clear evidence here that such a cooperative framework does not immunize inquiry arguments from negative outcomes. Over a sixth of the negative argumentative episodes provided by participants in the first part of this study were inquiries, and many described the erosion of the cooperative framework as the argument progressed as particularly frustrating. Consider these three examples:

- 1) "Another person and I were discussing the best way to go about studying for an exam together. I suggested we list out all the subtopics we needed to know, quickly write brief definitions/notes for them, then go back through each one, spending more time on topics we are unsure about. The other person disagreed with me in an irritated manner, making me feel bad for my suggestion. They then proceeded to begin their own method of studying versus working together, or creating a compromise."
- 2) "Basically, I was trying to come up with a plan with my mom to move out. she kept raising her voice at me and shot down every idea I had. We were not able to come up with a plan and it ended in her to telling me to do whatever I want."
- 3) "This is a conversation that occurs pretty often between me and my mom. She doesn't understand a lot of the LGBTQ+ terms and problems. She often asks me about new terms she's heard, and it usually ends in a debate. She thinks it is all too complicated and the LGBTQ+ community should make things easier for allies...I like talking with her about LGBTQ+ issues, because I want her to understand and be educated about it, but I'm usually disappointed in her willingness to understand my perspective. The most disappointing of these conversations involved pronouns. She talked about how people should choose one set of pronouns, and things like "she/they" are too confusing. No matter how I tried to tell her that if someone puts them in their bio, it means they identify with both, she didn't get it. She would say that it feels like they are making her choose one, and she will choose wrong."

All three of these start with the notion of cooperation. The first is framed as a discussion of optimizing study collaboration, the second as collaboratively making a plan, and the third features a professed LGBTQ+ ally asking for clarifications on LGBTQ+ terminology. Yet, in all

three cases, the narrator is progressively dismayed at the undermining of that framework. In the first example, the other person clearly violates N9 and takes a position immediately. In the second, the other person doesn't contribute to the planning and instead simply discounts every suggestion presented. In the final case, after seeking information and receiving it, the other person refuses to integrate it with their existing knowledge. Problematic inquiries seem to be characterized by this perceived shift into competitiveness or stifling of genuine progress. This is a dialogue type that is about collective momentum toward a shared understanding (Walton, 1998). In all three cases here, the narrator initially believes that shared understanding to be well within reach (hence, the generally high ratings of normative inquiry vignettes) and is thus frustrated by its slipping away.

In the vignette portion of the study, all three violation conditions were fairly strongly associated with negative argumentative outcomes relative to the normative condition. As we have seen in the previous studies, there is a marked deviation from the persuasion baselines—both the normative and violation conditions in the inquiry domain tend to be perceived around one scale point higher on the outcome perceptions than their persuasion counterparts. Since even the violation vignettes do not end with a clear outcome (unlike the episodes submitted by participants), it seems that the notion of cooperativeness does give these inquiries a significant perceptual boost relative to persuasion arguments.

As with persuasion, I expected inquiry arguments to cause more content harm than relational harm, but neither argumentative domain had such a distinction materialize. The notion of these domains falling under the domain of “utility” seems to extend into both the content and relational levels equally. In the vignette set here, if the two siblings agree on gifts for their mother for her birthday, they accomplish a content goal, but they also reaffirm their own

identities as siblings (and sons or daughters) and demonstrate a commitment to cooperativeness within that relationship. If they fail to agree, then they fail to reach these relational goals as well. In this case, participants perceived the effects of violations to be roughly equal in magnitude in how they affected each. Given that this is the only vignette set in this study that sets a very clear relationship (siblings who are the sort to collaborate on gifts for parents)—one that generally is going to be free of the worst-case relational outcomes (ending or significantly weakening the relationship)—it is interesting that participants saw the impact spread from the content to the relational level so consistently.

Identity

The results in the identity domain generally provided good support for the Theory of Argumentative Norms, as they have throughout the previous studies. Identity episodes were the second-most common domain of arguments participants described when asked to recall a problematic episode: as with inquiry, the relatively sizeable number of these came as something of a welcome surprise, as I was not at all sure whether participants would overwhelmingly recount persuasion arguments. The arguments described certainly backed up the idea that identity arguments can go wrong and lead to significant relational harm.

A trend that I noted with the identity results in earlier studies is that the violation conditions would often stimulate particularly strong differences in outcomes relative to the normative condition in this domain (except for the N11 violations, which tended to be weak or ineffective manipulations). The episodes that participants provided help to give more character to this finding. Even more than inquiries, identity arguments are *supposed* to be pleasant. One or both participants simply tell (and prove to) the other something about who they are—often, an identity that they've shared with other people without incident—and they both can walk away

feeling like they've shared something with and/or learned something about the other person, a conduit to maintaining or deepening relationships. As with inquiries, though, participants get startled when the simplicity and ease of reaching this goal get upset. Consider these two examples, coincidentally about the same topic:

- 1) "I was having a discussion with a friend on whether I liked coding or not. He made me feel like I wasn't allowed to like coding because I didn't spend much time on it outside of school. I tried to make an argument that you don't have to spend time on coding outside of school to like it, but he kept ignoring it and in the end I cut off the conversation by agreeing that I didn't like coding even though I did not feel that way."
- 2) "I was talking with an adult about my college life; we were catching up. I mentioned struggling with figuring out my double major or minor possibilities. The moment I mentioned possibly trying a CompSci minor, she said, "No, don't do that. It's too hard. You won't like it." It was very discouraging especially when she had no basis to tell me what was 'too hard for me.'"

In both cases, the narrator is taken aback by a sort of identity policing behavior on the part of the other person. In the first case, the other person claims the narrator cannot rightfully claim the social identity that is being projected; in the second case, the other person ascribes unwanted characteristics (limitations in ability to do computer science) to the narrator. Both are clear N12 violations: identity contradictions or condemnations. The first seems to materialize out of thin air; the second is likely an attempt at advice (given the context of "struggling" that precedes it) that nevertheless is too pointed and presumptuous to be appropriate.

Another theme in the identity argument set was disclosure of sensitive issues not being received appropriately. Several participants recounted episodes where they revealed mental health problems, only to be met with inappropriate reactions. Some examples:

- 1) "I had a discussion with my mom once about some of my mental issues and it felt as though she wasn't understanding the depth of the issue. I would say things like "I just feel really depressed all the time" and she would respond saying things like "you just need to change your attitude." I felt my mother wasn't acting appropriately because she wasn't really understanding that you can't just change your attitude because depression isn't an attitude."

- 2) “I told them I was going through some trouble in real life, and was dealing with some situations that were affecting me negatively outside of my control. However, there was a constant lack of regard for my emotions and my current mental state at the time, as they continued to joke or move past anything getting close to that topic. Made me reconsider my friends a lot.”
- 3) “I told my parents I was depressed and they blamed me for it. Since they gave me all the things I needed and wanted, they said I had no reason to be depressed. They also called me ungrateful. They made no effort to understand the way I felt. Ever since that conversation, they have never brought it up again.”

Unlike sharing a social identity like enjoying coding, regularly watching a TV show, having a favorite genre of music, or working a certain summer job (other topics that came up in the episodes), here the narrators are sharing personal identities that they do not like, but they do not want it to be received as an N11 violation. They’re seeking therapeutic listening—they want to be heard out about what’s going on, and then *perhaps* (gently) given some advice if it’s warranted. Instead, the identity claim is received uncomfortably (as an N11 violation) and met with contradiction, condemnation, dismissal, and/or lack of care. Just as the earlier examples violate the norms of simple identity disclosures in more casual relationships, this sort of failure to appropriately attend to more sensitive identity issues seems to constitute a lot of the violations in closer relationships.

In the vignette portion of the study, the data generally affirmed the theory: the violation conditions were perceived more negatively than the normative one by a significant amount. As with inquiry, the trappings of identity arguments still made them generally perceived more positively than persuasion arguments in these cases, and participants particularly felt that the arguments were still somewhat unlikely to escalate into quarrels, and that violations did little to meaningfully change this likelihood. It is worth noting that this contradicts the finding about this vignette set from Study 1, which featured statistically significant differences between normative and violation conditions on quarrel probability in both vignette sets.

The vignette set used here, as well as the other vignette set used in Studies 1-3, comes with fairly particular features. Both sets feature identity arguments far more similar to the coding examples above than the mental health ones. They are ostensibly social identity claims, but they specifically are not identities that ought to provoke intergroup threat responses (Riek et al., 2006). Liking live music or volunteering at the library don't threaten anyone, at least usually. In fact, the operationalizations of N11 violations take them outside of the social identity realm altogether, instead focusing on personal aspects of that person's identity (in the first vignette set, liking fringe genres of music to feel rebellious; in the second vignette set—which is used here—slacking off during work). Since neither identity comes with a group threat nor is a particularly central identity, even poor presentations or receptions of it are not likely to lead to huge fights. Further, the context also may suggest a more casual relationship between the arguers—a parent, close friend, or sibling probably already knows the other person's music taste or is there when the person *decides* to start volunteering—and so perhaps participants read the relationship between the hypothetical arguers as more distant here than in the other domains. In any case, the episodes described by participants in the first part of the study span a wide range of identity importance, intergroup/intragroup status, and seriousness, and the vignette set here and the other one from Study 1 do not come close to capturing that spectrum. This was, to some extent, by design: as discussed in Chapter 3, fairly casual topics were chosen for the vignettes to ensure that the theory held in broader contexts than just controversial topics (e.g., political identities). Thus, the marked effects that have usually appeared in the identity results are quite encouraging.

Play

Unfortunately, play is the domain where results are least clear. Participants rarely recounted an (intendedly) playful episode when asked to describe a discussion that went poorly,

and the manipulation of N15 did not work well here, just as it hadn't in Study 3 (which ran concurrently). Still, play was the only domain that offered some level of conformity with the idea that it would favor one level of effects over the other: its harms were felt somewhat more heavily on the relational level than the content level. The two manipulations that worked also showed other impacts consistent with the theoretical predictions.

Many of the 12 playful arguments described by participants amounted to some form of “[I or the other person] made a joke that [I or the other person] didn't like, provoking a negative reaction”—essentially describing an N14 violation (non-dyadically appropriate play) that subsequently provoked an N16 violation (non-playful response), which thus revealed a frame synchronization issue (N1 violation). For instance:

- 1) “I had a discussion with my friend where we were debating for fun about something problematic that happened in a show. He escalated the conversation by raising his voice and started taking everything I was saying very seriously. I believe that this was not appropriate as we were simply discussing a show and I was no longer interested in continuing the conversation.”
- 2) “I was discussing the topic of pronouns and neopronouns with a friend from Europe and I had felt as if he was not taking my points seriously or rather we were just joking around, while I was trying to have an actual discussion.”
- 3) “My cousin and I were chatting about football on an afternoon and things took a turn as I made a joke about how the Dolphins had a perfect season so they're the better team. He took it seriously and continued to get all agitated about how I'm just a bandwagon and how i'm secretly a fan of another team. He ended up getting mad and told me my opinion didn't matter and told me just to shut my mouth before storming off.”

We can also see violations of N15 in the first and third examples here, where the narrators lament not effectively conveying playful intent.

There was one fairly unique entry, though, and I want to take a moment to discuss it.

“One time when my friends and I were bored we decided to do casual debates between each other. We set up little teams and just discussed our opinions on random, silly topics. It was supposed to just be for fun to get conversation going, but we started to get into controversial topics and a few of them took it too far and it ended up in an aggressive argument that involved yelling and offending each other. Once it got to this point it was hard to get a word in and add my viewpoints.”

Here is an example of a playful argument in which N14 actually isn't violated—everyone agrees that these debates are group-sanctioned playful ground. This is substantive play.

I have essentially avoided the topic of substantive play since briefly discussing it in Chapter 2, mostly because the vignettes do not attempt to capture it. Unlike some of the other specificities I have noted with the vignettes as these discussion sections have worn on (the low-information and high-information inquiries, the above discussion of what sorts of identities are projected), this was an intentional decision. I had no confidence that I could operationalize substantive play in a short vignette framework, because substantive play is essentially *persuasion or inquiry done for fun*. The “done for fun” part of that is often unspoken. If one were to simply transcribe an excerpt of an interscholastic debate, it may well look like quite heated and quite contrasting persuasive attempts. It is the unspoken context—this is a competition, the arguers don't even necessarily hold the views they're espousing (in fact, they will have to argue the opposing side in an hour)—that gives it its playful character. It is very hard to set up that sort of context in a natural way and let it get to a substantive place in just a few conversational turns, let alone then have one of the arguers violate it and still have it clear what the argument was supposed to be.

It's just as well, because if substantive play is persuasion or inquiry done for fun, and not ‘just’ play, then it's a hybrid domain, and thus falls somewhat beyond the scope of the theory laid out. Which norms apply? Persuasion? Inquiry? Play? All of the above? Do the arguers get to choose? I don't know, but I find it an interesting question, one that I will elaborate upon further in the final chapter. But the above episode gives us a case study: it goes off the rails precisely when some of the arguers turn it into pure persuasion and forget that it was supposed to be persuasion for fun. At some point, somebody doesn't remember to respond playfully, or someone

doesn't remember to give nod to the playful context (it's unclear which came first, but one stimulated the other, etc.), and the lamination wears away.

The results in the play domain, both in their relative incompleteness and their divergence from the other three domains, call for more pointed further investigations into playful arguments. The low identification with the play frame may be an important underlying factor in why it has been somewhat difficult to get robust data on playful arguments in the project (and particularly in this study): many individuals do not see argument as playful, so they have trouble putting play vignettes into context and do not report such instances when asked to describe problematic discussions. It may be that future investigations that stratify the sample in some way, dividing participants into high-play and low-play tiers, will give interesting context to how these arguments are perceived by different sorts of arguers.

Conclusion

The argumentative norms matter. Violations of any of them can contribute significantly to the erosion and degradation of appropriate discourse in argumentative settings, and also threaten the relationships that permitted the arguments in the first place. The episodes that participants submitted in Study 4 clearly illustrate that any violation can set an argument down a profoundly negative and counterproductive course. Not all do; violations can be, and often are, quickly repaired. In some cases, even the norm violations committed in the vignettes in that half of the study were not seen as particularly consequential. But norm violations always create the potential for problematic argumentative outcomes.

The findings of this study are particularly notable in context. In the free-narrative portion, the majority of participants recounted episodes that took place between them and someone else with whom they enjoyed a friendly relationship—friends and family. There is reason to believe

that in many of the episodes, both participants at least began with prosocial relational goals. In the vignette half of the study, the vignettes generally suggested a friendly preexisting relationship between the arguers—siblings in the inquiry vignettes, friends in the personal persuasion vignettes, and people close enough to decide to bring up shopping center construction, volunteering, or rock bands in the others—and the normative arguer doesn't escalate the violation by reacting poorly or calling attention to it. Still, in the narrative part of the study, many of the episodes showed things spiraling despite both arguers having reason for (and probably some history of) discussing things constructively, and in the other half of the study, participants judged most of the violation vignettes as likely to lead to negative relational outcomes relative to their normative counterparts despite the lack of a negative reaction or conflictual escalation.

The general framework of the theory seems to hold. Argumentative domains, like many other social situations, come with social scripts of sorts—guidelines for how we should conduct ourselves based on the expectations of others, and what we should expect of them. When arguers fail to meet those expectations, their paths to desired outcomes are impeded, often quite significantly. They lower their chances of actually transmitting their arguments effectively, make them more susceptible to relational discord (both immediately in the argument and down the line), and make their argumentative partners less willing to engage with them in the future. Norm violations imperil both internal (argumentative substance) and external (relationship) desires in an argument.

The Theory of Argumentative Norms originally predicted that these impacts would be somewhat compartmentalized—that violations in some domains would engender content frustrations but have lower effects on relational standing, while others would cause relational discord but have mild effects on the content level. I also speculated that the specific norms may

come with specific outcome patterns of their own. Though there is some evidence here to suggest that norm violations do not result in totally uniform reductions in all outcomes, the data point to such uniformity as something of a default, with some exceptions (play being less content-focused and a few of the norms exhibiting slightly differentiating effects patterns). Perceptions of argumentative normativity seem to, more often than not, be binary—is the other person arguing in good or bad faith? Is this a frustrating situation or not? Is this accomplishing anything or not?

Arguments containing violations happen all the time. Most of the participants had no trouble recalling one, and many presented it as a part of an ongoing pattern or even in a serial argument context (Trapp & Hoff, 1985). Arguments in all four domains clearly demonstrated the capacity to move the needle toward positive outcomes—gaining something of value, building relationships through self-disclosure, or having fun—or negative ones. The ability to hew to normative scripts is, usually, a significant predictor of these outcomes regardless of the actual quality or soundness of the argument presented. Good faith goes a long way, but it helps if it's paired with a clear understanding of the argumentative situation one finds oneself in.

Chapter 7: Evaluations, Limitations, and Paths Forward

The four studies conducted in this project have provided a wealth of data about the perceptions of argumentative norms and the effects of their violations. To a large extent, the patterns of the data in each study are similar, allowing us to form some fairly firm conclusions about the predictions made by the Theory of Argumentative Norms, at least regarding the measures and methodology employed in this project.

Nevertheless, despite the clarity of the results, the studies of this project have several individual and collective limitations, and these are important to acknowledge. These limitations clearly offer paths to subsequent research designs that may further clarify many facets of the perceptions and effects detailed in this project. In concert with the encouraging findings regarding the importance of norms in judgments of argument quality, notions of pleasantness, and paths to positive and negative argumentative outcomes, many possible paths emerge to continue exploring the landscape of argumentative expectations.

In this final chapter of the project, I will first detail what the studies collectively show us, regarding several themes present in the data. I will then discuss the limitations that were present in the research, and the future directions suggested by both the results and limitations. Finally, I will conclude with some notes about the importance of integrating ideas of domain-specific argument normativity into our understanding of arguments, both theoretically and pedagogically.

Empirical Patterns

Over the course of the four studies (the three hypothesis-testing studies—1, 3, and 4—in particular), several themes have emerged. The first is the central claim of the Theory of Argumentative Norms, tested in various ways by H1-H3: are the norms conventionally valid? Problem validity is established by theoretical (in this case, philosophical) analysis; conventional

validity has to do with the question of whether the theoretically-required things are also apparent to social actors in general (van Eemeren et al., 2009). People can violate rules and norms, of course, so things that are problem valid are not necessarily conventionally valid. In this case, the first issue was whether ordinary arguers prefer when a norm is followed to when it is not followed. A related theme that emerged was the notion of perceptual reach of violations: the extent to which a single violation was perceived as actually breaking other norms. The third theme in the results stems from the other set of claims made by the theory, regarding the impacts of norm violations on argumentative outcomes. Finally, the research question of the project wondered if particular norms differed from each other in magnitude and/or types of effects. Here, I will organize the overall findings of this project by reference to these four themes and explain how they clarify our understanding.

Conventional Validity of the Norms

In its construction in Chapter 2, I framed the Theory of Argumentative Norms in a descriptive fashion, not necessarily a normative one. The theory offers an explanation of what social norms exist in each argumentative domain; it does not explicitly say whether these are the norms arguers *ought* to be holding. To be sure, several of the norms (mostly those in persuasion and inquiry) are borrowed from pragmadialectics or from Walton (1998), which are normative theories, but the main objective here has been to ascertain whether these and the other, newly developed, norms are actually held by ordinary arguers. The theory purports to be an explanation of things that constrain arguers' work in ordinary arguments. Thus, to use the pragmadialectical term, this project has focused on *conventional validity*—whether a particular argumentative rule or practice is seen as good by ordinary arguers—instead of *problem validity*, which instead refers to whether rules or practices are *critically* appropriate.

Argument Quality and Pleasantness

The first three hypotheses of this project were intended as complementary tests of this central claim. If the fifteen domain-specific norms are conventionally valid, then we would expect some perceptual differences to emerge between arguments that follow the norms of their domain and arguments that include norm violations. H1 and H2 predicted these differences would be felt on both the argument₁ (monologic) and argument₂ (dialogic) levels: that arguments₁ would be perceived as lower-quality if they included a violation, and that arguments₂ would be perceived as less pleasant if one of the arguers violates a norm.

Both of these hypotheses were tested in Studies 1, 3, and 4. In Study 1, they were tested with the original versions of the 40 vignettes (two topics per domain), several of which were altered following in the study. In Study 3, they were tested with the finalized versions of the 40 vignettes, and in Study 4, they were tested with 20 of them (thus, one topic per domain). Table 7.1 presents the effect sizes associated with these judgments in each of the three studies. Recall that the norms were only tested regarding the domain to which they applied, so that norms 2-7 only applied to persuasion, norms 8-10 to inquiry, norms 11-13 to identity, and norms 14-16 to play.

Table 7.1.
Effect Sizes (d) and Significance Levels of Hypothesis Tests, H1-H2

Norm	H1 (Argument Quality)					H2 (Pleasantness)				
	Study 1 Set 1	Study 1 Set 2	Study 3 Set 1	Study 3 Set 2	Study 4	Study 1 Set 1	Study 1 Set 2	Study 3 Set 1	Study 3 Set 2	Study 4
N2	0.71*	1.20***	0.88***	0.62*	0.62*	0.64*	1.82***	1.73***	1.46***	1.24***
N3	0.52	0.90**	0.57*	1.02***	1.11**	0.60*	1.17**	0.88***	0.91**	1.45***
N4	1.13***	0.71*	0.62*	1.52***	0.89**	0.88**	1.35***	0.89***	1.54***	1.09***
N5	0.48	0.01^	0.21	0.66*	0.15^	0.21	0.19^	0.79**	0.94***	0.24^
N6	0.21^	0.85**	0.66*	0.57*	0.75*	0.20^	1.05**	1.52***	0.79**	1.22***
N7	0.10^	0.52	0.82**	0.80**	0.44	-0.45^	1.08	1.08***	0.85**	0.59*
N8	-0.07^	1.23***	0.56**	1.46***	1.02***	0.36^	1.10***	0.12	0.90***	1.63***
N9	0.64**	1.25***	0.53**	-0.05	0.00	0.69***	1.41***	0.83***	1.34***	1.42***
N10	-0.38^	1.01***	0.89***	0.77***	0.63	-0.21^	0.83***	0.52**	0.85***	1.40***

N11	0.45*^	0.87***	0.15^	0.78***	0.95***	0.81***^	1.28***	1.12***^	0.69***	0.96***
N12	1.31***	1.38***	1.74***	1.03***	1.46***	1.94***	1.24***	2.55***	1.29***	1.24***
N13	1.49***	1.43***	1.52***	1.67***	1.27***	2.41***	1.75***	2.85***	2.12***	1.68***
N14	0.13	1.18***	0.20	0.38*	0.56*	0.34	1.40***	0.78***	0.85***	1.48**
N15	-0.43	-0.09	-0.61***	-0.04	-0.33^	0.15	0.67**	0.62***	0.17	0.34^
N16	0.54*^	0.37	0.12	0.71***	-0.01	0.05^	0.71***	1.13***	0.63***	0.65*

Notes. ^ denotes that the manipulation was not effective at $p < .05$. N2 refers to allowing the other arguer to advance

arguments. N3 refers to responding to the opponent's argument. N4 refers to only using argumentative defenses of positions. N5 refers to not prematurely claiming victory. N6 refers to conceding if disproven. N7 refers to showing reasonable relational priorities. N8 refers to not retracting commitments. N9 refers to not prematurely adopting a position. N10 refers to avoiding circularity. N11 refers to projecting a non-negative identity. N12 refers to not contradicting or condemning an identity. N13 refers to therapeutic listening. N14 refers to individually and dyadically appropriate play. N15 refers to nonseriousness. N16 refers to responding playfully.

* $p < .05$

** $p < .01$

*** $p < .001$

The evidence here is overall strongly in favor of the Theory of Argumentative Norms. Of the 65 tests of argument quality differences that were run on effective manipulations across the three studies, 50 were significant in the hypothesized direction at the $p < .05$ level, and 28 were significant at the $p < .001$ level. Of the 65 tests of pleasantness differences that were run on effective manipulations across the three studies, 59 were significant at the $p < .05$ level, and 45 were significant at the $p < .001$ level. Every norm violation except that of N15 (nonseriousness) was associated with reductions in argument quality in at least one test; all except N5 (not prematurely claiming victory), N7 (appropriate relational priority), N15, and N16 (playful response) returned supportive results with respect to argument quality on at least three of the five occasions (all with at least one $p < .01$ result). Each of the norms returned at least one $p < .001$ result with respect to pleasantness, with N15 being the only norm with more than one negative test result on an effective manipulation (and even this is only barely the case, as the second manipulation in Study 3 was only just across the $p < .05$ threshold). Ten of the norms (N2, N3,

N4, N6, N9, N10, N11, N12, N13, N16) were associated with reductions in pleasantness in all tests of their (effective) manipulations across the studies.

The effect sizes were also notably strong on both hypotheses. Effect sizes on argument quality averaged around $d = .75$ overall, and average d values on pleasantness were just over 1.0. All norms except N15 (nonseriousness) and N16 (playful response) attained average d values (across studies 1, 3, and 4) exceeding .45 on argument quality, and all norms had average d values exceeding .4 on pleasantness. Three norms (commitment maintenance, avoiding identity contradiction, and therapeutic listening) exceeded average d values of 1.0 on argument quality, and seven exceeded that threshold with regard to pleasantness. The average effect size of therapeutic listening violations on pleasantness even exceeded 2.0.

Thus, there is very strong evidence throughout the project that, at the very least, most of the norms are conventionally valid; violating them causes marked perceptual differences in the pleasantness of the interaction, and often the quality of the argument₁. In the persuasion domain, this extends the findings of van Eemeren et al. (2009), who found the pragmadialectical rules (distilled here into N2-N6 based on Walton (1998)) to be conventionally valid. Particularly notable are the results in the domains of inquiry and identity, where violations almost always elicited reductions in perceived pleasantness at the $p < .001$ level.

The only area for which H1 seemed to be in question was that of play. Of the thirteen tests of effective manipulations, only five returned significant results, and one of these was in the opposite direction of the hypothesis. As noted in chapter 5, this may well be a reflection of the notion that “argument quality” holds a different meaning with respect to play: as Hample and Irions (2015, p. 413) say, “a playful argument should be assessed for the enjoyment it produces.” Thus, items such as “[Arguer]’s argument was convincing” do not really capture what makes a

playful argument high or low-quality. Tellingly, one of the N15 violation conditions—where a serious argument is attempted—received a higher score than the normative condition, perhaps for this reason. The play norms were also able to explain only five percent of the variance in argument quality judgments in Study 3 (see Table 5.15), by far the weakest result of any norm set on any dependent variable in Studies 3 and 4.

Future investigations in the play domain need to take this difference into account. Perhaps a new operationalization of argument quality needs to be developed for playful arguments. Such a measure ought to account for the dyadic enjoyability of the argument¹, as well as the cognitive stimulation it provides (since, as noted in Chapter 2, playful argument requires turn-to-turn momentum to reach its goal). This dissertation offers further evidence that playful arguments are fundamentally different episodes than other sorts of interpersonal arguments.

Otherwise, we do generally see support for the idea that play norm violations cause some sort of worsening in the perception of the argument. N14 (dyadically appropriate play) and N16 (playful response) in particular showed strong reductions in pleasantness in most cases. Even N15 (nonseriousness) generated some supportive evidence here, though it was clearly the norm with the weakest evidence of conventional validity.

The inconclusive evidence regarding N15 suggests that there are at least some (playful) argumentative contexts where it is not a problematic norm to violate. This is not surprising on its own: substantive playful arguments (Stoltz, 2019), for one, would tend to require at least some level of seriousness. “Playing devil’s advocate” is not enjoyable for either party if the “devil’s advocate” position is an obvious strawman from the outset, and interscholastic debates lose their sense of purpose if one team offers only superficial arguments. But the vignettes used here were exclusively superficial play: poking back and forth about baseball teams and rock bands. Thus,

the issues with N15 indicate there is, at the very least, not a particularly large amount of discord in these contexts if one of the arguers suddenly asserts a serious argument₁.

In Chapter 5, I noted that the mixed results on N15 (nonseriousness) may indicate a higher permeability of playful arguments: i.e., that shifts out of play and into a different domain are more likely to be seen as licit shifts, per Walton's (1998) terminology. I want to build on that idea further here.

It may be that playful arguments come with a lower baseline of inherent *argumentative investment*. Persuasion and inquiry arguments fall under the utility frame (Hample, 2003), and these are arguments that tend to be associated with high stakes (Hample et al., 2016), and thus offer arguers a natural reason for investment. Identity arguments do not get us direct "utility" in the sense that they do not get others to do favors for us or resolve issues, but they do offer a sort of relational utility. In self-disclosing aspects of our identities, we offer a context for others to consider us in and invite the other arguer(s) to self-disclose to us as well, building the relationship. Hample et al. (2016) found support for this idea as well, noting a strong relationship between relational consequences, identity, and utility. We thus have investment in identity arguments as well: this is, in part, why failing to listen to them therapeutically appears so damaging.

Superficial play arguments do not seem to have the same pull, though. They often are incidental riffs on a topic that quickly run their course. This does not mean that individuals never have significant investment in playful arguments: perhaps they become an important feature of a particular dyad, or the person is in a particularly silly mood that day and doesn't feel like attending to things seriously. As a baseline, though, it may be that arguers do not orient to play with the same level or type of investment, and simply see it as a transitional frame that lightens

the mood between more serious topics. And if both arguers are interested in the subject matter of the playful argument (like baseball teams or rock bands in the vignette examples), it stands to reason that they may not take issue with shifting into more serious discourse on the same topic, intentionally making room for what I am calling permeability. Such an orientation may be especially common in individuals or dyads who score low on the play frame; recall that the play frame was identified with less than utility or identity (see Tables 5.3 and 6.3). Individuals who do not see argument as playful may thus be more inclined to take an argument on a serious course once an avenue for such an argument is presented.

With all that said, the evidence on violating N15 (nonseriousness) is mixed, not exclusively negative, and it is worth testing in other fashions in the future. Perhaps in a higher-investment context, it will be rated as more consequential.

With the qualifiers on this particular norm and the play domain in general acknowledged, the conventional validity of the norms appears to be quite clear. Violations of the norms were associated with reductions in argument quality and pleasantness perceptions, and the norms (excepting play's predictiveness of argument quality) were very helpful predictors of assessments of argument quality and pleasantness in each domain; again, recall the near-universal presence of moderate or strong d values across the project. This marks the Theory of Argumentative Norms as bringing significant explanatory utility to the table, especially in the inquiry and identity domains, neither of which has been given much empirical attention.

Frame Synchronization

H1 and H2, in predicting that norm violations would be associated with reductions in perceived argument quality and pleasantness, dealt with in-the-moment judgments of how the argument was going (recall, the vignettes end before any sort of resolution is reached). They

were joined in this assessment by H3, which predicted that violations of domain-specific norms would result in lowered perceptions of the meta-norm N1, frame synchronization. Table 7.2 presents the effect sizes and significance levels of these tests throughout Studies 1, 3, and 4.

This table shows how violations of the other norms affected perception of synchronization (N1).

Table 7.2.

Effect Sizes (d) and Significance Levels of Hypothesis Tests, H3

<u>Norm</u>	<u>Study 1 Set 1</u>	<u>Study 1 Set 2</u>	<u>Study 3 Set 1</u>	<u>Study 3 Set 2</u>	<u>Study 4</u>
N2	0.59*	1.70***	1.04***	1.66***	1.88***
N3	0.90**	1.31***	0.89***	1.18***	1.56***
N4	0.93**	0.87**	0.81***	1.42***	1.45***
N5	0.54	0.49 [^]	0.49	0.78**	1.04*** [^]
N6	-0.07 [^]	0.97**	0.63*	1.25***	1.52***
N7	-0.67* [^]	0.93**	1.10***	0.67*	0.62*
N8	0.70*** [^]	0.90***	0.61***	0.97***	2.03***
N9	0.31	1.77***	0.59***	2.00***	2.06***
N10	-0.22 [^]	0.88***	0.32	0.87***	1.31***
N11	0.37 [^]	1.18***	0.81*** [^]	1.10***	0.61*
N12	1.55***	0.64**	2.05***	1.29***	0.94***
N13	1.44***	1.71***	0.98***	2.02***	1.50***
N14	0.59**	1.45***	0.85***	1.07***	1.24***
N15	0.14	0.85***	0.19	0.30	0.45 [^]
N16	-0.09 [^]	0.74***	0.59***	0.34	0.13

Notes. [^] denotes that the manipulation was not effective at $p < .05$. N2 refers to allowing the

other arguer to advance arguments. N3 refers to responding to the opponent's argument. N4

refers to only using argumentative defenses of positions. N5 refers to not prematurely claiming

victory. N6 refers to conceding if disproven. N7 refers to showing reasonable relational

priorities. N8 refers to not retracting commitments. N9 refers to not prematurely adopting a

position. N10 refers to avoiding circularity. N11 refers to projecting a non-negative identity. N12

refers to not contradicting or condemning an identity. N13 refers to therapeutic listening. N14

refers to individually and dyadically appropriate play. N15 refers to nonseriousness. N16 refers to responding playfully.

* $p < .05$

** $p < .01$

*** $p < .001$

Again, the results here are very positive for H3: of the 65 tests on effective manipulations, all but nine were significant at $p < .05$, and 43 cleared the $p < .001$ threshold. Only four norms were not associated with reductions in N1 in every (successfully manipulated) violation condition: norms 5, 9, 15, and 16. Every norm had at least one $p < .001$ result, as well. The average effect size d was again quite strong, averaging right around 1.00 overall, with all norms except nonseriousness and playful response exceeding an average of $d = .6$ across the various tests in Studies 1, 3, and 4.

In light of these significant results, it is worth pausing to consider what sort of “meta-norm” N1 actually is. In theorizing it as a meta-norm, I posited that arguments would be optimized if both participants had a common perspective on what sort of argument they were engaged in. This is a very specific application of Brockriede’s (1975) general idea that good arguing requires that the participants share a frame of reference, which for him included things like language and cultural values. Research has suggested that conversational synchronization is of considerable importance to conversations going well (e.g., Cappella & Planalp, 1981; Garrod & Pickering, 2009). But does this mean that all of the norms are simply specifications of it, and that N1 captures some sort of global notion of normativity?

Looking at the descriptions of the norms, it does not seem so. Some of the norms do comment directly on frame synchronization; in particular, each non-persuasion domain has one norm that essentially amounts to “this is not persuasion; do not treat it as such.” Taking a

position too early in inquiry, contradicting an identity argument, or getting serious in a playful exchange directly imply a sync problem. We might also say that violating N2 and not letting the other person advance an argument is an indication of a dominance attempt, not a persuasion one. But these are only four of the fifteen norms, and several others do not imply the same sort of clash in goals. One can go back on a commitment while still thinking an inquiry is in progress, one can use an unreasoned defense in a persuasion argument and still be attempting to persuade, and one can certainly project a contextually negative identity while being in an identity frame, for instance. H3 was hypothesized in these cases as well, but on the idea that violations would imply either a lack of knowledge of or caring for the rules of the given domain, producing a significant but perhaps milder effect than that of the norms that directly imply sync issues. The data do indeed (loosely) fall in such a pattern. So it would be wrong to conclude that all the other norms are merely specifications of N1, even if several of them can reasonably be seen that way.

Still, the norms that do not comment directly on synchronization have their own themes. We might group them into two in particular: rudeness and soundness. Not letting the other person speak, showing an inappropriate relational priority, not engaging in therapeutic listening, or not making a dyadically appropriate move fall into the “rudeness” category, while unreasoned defenses, circular arguments, and commitment retractions fall into the “lack of soundness” category. Some norms may cross multiple themes: not letting the other person speak is both asynchronized and rude, as is contradicting or condemning an identity.

It may be the case that these three themes—perceptions of synchronization, rudeness/consideration, and soundness/logicality—are the summary assessments arguers make of arguments. Thus they may be the drivers of the perceptions examined in this project—argument quality, pleasantness, goal attainment, quarrel likelihood, and so forth. The domain-specific

norms thus detail exactly *how* these three general expectations in each domain can get violated, with persuasion and inquiry being more detailed in the soundness category and identity and play being more detailed in the rudeness and synchronization categories. Future research should investigate this judgment system directly.

Perceptual Reach of Norm Violations

Conventional validity of the norms was not the only key set of results in this project. A second persistent finding was that violations often exhibited significant *perceptual reach*—that is, even though the manipulations present in the vignettes only operationalized a single violation at a time, the violation conditions were usually associated with reductions in the perceptions of multiple norms. This tendency was especially pronounced in the persuasion domain, where violations often reached out to the perceptions of all six norms (including the personal-issue N7, despite most of the vignettes dealing with public issues).

I have proposed some explanations for this phenomenon, which the theory did not predict (I had no particular expectations regarding it at the outset of the project), over the course of the preceding chapters. Some of it may be due to slight operational overlap in the norm subscales and/or manipulations, some may be due to the decontextualized nature of the vignettes (for more on this, see “Limitations” later in this chapter), and perhaps most notably, it may reflect a summary judgment of “bad faith” after a violation is committed, in which it is assumed that the arguer is willing to commit other violations as well.

The three-factor idea above—synchronization, consideration, and soundness—may further specify the way these “faith” judgments may work. If an individual violates N9 in an inquiry by taking a position too early, then the individual is perceived as out of sync with the inquiry, but this does not result in wide perceptual reach because N9 is the only inquiry norm

that deals primarily with sync. Conversely, many of the persuasion norms have an element of consideration to them—letting the other person speak, responding to the opposing point of view accurately, not prematurely claiming victory, showing appropriate relational priorities, etc. Thus, many of the violations in this domain constitute an element of rudeness. Alternatively, these violations may also be seen in some cases as dominance attempts, in which case the arguer may be willing to break any norm to win.

Thus, better understanding how the norm perceptions funnel to perceptual judgments of the arguer may clarify the perceptual reach findings, especially those in the persuasion domain. It is worth noting here that in the multiple regression frameworks in Study 3 (see Table 5.6), all six persuasion norms were useful predictors of argument quality perceptions, and four each were significant predictors of pleasantness and synchronization, so it may be more complicated than a sync/rudeness/soundness framework. However, in the Study 4 regressions on goal attainment, future willingness to argue, and quarrel probability (see Table 6.6), this mostly collapsed to a two-predictor model of N2 and N7, which both again heavily imply notions of rudeness.

Testing possible explanations of perceptual reach, and how judgments of particular norms align to produce judgments of overall *normativity*, should be a priority in this course of research going forward. It might also be interesting to learn whether perceptual reach on argument judgments might extend to other evaluations, such as arguer integrity, wisdom, and good faith, for instance.

Effects of Norm Violations

The second major question posed in Chapter 2 was: what sort of effects do norm violations have? I posited three types of outcomes for investigation: the notion of “goal attainment,” which itself contains both a content level and a relational level, the future

willingness to argue with a person, and the likelihood the argument escalates into an eristic exchange. Though H7-H10 offered some specifications as to which effects would show up most strongly in different domains, the Theory of Argumentative Norms holds that violations will generally lead to a worsening of all of these outcomes.

Hypotheses 4, 5, and 6 thus proposed that norm violations would lead to worsening of goal attainment (both content and relational), future willingness to argue, and quarrel probability, respectively. These predictions were tested in both Study 1 and Study 4. An aggregation of the effect sizes in each of these variables across the two studies is presented in Table 7.3. Readers will recall that N2-N7 bear on persuasion dialogues, N8-N10 on inquiry, N11-13 on identity, and N14-16 on play.

Table 7.3.
Effect Sizes (d) and Significance Levels of Hypothesis Tests, H4-H6

Norm	H4a (Content Goal Attainment)			H4b (Relational Goal Attainment)			H5 (Future Willingness to Argue)			H6 (Quarrel Probability)		
	Study 1 Set 1	Study 1 Set 2	Study 4	Study 1 Set 1	Study 1 Set 2	Study 4	Study 1 Set 1	Study 1 Set 2	Study 4	Study 1 Set 1	Study 1 Set 2	Study 4
N2	0.50	0.93**	1.32***	0.77**	2.01***	1.79***	0.71*	1.69***	1.28***	-0.57*	-2.09***	-1.59***
N3	0.89**	0.74*	1.91***	0.37	1.08***	1.78***	0.22	0.76*	1.69***	-0.01	-1.25***	-1.18***
N4	0.32	0.81*	-0.39	0.55	1.19***	-0.37	0.70**	0.84**	-0.39	-0.44	-1.30***	-1.17***
N5	0.06	-0.35^	0.51^	0.19	0.25^	0.54^	0.52	-0.11^	0.35^	-0.21	0.06^	-0.41^
N6	0.26^	0.70*	1.37***	0.01^	1.03**	1.51***	0.20^	1.13***	1.19***	0.03^	-1.22***	-1.27***
N7	0.19^	0.48	0.42	-0.30^	1.37***	0.38	0.17^	1.18***	0.20	0.09^	-1.23***	-0.50
N8	0.15^	1.85***	1.49***	0.28^	1.05***	2.14***	0.24^	0.83***	1.51***	-0.30^	-1.39***	-1.48***
N9	0.14	1.35***	1.13***	0.57**	1.43***	1.32***	0.61**	1.25***	0.82***	-0.51*	-1.64***	-1.18***
N10	-0.39^	0.94***	0.79*	-0.20^	0.90***	1.63***	0.12^	0.65**	1.24***	-0.05^	-0.08***	-1.44***
N11	0.63**^	0.83***	1.11***	0.77***^	1.74***	1.46***	0.77***^	1.03***	0.50	-0.74***^	-1.19***	-0.22
N12	1.30***	1.35***	1.67***	2.03***	1.32***	1.08***	1.65***	1.08***	0.67*	-1.73***	-1.13***	-0.42
N13	1.81***	1.82***	2.01***	2.10***	1.85***	1.82***	2.05***	1.70***	1.54***	-1.40***	-1.16***	-0.61
N14	-0.02	1.16***	1.46***	0.58**	1.30***	1.60***	0.35	0.92***	1.08***	-0.24	-1.52***	-1.17***
N15	0.10	0.26	0.47^	0.33	0.73***	0.67^	0.22	0.43*	0.41^	-0.06	-0.90***	-0.52^
N16	0.34^	0.61**	0.40	-0.04^	0.65**	0.69**	0.17^	0.53*	0.55*	0.10^	-0.74***	-0.61*

Notes. ^ denotes that the manipulation was not effective at $p < .05$. N2 refers to allowing the other arguer to advance arguments. N3 refers to

responding to the opponent's argument. N4 refers to only using argumentative defenses of positions. N5 refers to not prematurely claiming

victory. N6 refers to conceding if disproven. N7 refers to showing reasonable relational priorities. N8 refers to not retracting commitments. N9

refers to not prematurely adopting a position. N10 refers to avoiding circularity. N11 refers to projecting a non-negative identity. N12 refers to

not contradicting or condemning an identity. N13 refers to therapeutic listening. N14 refers to individually and dyadically appropriate play. N15

refers to nonseriousness. N16 refers to responding playfully.

* $p < .05$

** $p < .01$
 *** $p < .001$

With each of these four outcome variables, there were 36 viable tests (i.e., on effective manipulations). Of these, 25 returned $p < .05$ results on content goal attainment (18 were below .001), 30 returned $p < .05$ results on relational goal attainment (24 below than .001), 30 returned $p < .05$ results on future willingness to argue (19 were less than .001), and 28 returned $p < .05$ results on quarrel probability (with 24 less than .001). These results vastly exceed what would be expected by chance, and indicate support of the hypotheses in a clear majority of cases, with H4a being somewhat less supported than H4b, H5, and H6.

As with H1-H3, we see particularly strong support in the inquiry and identity domains, with a preponderance of $|d| > 1.00$, $p < .001$ effects on all three norms within both. Conversely, the results in play are more mixed. As with H1-H3, N15 in particular seems to have a limited impact on these outcome judgments (effect sizes below $|0.5|$ on all outcomes except relational goal attainment). Perhaps more surprisingly, the effects of persuasion violations (particularly N4, N5, and N7) are notably more mixed than those of inquiry or identity, with a few null results and most effects coming in below $d = |1.0|$. N5 violation conditions (premature claims of victory) were particularly devoid of significant results, although this is compromised by the ineffectiveness of the manipulations in the two studies where these outcomes were examined (both manipulations were solid in Study 3, but that does not help us here, since Study 3 did not utilize these outcome variables, only testing H1-H3).

The outcomes here give us a picture of how normative or non-normative behavior affects argumentative perceptions at various points in time. The variables measured in H1-H3, argument quality, pleasantness, and frame synchronization, are backward-looking; they ask “How good/pleasant/synchronized has this argument been so far?” Quarrel probability looks forward to

how the argument will continue before it ends: will it escalate at some future point? Goal attainment perceptions ask how well the goals of the argument will be attained when the episode has concluded. Finally, future willingness to argue asks about the lingering effects the argument may bring into future relational life. The results across this project indicate that, in most cases, norm violations have negative effects projected across time, and in most of these respects.

The generally theory-supportive results here are further bolstered by the multiple regression analyses, which often showed the norm judgments explaining over half the variance in each of the outcome variables, almost always in a framework that incorporated at least two of the norms as statistically significant predictors (see Tables 5.6, 5.9, 5.12, 5.15, 6.6, 6.9, 6.12, and 6.15). This was true even in the play context. It is worth emphasizing the utility of the norms as of particular predictive importance, especially since the vignettes are constructed in a way that assumes positive goal valence, at least in most cases. Goal valence—whether an arguer is pursuing a positive goal (e.g., understanding another person, striking up a friendship) or a negative one (e.g., relational termination or distancing) was seen as an especially important predictor of argumentative outcomes (particularly dealing with resolvability of conflicts) by Worley and Samp (2016). The emergence of the norms as important predictors *within* a particular valence (the positive one) is notable. This connects back into the notion of good and bad faith: perhaps norm violations lead to a questioning of goal valence. This may be especially true in the violations that carry a strong element of rudeness. Much as the violations that directly denote a sync issue lead to the feeling of “talking past” the other person or “having two separate conversations,” those that are behaviorally inappropriate may lead to questions about whether the person is looking for a positive resolution to the episode.

The outcomes that were most consistently associated with norm violations were lowering of relational goal attainment (which also had the highest average *d* value, above 1.1, while the other three variables all averaged *ds* of around .9) and lowering of future willingness to argue—both relationally-oriented concerns. This further sheds light on the utility of argumentative norms as a schema for how arguments reach their goals: sound argumentation is only one of the three features of the norms (the others being synchronization and rudeness, as noted above), whereas most evaluative frameworks of argument (e.g., acceptability/relevance/sufficiency, informal fallacies) have chiefly focused on concerns of soundness. They are not necessarily completely ignorant of other concerns—Walton (1998) is clearly aware of something akin to my notion of frame synchronization, and any informal logician would likely acknowledge the rudeness of *ad hominem* fallacies—but sound argumentation has naturally taken a central role in most descriptions of appropriate argumentative behavior.

A notable exception to this paradigm is that of Gilbert (1997). He notes that there are four “modes” from which people argue, only one being “logical.” The other three he termed “emotional,” “visceral,” and “kisceral.” Modes, as described by Gilbert, are characterized by the features of a particular argument₁ (i.e., claim, warrant, backing, etc.) all stemming from the same sort of argumentative place (logic, emotions, physicality, or intuition, respectively). For instance, a student with an 88.5% in a class at the end of a semester may plead for an A grade with the professor, offering some sort of reason like “It would mean so much to me to get the A,” “It would help me get into grad school,” or “My parents will be really upset with this.” None of these reasons attempt to make a logical justification for the grade change (which one could, e.g., “I’ve improved throughout the semester” or “I only did poorly on the first exam, which happened right after I went through a bad breakup”). Physical (“visceral” in Gilbert’s terminology) cues

also can serve as argumentative: when I was young, anytime my father thought my mother and I were taking too long to get ready for something, he would loudly proclaim “I’ll be in the car” and depart for the garage. Intuitive (or “kisceral,” per Gilbert) arguments are also not uncommon: while watching a sporting event, someone might say “I feel like we’re going to see a long pass here” or some such prediction, based on nothing other than “gut instinct.” Though all of these non-“logical” examples may be of varying persuasive quality, the same is true of “logical” arguments. Gilbert in fact notes that arguers may choose the mode they feel may prove most persuasive or expressive.

Gilbert’s project and mine have some clear differences—his overall notion of “coalescent argumentation” is still largely centered around the utility argument, and I have not sought to incorporate the modes directly into this course of research, among other differences. Nevertheless, his claim that argumentative resolutions are not optimized solely by focusing on logically sound arguments₁ is one that is shared by the Theory of Argumentative Norms, many of which (e.g., not taking a position too early, therapeutic listening, dyadically appropriate play) make no comment on the logical qualities of the argument₁ at all. This is particularly true in the identity and play domains, where the logical soundness of the argument₁ is often either not in question (in identity) or unimportant and sometimes even counterproductive (in play). Some of the norms (e.g., showing reasonable relational priorities, listening therapeutically) also hint at the sort of open, multimodal perception favored by Gilbert, and the idea of diagnosing what the other arguer is trying to do (in some way) is central to both coalescent arguing and the Theory of Argumentative Norms.

The strong explanatory utility of the argumentative norms with regard to both relational goal attainment and future willingness to argue underscores the importance of incorporating some sort of extra-logical mechanism in evaluating interpersonal arguments.

Comparative Differences in Violations

The final concern of this project was that of *differences* in argumentative effects. H1-H6 specified the expectation that all norm violations would lead to some sort of negative perception with regard to the seven outcome variables—argument quality, pleasantness, frame synchronization, content goal attainment, relational goal attainment, future willingness to argue, and quarrel probability. But the violations all differ—they occur in different domains, for one, and they each have a different sort of character (for instance, the sync/rudeness/soundness framework discussed earlier in the chapter). Thus, I wanted to know whether there were obvious differences in the fallout of the violations. Are some more severe than others? Are some more prone to damaging a particular level of the argument (content or relational)?

H7-H10 specified particular differences I expected to find between argumentative domains. These hypotheses were predicated on the notion that content concerns lie at the heart of utility arguments (persuasion and inquiry) and relational concerns (self-disclosure and bonding) lie at the heart of identity and play arguments. Thus, I expected persuasion and inquiry violations, which tend to deal more with *soundness of the argument*₁, to lead to a particularly strong reduction in content goal attainment, while identity and play violations, which tend to concentrate more in rudeness or sync problems, would hurt more on the other variables—relational goal attainment, future willingness to argue, and likelihood of escalation. Overall sample-weighted effect sizes on each of these outcome variables in each domain is presented in

Table 7.4, which combines results from Studies 1 and 4 originally reported in Tables 3.11-3.14, 6.5, 6.8, 6.11, and 6.14.

Table 7.4.

Sample-Weighted Effect Sizes (d) of Outcome Variables By Domain

<u>Domain</u>	<u>Content Goal Attainment</u>	<u>Relational Goal Attainment</u>	<u>Future Willingness to Argue</u>	<u>Quarrel Probability</u>
Persuasion	0.64	0.90	0.81	-0.92
Inquiry	1.15	1.20	0.93	-1.01
Identity	1.33	1.61	1.19	-0.96
Play	0.50	0.77	0.54	-0.71

As I have noted earlier, the only one domain showed a notable difference in which level of goal attainment was impacted *at all*: play. Only three of the seven tests of play manipulations on content goal attainment achieved statistical significance, whereas all but one test on relational goal attainment achieved significance, indicating there may be some conditions in which play violations do not impact content goal attainment (the other domains impacted both levels with similar consistency). The difference in effect sizes (.27) on these two variables in play was also significant ($z = 2.50, p = .01$), but was essentially the same as identity (.28) and persuasion (.26), so it may simply be that participants felt that norm violations tended to move relational goal attainment slightly more forcefully than content goal attainment in most cases. Still, the play results did conform to the prediction: play violations were more impactful on the relational level.

I noted earlier in the chapter how the notion of “argument quality” does not hold the same meaning in (superficial) play as it does in other argumentative contexts. I do not necessarily think the notion of content goal attainment is similarly altered in play: there still is a need for the other person to listen to the argument₁ and decode it in the spirit it was intended, and these projects both assume some sort of proposition-to-proposition coherence. Thus, the relational focus of superficial play arguments is borne out in the data of the project, but persuasion did not show the hypothesized content-level focus, nor did inquiry. Identity arguments did also show a

slight leaning toward the relational level ($z = 2.36, p = .02$), but violations clearly impacted both levels quite profoundly in that domain.

H8 and H9 predicted that the relational foci of identity and play arguments would mean that violations in these domains would more profoundly affect future willingness to argue and quarrel probability than violations in utility arguments, and this did not seem to be the case. The four domains clustered together quite tightly on effect sizes on quarrel probability, and though identity violations did cause slightly larger effect sizes on future willingness to argue (z comparing identity to persuasion = 3.91, $p < .001$, z comparing identity to inquiry = 2.52, $p = .01$), play violations caused the lowest, so the overall difference between utility arguments and non-utility arguments was essentially zero (both averaged $d = .87$). Though the relational focus in identity and play arguments may make violations especially discouraging, this may be moderated by the considerable stakes of utility arguments, which push arguers to fight if they fall short of their utilitarian goals. The lower baseline (i.e., normative condition) ratings of persuasion arguments, in particular, suggest that ordinary arguers see escalation and frustration as clear possibilities in even well-conducted persuasive dialogues, whereas they do not seem to be on the horizon in identity episodes. Thus, these hypotheses may have failed to account for the stakes and conflict that exist in utility frameworks. The relational focus of identity and play may counteract this and make violations in those domains *similarly* impact future willingness to argue and escalation, but they do not *supersede* the conflict potential in utility situations.

Thus, overall, the domains did not exhibit many differences in effect sizes or patterns. This was also the case in the analyses of real-world arguments in Study 4, which found problematic persuasion arguments to involve slightly more escalation than problematic arguments in other domains, but overall found the effects of problematic arguments to be similar.

The analyses of these arguments also tested the research question, which asked whether particular *norms* differed from each other in magnitudes and/or types of effects. Below, I will briefly discuss what the data have showed in these two aspects, not only in the real-world episodes, but also in the vignette analyses.

Magnitude

Fundamentally, it is hard to separate the effect sizes on the various outcomes (argument quality, pleasantness, goal attainment, etc.) from the effect sizes on the norm perceptions themselves. For instance, in Study 3, violations of N13 (therapeutic listening) produced effect sizes of $d = 2.85$ and 2.12 on pleasantness perceptions, whereas violations of N5 (avoiding premature claims of proof) produced effect sizes of only 0.79 and 0.94 . But the effect sizes of the N13 manipulation itself exceeded 3.0 in both cases, whereas the effect sizes of the N5 manipulations were 1.16 and 1.25 . Thus, in both cases, the effect size on pleasantness was about $\frac{3}{4}$ of the effect size on the manipulated norm. The effect size for a manipulation check is not necessarily an indication of how large a downstream effect can be, but it is often relevant (Ejelöv & Luke, 2020).

It is thus tempting to discard any notion of the vignette results providing information on differing magnitudes of effects, because I cannot guarantee the strength of the manipulations is constant. It may be that the vignettes employ especially striking violations of N13 and fairly weak violations of N5, for instance. Still, though this is an obvious caveat, it is not as though any of the vignette manipulations were so strong as to be unrealistic (since all scored above the neutral midpoint on perceptions of typicality), and the manipulations being perceived at varying levels of strength does not necessarily invalidate any analysis of their effects. Though it is possible that, e.g., I used stronger manipulations of N13 than N5, it is also possible that an

“average” N13 manipulation is significantly more noticeable by an ordinary arguer than an “average” N5 violation. In this sense, the differing effect sizes of the norm perceptions are themselves interesting results.

To that end, there were a few norms that were registered particularly strongly, and they (unsurprisingly) showed some of the strongest effect sizes on the dependent variables. Violating N2 (not allowing the other person to advance arguments), N12 (identity contradiction or condemnation), and N13 (non-therapeutic listening) were often associated with effect sizes of $d > 2.00$ on the manipulated norms themselves, and each showed quite consistent and strong patterns of effects on the dependent variables (typically $d > 1.0$). Conversely, N5 (prematurely claiming victory) and especially N15 (seriousness) were sometimes manipulated ineffectively, and even their effective manipulations had noticeably lower effect sizes, typically $d = 1.25$ or below. These two norms also were associated with the most inconsistent patterns of effects on the dependent variables. Another set of norm violations, namely N6 (not retracting after a failed defense), N8 (commitment retraction), N10 (circular argument), and N11 (negative identity), showed some situational characteristics where they were hard to manipulate effectively, or at least strongly.

Perhaps this is simply an artifact of the vignette specificities, and I do not propose any firm conclusions here. However, it is interesting that these categories largely map onto the frequencies of violations in the real-world arguments in Study 4. In these arguments, N11 violations were less common than N12 or N13 violations in identity arguments, N5 and N6 violations were some of the least common persuasion violations, N15 violations were the least common of the three play violations, and N8 and N10 violations were less common than N9 violations in inquiry. Thus, the more common violations in the real-world episodes were almost

always those that were detected more strongly in the vignettes. The only deviation from this pattern is that N2 violations were quite infrequent despite their perceived severity. Thus, perhaps the frequency that these violations occur in real life better attunes arguers to their presence and stirs clearer negative associations with outcomes. Alternatively, perhaps these violations only function as problematic in some contexts (e.g., N8 and N10 violations being less problematic in low-information inquiries), and ordinary arguers build this into their perceptions in some way.

Of course, the between-norm comparisons in the real-world episodes did not reveal many differences in effects, which is a further note of caution in reading too far into the differing magnitudes in the vignette analyses. There was perhaps some suggestion that N6 violations were less harmful than the other persuasion norms, but it was hard to conclude much beyond that, especially since the sample sizes outside of the persuasion domain were modest. Still, the data discussed here do provide some interesting starting points for future investigations.

Effect Patterns

The research question about differential effects also wondered whether different norm violations would exhibit different effect patterns: would some heavily influence pleasantness but not argument quality, or quarrel probability but not future willingness to argue? There was, overall, very little in the way of clear differentiation that emerged in this regard, either in the vignette analyses or the real-world episodes. What specific effect patterns tended to emerge were largely the result of domain-level effects, like the relational focus of play or lower level of conflict in identity. This may be further evidence that actual judgments collapse into more of a condensed framework (e.g., soundness, synchronization, consideration), that is more generalized to the domain. Ordinary arguers do not seem to take particular violations as harbingers of specific effect patterns; in fact, the findings with regard to perceptual reach indicate that their

judgments in many areas are quite intertwined with each other. Again, this reflects the actual intertwined nature of argument violations: in the real-world episodes, the majority of problematic arguments contained multiple violations, often from both arguers. Thus, when one violation is committed, arguers seem to sense fairly equal effects on a number of negative possibilities, regardless of what the initiating violation is.

Summary of Evidential Support for the Theory of Argumentative Norms

Taking all of these matters together, it is possible to summarize the statistical support and non-support for the basic tenets of the Theory of Argumentative Norms. Overall, the central claim of the theory—that N1-N16 are actually held by ordinary arguers—was strongly supported, as norm violations typically caused fairly strong effects on the perceived pleasantness of an argument, as well as perceptions of its quality. In general, these momentary perceptions also extended to worse feelings of how the argument would resolve, most pointedly with respect to relational goal attainment, but also regarding future willingness to argue with the violating arguer, likelihood of escalation, and content goal attainment. However, the final group of hypotheses and the research question, which posited various domains or situations in which certain effects would be felt more strongly, were typically not supported by the data here, which instead oriented toward a more uniform effect on all of the variables in most cases.

Limitations

Despite the strength and clarity of many of the findings that this project provided, the studies undertaken here certainly have several limitations. Four that I will discuss in particular are the generalizability from the stimulus vignettes, the statistical power of each study, the operationalization of the norm scales, and the large number of tests and associated propensity for Type I error.

To a large extent, these limitations stem from the difficulties of testing the entire theory simultaneously. Testing every norm at once required the creation of, at minimum, twenty different conditions in any particular study, which impedes statistical power, raises the probability of Type I error, and also spreads things somewhat thin when it comes to understanding the nuances of any particular norm. Prioritizing a full, if somewhat general, test of the theory over more specific investigations into particular norms was the correct choice, I believe, because a general test shows us whether the norms framework is a useful one in the first place. Still, in aiming for a broad test of whether the norms are normative and related to argumentative outcomes, we lose the ability to focus on some particular argumentative contexts or conduct more specialized investigations of particular norms.

In discussing the limitations of this research, I will focus on six particular issues. The first—the one I will spend the bulk of this section discussing—is the limitations on generalizing from the vignettes used in the studies. After discussing some of the blind spots of the vignettes and their framework, I will move on to address the operationalization of norm judgments, statistical power, possibility of Type I error, simultaneous data collection, and Western-centric bias.

Generalizability from Stimuli

Topical Bounds

The vignettes used in this study were constructed with several principles in mind, as detailed in Chapter 3: they mostly concerned casual topics, they were the sorts of topics that might be discussed in a college setting, and they did not include resolutions so as not to bias judgments. And there was an effort to generalize beyond a single topic, especially for H1-H3; in

Studies 1 and 3, two topics per domain were used. Study 4 used only one topic per domain but also solicited real-life descriptions of problematic arguments.

Using *only* two topics significantly limits the amount we can generalize from the vignettes (Jackson & Jacobs, 1983). There are many variables that may impact the context of arguments in any particular domain, and the vignettes do not even begin to test all the permutations of these variables. For instance, though I did separate public and personal-issue persuasion into separate vignette categories, one could also wonder if public and personal-issue inquiries or playful arguments have notable normative variation (both vignette sets include personal-issue inquiries and public play attempts). There are many other variables we could think of: relationship type, seriality, cultural context, social vs. personal identity, difference in topical knowledge among the two arguers, etc.

Particularly illustrative of the potential dichotomies that may arise is the distinction between low-information and high-information inquiries that I discussed in Chapter 3, which was not an intentional difference in topic choice but nevertheless seemed to impact both norm and outcome judgments. Norm violations in the high-information vignette set (where two siblings attempted to work out good presents to buy their mother) were more noticeable and problematic than those in the low-information vignette set (where two friends tried to figure out which class they wanted to take). There could be many other contextual variables of this sort that impact perceptions and/or effects of violations in any of the four domains, and the vignettes do not even begin to account for all of these possibilities. For instance, both play vignette sets were *public intergroup superficial play*.

The choice of casual contexts made sense for this project. As noted in Chapter 3, the theory is supposed to apply to all ordinary arguments, not just those that are highly controversial

and have a high chance of escalating into quarrelling turmoil. But still, with the exception of the qualitative coding in Study 4 (which ultimately did little to clarify the theory's positions), the testing thus *only* concerned fairly casual topics with which neither the hypothetical arguers nor the participants had a particularly vested interest (save for possibly the personal persuasion vignettes, which were a bit more heated, if still reasonably navigable). Thus, we do not get a lot of information on how violations play out in topical contexts that are more prone to escalation (intergroup threat, more utility derived from persuasion, etc.). Nor can we be sure that the present conclusions extend to workplace or public sphere arguments, although both of these can be tested in future work.

Casual Topics

As discussed in Chapter 3, the topics chosen for the vignettes, aside from perhaps the personal-issue persuasion sets, were quite casual in nature. This was done for a variety of reasons, primarily to avoid biasing participants for or against the argument by activating a salient group identity (e.g., a political affiliation) and to ensure that the argumentative norms matter in everyday, casual contexts and not solely in controversial, high-stakes arguments.

However, in this project, I did not directly test *how* the norms apply to these more high-stakes, intense argumentative contexts. To be sure, a transgender teenager coming out to their LGBTQ+-skeptical parents is a very different sort of situation from friends discussing their music tastes or hobbies, and though I believe the argumentative norms do provide some theoretical basis for understanding how both of these examples work, I have mostly only tested the latter sort. I did collect data on higher-stakes arguments in this project—many of the free-response arguments participants submitted in Study 4 were quite weighty—and those data seem to indicate that norm violations of some sort often are in play when they go wrong, but they do

not provide as rich an account of the norm-to-outcome relationship in these cases as the vignette-based analyses do.

Lack of Context

The vignettes, though consistently perceived as relatively typical interpersonal arguments by the participants, *are* artificial stimuli, carefully manipulated into certain forms and designed with particular principles in mind. They lacked context for good reason: to prevent different people reading different contextual understandings into them or attending to aspects irrelevant to the argument. But real-life arguments certainly come with many layers of context that participants do not get in reading the vignettes. They didn't know (in most of the vignette sets) what the precise nature of the relationship was between the arguers, whether this was a serial argument, whether both were acting as they normally do, what knowledge each of them had about the topic being discussed, and in some cases, *why* the topic was being discussed at all.

The vignettes were quite short. Typically, in the violation conditions, the non-normative arguer behaved normatively for two or three turns, making small talk, stating a preliminary claim, or doing otherwise typical introductory argumentative behavior. Then, the arguer violated a norm for three turns or so, and the vignette ended. It is not as though, in those first few turns of normativity, the hypothetical arguer clearly demonstrated a commitment to all of the norms he or she did *not* violate. This may be why we often see significant perceptual reach in the violation conditions: sure, only one norm was *directly* violated, but why should we expect the arguer, having violated that norm fairly quickly, to be respecting any norms at all?

Thus, though I discussed in Chapter 5 how the perceptual reach findings may reflect a lack of cognitive differentiation regarding argumentative terminology, it may simply be that the vignettes, intentionally devoid of context, give participants no reason to not assume that arguers

who violate a particular norm will not also violate all norms that have some conceptual association with it. It is possible that when presented with more contextualized arguments, participants may be able to better localize their judgments of violations to individual norms.

Operationalization of Norms

Overall, the creation of new measures for this research has been successful—the scales proved reliable, and the vignettes were perceived as realistic and usually produced statistically significant manipulations. However, some of the argumentative norms are easier operationalized than others, because some (e.g., contradicting an identity, letting the other person talk) are more directly understood by ordinary arguers than others (e.g., therapeutic listening, circular arguments). Thus, some of the norm subscales are made up of items that are a bit more general than their actual concept (most notably the circular argument scale), some are largely made up of items that are more specific than the construct (e.g., therapeutic listening), and others are more easily able to attain precise construct validity. While all of these measures are sufficient for determining manipulation effects, as noted in Chapter 5, they may have some drawbacks in multiple regression frameworks as a result of this variance in specificity.

Power

Adequately powering this research has been a significant challenge. In the persuasion domain, Studies 1 and 3 required sixteen participants to take the survey just to get each vignette version rated once; for the other domains, eight participants were required. In Study 4, twelve participants were needed to get a single rating on each persuasion and inquiry vignette condition, and eight were needed to get a single rating on each play or identity vignette. As such, getting a sufficiently large sample to powerfully test differences between vignette conditions was difficult, especially in light of the slower response rate during the COVID-19 pandemic, when the two

main studies of the project were conducted. This was an especially large issue in Study 4, where it would have been better to have more real-world argumentative episodes to code, especially in the non-persuasion domains. It was hard to draw significant conclusions from the data provided (though enough was there to at least test particularly large effect sizes).

Thankfully, the domain most affected by the low power is persuasion, where the norms (save the personal-issue N7) have been well-theorized and there is some evidence for conventional validity already (van Eemeren et al., 2009). In the domains where this project made particularly novel contributions, a reasonable power level was attained if one takes the three large studies in combination. Still, I recognize that power is a significant limiting factor on a study-to-study basis, especially with regard to the persuasion domain.

Type I Error

As discussed in Chapter 3, the large number of tests conducted in Studies 1, 3, and 4 raises the possibility of significant numbers of Type I errors in the course of research. Each of these three studies involved between 200 and 400 tests, meaning random chance would likely produce between 12 and 20 results per study at the $p < .05$ level. However, those studies showed far more significant results than that, with each returning well over 100 such results. In the *t*-test analyses in Studies 3 and 4, for instance, over three-quarters of the *t*-tests were significant (177 of 216 in Study 3 and 126 of 168 in Study 4). For reasons detailed in Chapter 3, I did not employ a formal Bonferroni correction to address this, although I had an informal Type I error standard in mind when assessing results, particularly in the exploration of the research question with the qualitative data in Chapter 6.

Instead, I employed tests of hypotheses in multiple studies to arrive at more stable conclusions. Thus, I depended on finding patterns of findings, rather than isolated ones, and took

careful note whenever the evidence for some claim depended mainly on results where the p level was only .05. Consistent use of effect sizes to control my thinking was also a corrective to the possibility of being misled by random results, which one would expect to have just-barely-significant tests (as was true in many of the qualitative examinations in Chapter 6, and the trait variable multiple regressions in Studies 3 and 4) and therefore small effect sizes as a general matter. Nevertheless, there is a strong likelihood that a few of the theory-supportive results in any particular study only appeared by chance.

It is worth emphasizing, however, that Bonferroni corrections and other Type I error control procedures often are at their most useful when researchers have employed a design that involves many extraneous variables in hope of finding some sort of relationship (Nakagawa, 2004). The reason there were so many tests in the studies here was not that: it was primarily because of the large number of conditions, all of which were hypothesized to cause effects on (mostly correlated) dependent variables. In other words, I was often searching for “bunches” of results, whole bunches at a time, rather than just collecting isolated findings. Careful theoretical control is something of a defense against finding “surprising” results randomly. As Moran (2003) noted, Type I error control mechanisms like Bonferroni corrections artificially punish these sort of explorations in ways that are not practically or statistically helpful.

In the two cases in the course of research where I have taken more of a freeform approach—the trait variable regressions and Study 4’s qualitative exploration—I have been significantly more cautious about accepting $p < .01$ but $< .05$ results as significant findings and integrating them into the theory. This is because these are the two cases where the tests have primarily returned null results, and the frequency of $p < .05$ findings in these cases indeed dwindled down toward the five percent range, thus suggesting a significant portion of them were

due to chance. This does not mean the findings in these explorations are negligible, but I have viewed them with some skepticism in this project and will look to test them more directly and powerfully in the future. In any case, I concede that with such a detailed theory and therefore so many tests, managing the error landscape on both sides presented challenges. However, throughout the project I have attempted to make intelligent and balanced judgments about the degree to which each finding should be regarded as conclusive.

Simultaneous Data Collection

As discussed in Chapters 5 and 6, data from Studies 3 and 4 was collected concurrently. There were no restrictions on who could sign up for each study, so it is possible that the studies had some of the same participants, which could potentially bias the results of them in some way. However, participants who took both studies would be quite unlikely to see the same *vignette* twice, which significantly decreases the possible risks this data collection strategy poses.

Western-centrism

Though the University of Maryland is a diverse, multicultural institution, its students do not embody all of the world's culture in arguing. The data in this project largely confirm that the sixteen argumentative norms are a significant force in *their* argumentative world, which is largely a Western one. There was not a large enough sample of each particular ethnic identification to run any useful group comparisons between, e.g., people of East Asian descent and people of African descent in these studies, particularly because the numerous vignette conditions sliced the sample quite thinly to begin with. Still, interpersonal arguing has been shown to vary quite a bit across culture (see Hample, 2018, ch. 7), and the extent to which *these sixteen* norms govern interpersonal arguing in East Asia, Africa, etc. is not something this project

answers. However, the data here do show some promise for the idea that argumentative norms of *some sort* are likely important in interpersonal arguing in any culture.

Future Directions

As I noted earlier, a key factor in several of the limitations that arose in this course of research was the focus on testing the entirety of the norms framework, so that it could be determined whether this was a promising course of research at all. The data indeed support its utility and point toward future productive avenues of research, while the limitations of the testing discussed above also leave clear areas to investigate with more clarity in the future.

One may wonder, when looking at a theory that spells out sixteen particular constructs: why stop at sixteen? If there are so many of these things, maybe a more careful search will find more. Truthfully, over the four-plus years in which I have developed and tested the Theory of Argumentative Norms, no such “N17” or “N18” has occurred to me. That does not mean I rule out the possibility that the proposed sixteen-norm framework misses out on one or more expectations ordinary arguers carry with them into particular argumentative domains, but if there are such things, they have not become apparent in this course of research or any external thinking I have done regarding the issues within it.

Rather, when I think about what may be weak or unsatisfactory in the theory, I tend to lament more the lack of prescriptiveness it has, especially in the novel explorations of identity and play arguments. For instance, there is only a single norm regarding the *production* of identity arguments, and it simply states that the identity projection should not be a negative one. It offers no guidance about *how* to project an identity. The play norms are also fairly general.

Perhaps this is fine. Perhaps identity and play arguments, being more pleasant than persuasion in many cases, need fewer argument-normative guardrails to function appropriately.

Possibly, normal social expectations for any sort of encounter will serve. In any case, I tend to be more concerned that some of the norms are stretched thin in trying to cover a wide swath of argumentative behavior (like identity argument production or dyadically appropriate play), rather than the developed norms missing whole areas of argumentative perception and judgment.

Rather than looking for “N17,” we may need a “N11a” and “N11b,” which may either subdivide a fairly general norm into two parts or specify different sorts of manifestations of the norms that may apply in different contexts (e.g., low-information vs. high-information inquiries, public vs. personal play).

The future directions for this research break into two tracks. The first concerns expanding the investigations on norms and their effects both outward (into mixed discourse) and inward (accounting for more contextual variables). The second concerns using different stimuli and/or methods to better ascertain the mechanics of particular norms, their perceptions, and their effects.

Mixed Discourse

The Theory of Argumentative Norms, as presented in Chapter 2, stipulates sets of norms that become salient upon an individual’s entry into an argument with a particular goal. However, interpersonal argument is not always so neat. Walton (1998) notes the possibility of “mixed” dialogue types, in which two or more sorts of dialogues are combined together, or perhaps one serves as an aside in the context of another. Though Walton’s dialogue types are not analogous to Hample’s (2003) frames, which serve as the basis for the domain separations of this project, the idea of mixing domains nevertheless holds. In Chapter 6, for instance, I noted that what I termed *substantive playful argument* (Stoltz, 2019) is actually a hybrid of play and something else, probably persuasion or inquiry. People who formally debate things for fun or enjoy “playing devil’s advocate” are engaging in what looks like full-throated persuasion or inquiry,

but with a (often unspoken) context of enjoyment overtop of it. The mixing can be simultaneous, as when two goals are always in play, or sequential, as when the dialogue pursues one goal and then another.

Dual-purpose argument can also exist with identity and either persuasion or inquiry—identities can certainly become salient in these contexts, and often they serve as important *reasons* in personal-issue persuasion or inquiry (e.g., “You know how important it is for me to spend time with my parents, so we should spend Christmas with them”). People can sometimes realize that for their (persuasion or inquiry) argument to make sense, they have to share an identity to give context to their claim. Identity-oriented play is possible; the intergroup teasing exemplified in both vignette sets I used in the project actually flirts with such a context. Persuasion and inquiry themselves are on more of a continuum of cooperation and competition, so it is harder for them to be simultaneous, though they may at least be nested—i.e., to verify a point in a persuasion argument, both participants engage in inquiry for a moment.

How can such arguments feel synchronized? What norms apply in these “hybrid domains?” Should we expect the norms of both domains or just one—or does each arguer just have to follow one set of their choice at a time? Cionea (2011)’s work is relevant here. She proposed a framework in which close dyadic relationships involve a sort of dialogic preference convergence toward a synchronized “meta-dialogue.” The more context close friends, romantic partners, siblings, etc. have for the other person’s argumentative moves, the more they may be able to understand *how the other person might see a given shift as licit*. Hample (2018) notes that this sort of system has the effect of making violations sometimes *dyadically* specific (e.g., “In this house, we stop arguing when someone gets upset”). So, perhaps one way to get at the issue

of how hybrid domain norms work is to think of them in a relationally-specific context, though as Gilbert (1997) notes, this might come at the cost of generalizability.

Even without such a dyadically specific context, investigations into hybrid-domain arguments will be key to understanding how violations work in everyday discourse. Clearly, a key point of emphasis in such frameworks must be that of synchronization, and thus understanding how shifts are perceived as licit or illicit in various hybridized contexts. Even so, the other components of arguing certainly differ between domains—persuasion and play arguments, for instance, may have markedly different criteria for rudeness and soundness, so in a playful persuasion context, ascertaining what still constitutes rude or unsound arguing may be quite challenging even if the argument is synchronized. Perhaps specific hybrids themselves are defined by particular situational variables, which leads me to the next area of future research.

Situational Argument Variables

Much as we might look to integrate the norms into mixed discourse and better capture their utility throughout the flow of a “meta-dialogue,” we may also examine whether they retain their utility in particular contexts of each domain. As I noted earlier in the chapter, one of the limitations of this project is that, in limiting the stimuli to low-context vignettes on only two topics, we miss the chance to see how the norms work in a number of particular subtypes of each domain, like public-issue inquiry, serial play, or a persuasive attempt with a power differential.

Investigations into particular domains can look to incorporate several situational variables in an effort to better ascertain the consistency to which norm violations impede argumentative progress in various contexts, and any particular differences in how norms may manifest or function in these various contexts. Understanding situational differences within domains would also give some clues to the different sorts of features that may manifest in hybrid-domain

arguments, as mentioned above. However, not all situations are of equivalent interest, either in theoretical or applied terms. A first step would therefore be to decide what situations (and elements of situations) deserve pointed investigations. We found in Chapters 5 and 6 that individual differences variables were not very important to the Theory of Argumentative Norms, but situational considerations might be quite powerful. For example, it would seem easier to play superficially with a friend than your superior's boss at work, and so the norms might be more lax with a friend. Finally, as discussed earlier in the limitations of the project, and as elucidated by some of the episodes submitted by participants in Study 4, more direct investigations of high-stakes arguments in all domains should be prioritized.

Norm and Domain Differences, Redux (Now With Stakes?)

The major predictive failure of the Theory of Argumentative Norms was that of H7-H10, which predicted that persuasion and inquiry norm violations would cause more damage on the content level than the relational level, and that the reverse would be true for identity and play norm violations. Play seemed to follow this prediction to at least some extent, but the other three domains showed no such differentiation between levels. That does not mean the differentiation does not exist (though the project's results certainly cast doubt on its existence). But, upon review, I wonder if this result is more a failure of measurement than one of conceptualization. Attainment of content and relational goals may drop roughly equal *amounts* in persuasion, inquiry, and identity domains when a norm is violated: this much seems clear. But that does not mean these reductions are of equal *importance*. In persuasion and inquiry, failing to achieve the content goal often means failing to gain utility, which is the frame in which these dialogue types are situated, whereas identity arguments are often meant to self-disclose an identity for relational purposes. To put it another way, the stakes of utility arguments should often reside primarily on

the content level, and those of identity arguments on the relational level. There is some evidence to support this: for instance, personal topics (which identity arguments always are) were found to have more implications for relational satisfaction in Hample et al.'s (2016) investigation of argument stakes.

This notion of stakes may be the way forward here. Hample et al. (2016) did not examine differences in stakes across dialogue types or frames, but better understanding what arguers think is at stake in particular argumentative situations would allow for a significantly richer understanding of the impacts of norm violations. Stakes may vary not only across argumentative domains, but also across some of the subtypes discussed in the previous section (e.g., in public-issue persuasion, the intended goal is often merely attitude change, whereas in personal-issue persuasion, it is often to gain compliance to do some sort of favor, make a decision, or participate in an activity). Whether via stakes or some other conceptualization of “importance,” better understanding what arguers hope to get from particular types of arguments could be of considerable value to this course of research.

Other Stimuli and Qualitative Incorporation

The vignette-style analysis that has been the main methodology of this project certainly can be employed to investigate the above areas of interest. Hybrid-domain vignettes can be constructed, as can vignettes that operationalize particular features within a given domain. We can also ask participants what stakes they perceive in vignettes. All of these analyses, however, will run into the same limitations that I described earlier in the chapter: they (necessarily) lack context. One cannot easily impute, e.g., a serial context into a vignette, at least not in a way that will be clearly understood. The vignette analysis in this project has done a good job in providing a clear baseline picture for the sort of “default” normative expectations ordinary arguers have in

different domains; at this early stage, the lack of context is an asset. The further we progress, though, the more it becomes a hindrance.

Thus, finding ways to get at contextualized episodes is of considerable importance in this track of research. More investigations of the sort employed in Study 4, where participants submit descriptions of arguments they had, or perhaps diary studies, or perhaps incorporations of filmed episodes that are more contextualized and complete, or perhaps some form of controlled role-playing or experiential performance, will be essential in moving from the basic question of this project (“Do the norms matter?”) to more sophisticated concerns (e.g., “How do norms matter in serial play?”).

In particular, more qualitative sorts of analysis, where, regardless of the stimulus employed, participants are asked to more methodically track how their argumentative judgments are proceeding, will be of significant utility moving forward. This research project can break into two branches—one with vignettes, where we establish descriptive features of different meta-dialogues and sub-dialogues, and another where we trace how judgments actually form and evolve in the mind of the arguer.

Conclusion

Interpersonal arguing is a highly important social activity. Arguments in all four of the domains focused on in this project—persuasion, inquiry, identity, and play—are regular occurrences in the lives of ordinary arguers, and they can each lead to important outcomes. Arguments help arguers teach and learn from each other, make decisions, gain favors, and build and maintain important social relationships. Successful arguing allows arguers to reach these goals with relative regularity, while unsuccessful arguing thus increases the frustration of the arguer’s needs.

How interpersonal arguments reach or fail to reach their goals is thus a key element in how interpersonal communication functions at all. Since arguments do sometimes produce very positive results and other times end on extremely negative notes, understanding what elements push arguments, and arguers, toward positive or negative ends is of considerable value to the discipline of communication. If we saw an argument as a journey, we might understand norms as travel constraints and goals as destinations, but in fact the norms are in service of the goals and instantiate them at every behavioral moment.

The Theory of Argumentative Norms thus appears to make a significant contribution to the field. Across several quantitative tests, the domain-specific norms had significant explanatory power over perceptions of the qualities and outcomes of arguments, and explained a large portion of the variance in these dependent variables. Further, when asked to describe a problematic argument, participants (when describing the episode in any detail at all) always included at least one codable norm violation in their accounts.

In the timeline of quantitative research and theoretical development in the area of interpersonal arguing, scholars have often found distinctive contexts of argument. Hample (2003) noted the different argument frames, A. Johnson (2000) noted the difference between public and personal contexts, Trapp and Hoff (1985) brought seriality to our attention, Dai and Zhan (2020) realized that other people's personal issues were an additional extension of the public/personal divide, van Eemeren (2018, ch. 8) distinguished various institutionalized macro-contexts such as legal, academic, and medical argumentation, and so forth. Yet, as these additional contexts have been noted and described, with particular emphasis on what makes them somewhat different relative to public-debate-style persuasion, more work can be done on

understanding what conduct is deemed appropriate in these different settings, or how these contexts change the way at which arguers arrive at positive or negative results.

The Theory of Argumentative Norms does not integrate all of these contextual innovations, even in the realm of interpersonal arguing, but it does make some progress. It considers arguments delineated by goal, and shows how different goals map different expectations for conduct toward reaching the goal. In doing so, it offers particularly helpful empirical examinations of inquiries, identity arguments, and playful arguments, all of which have received fairly little quantitative investigation in prior research. The results in the inquiry and identity domains, in particular, were quite supportive of the theory and thus advance our understanding of how these particular domains of argument function in everyday discourse.

Just as the theory contributes significant knowledge, I also believe it has significant pedagogical value. Not only does it seem to have the sort of explanatory power that might merit attention in an argumentation curriculum, it also carries the benefit of being grounded in the sorts of judgments ordinary arguers make. Thus, the theory should be easily understood by students; rather than being comprised of novel concepts that require time to understand (like many of the informal fallacies, pragmadialectical rules, or dialogue types), it puts terminology to the sorts of evaluations and decisions ordinary arguers already are aware of, thus sharpening their cognitive differentiation in these areas. This project's support for the conventional validity of its constructs offers some proof that the ideas should be easily teachable. For instance, the notion of good or bad faith is prevalent in everyday discourse, especially on social media, but the argumentative norms give us clear tools to examine how judgments of good or bad faith might actually work, and perhaps discuss how they ought to work. Such close ties to these ordinary judgments make

application and retention of the theory relatively straightforward and immediately useful to students.

A particularly notable strength of the Theory of Argumentative Norms is how it offers significant explanatory utility over how arguments work without being totally centered on issues of argumentative soundness. With some exceptions (e.g., Gilbert, 1995), most schemes of argument evaluation have focused almost exclusively on what constitutes sound argumentation, or at least the avoidance of clearly *unsound* arguments. The Theory of Argumentative Norms incorporates some aspects of these (most notably the distillation of the pragmadialectical rules and the outgrowths of cumulateness from Walton (1998)), but is equally if not more focused on issues of synchronization and appropriateness. The findings in this project emphasize the importance of these aspects of arguing, especially in non-utility-oriented contexts. These are important dimensions of the experience of interpersonal arguing, and they merit more consistent incorporation into scholarship on how arguments work.

The investigations undertaken here are still somewhat preliminary. There is much more to do to better situate the argumentative norms within the contexts of real-world interpersonal arguments, investigating particular contexts more precisely. But what emerges most sharply from the studies is that *argumentative norms matter*. They appear to be clear forces at work in shaping argumentative perceptions in a number of dimensions at a number of temporal points. Orienting ourselves to norms as defining features of situationally-specific argumentative discourse will allow for a rich broadening of our understanding of how arguments reach or fail to reach positive resolutions. These outcomes are both of considerable frequency and outsized importance in the lives of all, and it is thus vital to dedicate more efforts to unpacking how arguments arrive at

them. I believe the Theory of Argumentative Norms offers a helpful framework to move in that direction.

Appendix A: Study 1 Materials and Measures

Dialogue Vignettes—Set 1

Public-Issue Persuasion Argument—Normative Condition

Alex: What do you think of the library not allowing outside food or drink anymore?

Eron: I think it's so silly. Why would they do that?

Alex: People eat there a lot, and it makes a mess.

Eron: But it's important that students can work over lunch.

Alex: I get that. But there are other places you can work and eat if you're that pressed for time. And really, most of us can find time to just eat lunch normally. If you have to eat at the library, you need better time management skills.

Eron: I just don't think that banning food and drink is the right way to go. If they're worried about mess, hire someone to make sure people clean up after themselves. Or just hire someone to clean up.

Alex: That costs resources, having people in there 24/7 to watch over everyone. It's a big library. You'd need quite a lot of staff for that.

Eron: Still, there's got to be something less extreme. Post signs about not littering or something.

Public-Issue Persuasion Argument—N2 Violation Condition

Alex: What do you think of the library not allowing outside food or drink anymore?

Eron: I think it's so silly. Why would they do that?

Alex: People eat there a lot, and it makes a mess.

Eron: But it's important that students can work over lunch.

Alex: I get that. But there are other places you can work--

Eron: Banning food and drink *cannot* be the right way to go. If they're worried about mess, hire someone to make sure people clean up after themselves. Or just hire someone to clean up.

Alex: But that costs--

Eron: I don't care what it costs. You can't take away these kinds of rights for students.

Public-Issue Persuasion Argument—N3 Violation Condition

Alex: What do you think of the library not allowing outside food or drink anymore?

Eron: I think it's so silly. Why would they do that?

Alex: People eat there a lot, and it makes a mess.

Eron: These sorts of rules drive me crazy. They're so arbitrary.

Alex: There are other places you can work and eat if you're that pressed for time. And really, most of us can find time to just eat lunch normally. If you have to eat at the library, you need better time management skills.

Eron: I don't think anyone thinks these policies through at all. I mean, who even decides this stuff? Why do they get to decide?

Alex: It seems like the most cost-efficient way to fix the problem.

Eron: Did students have any say in this? I don't get why people make decisions about students without consulting them.

Public-Issue Persuasion Argument—N4 Violation Condition

Alex: What do you think of the library not allowing outside food or drink anymore?

Eron: I think it's so silly. Why would they do that?

Alex: People eat there a lot, and it makes a mess.

Eron: Policies like this make no sense. Every year it seems like there's a new one.

Alex: There are other places you can work and eat if you're that pressed for time. And really, most of us can find time to just eat lunch normally. If you have to eat at the library, you need better time management skills.

Eron: So what?

Alex: It seems like the most cost-efficient way to fix the problem.

Eron: I don't care. It was fine the way it was.

Public-Issue Persuasion Argument—N5 Violation Condition

Alex: What do you think of the library not allowing outside food or drink anymore?

Eron: I think it's so silly. Why would they do that?

Alex: People eat there a lot, and it makes a mess.

Eron: I eat there all the time and always pick up after myself. Why should that apply to me?

Alex: I get that. But there are other places you can work and eat if you're that pressed for time. And really, most of us can find time to just eat lunch normally. If you have to eat at the library, you need better time management skills.

Eron: Come on, it's a bad policy. I shouldn't have to deal with this.

Alex: But it seems like the most cost-efficient way to fix the problem. And that means a cleaner space for you, too.

Eron: Doesn't matter. It's not fair to those of us who eat there and don't cause any problems.

Public-Issue Persuasion Argument—N6 Violation Condition

Alex: What do you think of the library not allowing outside food or drink anymore?

Eron: I think it's so silly. Why would they do that?

Alex: People eat there a lot, and it makes a mess.

Eron: But it's important that students can work over lunch.

Alex: I get that. But there are other places you can work and eat if you're that pressed for time. And really, most of us can find time to just eat lunch normally. If you have to eat at the library, you need better time management skills.

Eron: Well, I don't have to. But I know people who do.

Alex: Why do they have to?

Eron: It's just how their day works, I guess. This is such a stupid policy.

Alex: What's so stupid about it? I think it'll make an important campus space cleaner.

Eron: It's just not right.

Personal-Issue Persuasion Argument—Normative Condition

Sam: Hey Pat, isn't it your turn to do the dishes?

Pat: None of the dishes are mine.

Sam: That's not the point, Pat. When we moved into this apartment, we decided on an even split with the chores. This is my week to clean the bathroom, and your week to take care of the dishes.

Pat: Sam, I'm not washing the dishes—none of them are mine.

Sam: What about our roommate agreement?

Pat: When we made the agreement, I had no idea that you used so many dishes in a week's time.

Sam: I don't use that many dishes, Pat. This is your week to do the dishes, and you need to do them.

Pat: Why should I have to do the dishes when they are all yours?

Sam: Because of our agreement.

Pat: I think you should do the dishes, it's your mess.

Sam: All the work around here shakes out even. That is why we made this agreement to begin with. Some weeks, you use more dishes and some weeks I use more dishes. Would you rather clean the bathroom every week? I would be more than happy to take on the dishes.

Pat: I don't want to clean up after you all the time.

Sam: Look, the point was that we should be doing an equal amount of the work. Do you not think we're doing that?

Personal-Issue Persuasion Argument—N7 Violation Condition

Sam: Hey Pat, isn't it your turn to do the dishes?

Pat: None of the dishes are mine.

Sam: That's not the point, Pat. When we moved into this apartment, we decided on an even split with the chores. This is my week to clean the bathroom, and your week to take care of the dishes.

Pat: Sam, I'm not washing the dishes—none of them are mine.

Sam: What about our roommate agreement?

Pat: When we made the agreement, I had no idea that you used so many dishes in a week's time.

Sam: I don't use that many dishes, Pat. This is your week to do the dishes, and you need to do them.

Pat: Why should I have to do the dishes when they are all yours?

Sam: Because of our agreement.

Pat: I think you should do the dishes, it's your mess.

Sam: All the work around here shakes out even. That is why we made this agreement to begin with. Some weeks, you use more dishes and some weeks I use more dishes. Would you rather clean the bathroom every week? I would be more than happy to take on the dishes.

Pat: I don't want to clean up after you all the time.

Sam: Look, the point was that we should be doing an equal amount of the work. Do you not think we're doing that?

Pat: I'm only going to clean up when it's my stuff.

Inquiry Argument—Normative Condition

Kelly: There are three courses we could still get into: epistemology, metaphysics, and ethics. Which do you want to take?

Jamie: I don't know. What would we want to get out of a philosophy class?

Kelly: Well, I've never taken one before. Mostly I just want to get out of there with a decent grade. But I don't want it to be totally boring.

Jamie: Yeah, ethics seems pretty boring. I don't want to get lectured about right and wrong for a whole semester. I can figure that out for myself.

Kelly: I mean, maybe it could be interesting, but yeah. What is metaphysics, anyway?

Jamie: I think it has to do with figuring out what exists and what doesn't. Or something like that?

Kelly: Sounds pretty bizarre. And pretty abstract, too. Who's teaching it?

Jamie: Looks like it's...Dr. Goodman. Have you heard anything about him?

Kelly: Yeah, Josh took one of his classes last semester. He said it was okay, but Goodman rambles a lot. But I think he recorded some of the lectures from that class, so maybe we could listen to one and see if we like his style.

Jamie: That doesn't sound very encouraging. Let's look into the epistemology course.

Inquiry Argument—N8 Violation Condition

Kelly: There are three courses we could still get into: epistemology, metaphysics, and ethics. Which do you want to take?

Jamie: I don't know. What would we want to get out of a philosophy class?

Kelly: Well, I've never taken one before. Mostly I just want to get out of there with a decent grade. But I don't want it to be totally boring.

Jamie: Yeah, ethics seems pretty boring. I don't want to get lectured about right and wrong for a whole semester. I can figure that out for myself.

Kelly: I mean, maybe it could be interesting, but yeah. What is metaphysics, anyway?

Jamie: I think it has to do with figuring out what exists and what doesn't. Or something like that?

Kelly: Sounds pretty bizarre. And pretty abstract, too. Who's teaching it?

Jamie: Looks like it's...Dr. Goodman. Have you heard anything about him?

Kelly: Yeah, Josh took one of his classes last semester. He said it was okay, but Goodman rambles a lot. But I think he recorded some of the lectures from that class, so maybe we could listen to one and see if we like his style. It's important to me that the stuff is entertaining, or else I won't learn anything.

Jamie: Well, Goodman does seem to get rated as very easy. Isn't that what matters most?

Kelly: It doesn't matter if it's always boring stuff that isn't relevant.

Inquiry Argument—N9 Violation Condition

Kelly: There are three courses we could still get into: epistemology, metaphysics, and ethics. Which do you want to take?

Jamie: I don't know. What would we want to get out of a philosophy class?

Kelly: Well, I've never taken one before. Mostly I just want to get out of there with a decent grade. But I don't want it to be totally boring.

Jamie: Yeah, ethics seems pretty boring. Let's just do epistemology, I guess.

Kelly: Well, wait, what is metaphysics?

Jamie: I think it has to do with figuring out what exists and what doesn't. Or something like that?

Kelly: Hmm.

Jamie: Which is pretty bizarre. And pretty abstract, too. I'm down for epistemology.

Kelly: Who's teaching epistemology?

Jamie: Doesn't matter. It has to be better than those. Let's just sign up and be done with it.

Inquiry Argument—N10 Violation Condition

Kelly: There are three courses we could still get into: epistemology, metaphysics, and ethics. Which do you want to take?

Jamie: I don't know. What would we want to get out of a philosophy class?

Kelly: Well, I've never taken one before. Mostly I just want to get out of there with a decent grade. But I don't want it to be totally boring.

Jamie: Yeah, ethics seems pretty boring. I don't want to get lectured about right and wrong for a whole semester. I can figure that out for myself.

Kelly: I mean, maybe it could be interesting, but yeah. What is metaphysics, anyway?

Jamie: I think it has to do with figuring out what exists and what doesn't. Or something like that?

Kelly: Sounds pretty bizarre. And pretty abstract, too. Who's teaching it?

Jamie: Looks like it's...Dr. Goodman. Have you heard anything about him?

Kelly: Yeah, Josh took one of his classes last semester. He said it was okay, but Goodman rambles a lot. But I think he recorded some of the lectures from that class, so maybe we could listen to one and see if we like his style.

Jamie: That doesn't sound very encouraging. Let's look into the epistemology course.

Kelly: I think we should go with epistemology. It's the most important subfield in philosophy.

Jamie: What makes it more important?

Kelly: I'm looking at the syllabus right now, and it says epistemology is the most fundamental course students will take, not just in philosophy, but in their entire time in college. So that has to be the best option.

Identity Argument—Normative Condition

Ash: Hey Robin, how's it going?

Robin: It's going alright.

Ash: Do anything interesting this week?

Robin: I went to a couple of concerts. They were pretty fun.

Ash: Oh, I didn't know you were into music so much.

Robin: Oh yeah. Especially live music. There's nothing like it.

Ash: That's interesting. I've never really gotten into live performances. Studio versions of songs appeal to me more. What do you like about concerts?

Robin: Yeah, the studio stuff is very polished up and all, but there's something about the live energy of a good show that's just so explosive. And there's a lot to be said for the community experience of it all.

Ash: That makes sense. That's cool. It kind of reminds me of the way I feel about going to football games.

Identity Argument—N11 Violation Condition

Ash: Hey Robin, how's it going?

Robin: It's going alright.

Ash: Do anything interesting this week?

Robin: I went to a couple of concerts. They were pretty fun.

Ash: Oh, I didn't know you were into music so much.

Robin: Oh yeah. Especially live music. There's nothing like it.

Ash: That's interesting. I've never really gotten into live performances. Studio versions of songs appeal to me more. What do you like about concerts?

Robin: They make me feel rebellious. It's me against the world.

Ash: And you like that?

Robin: Yeah. It's an energy rush.

Identity Argument—N12 Violation Condition

Ash: Hey Robin, how's it going?

Robin: It's going alright.

Ash: Do anything interesting this week?

Robin: I went to a couple of concerts. They were pretty fun.

Ash: Oh, I didn't know you were into music so much.

Robin: Oh yeah. Especially live music. There's nothing like it.

Ash: I've never really gotten into live performances. Studio versions of songs appeal to me more. Why would you pay so much to see worse versions of the songs?

Robin: The studio stuff is very polished up and all, but there's something about the live energy of a good show that's just so explosive. And there's a lot to be said for the community experience of it all.

Ash: Still, you can experience that stuff on YouTube. It gets uploaded there anyway. You're just throwing your money away.

Identity Argument—N13 Violation Condition

Ash: Hey Robin, how's it going?

Robin: It's going alright.

Ash: Do anything interesting this week?

Robin: I went to a couple of concerts. They were pretty fun.

Ash: Sure

Robin: Experiencing live music is one of my favorite things to do. It really restores my energy.

Ash: Yeah.

Robin: There's something about the live energy of a good show that's just so explosive. And there's a lot to be said for the community experience of it all.

Ash: I see.

Play Argument—Normative Condition

Hayden: Did you see the game last night? My Cardinals crushed it.

Jordan: Ehh, they got lucky.

Hayden: That's 5 of 7 they've taken from your Cubs this season! That ain't luck.

Jordan: You'll see. We're just taking it easy on you. Spot you a couple games so you think you can hang in the race.

Hayden: It won't be much of a race for long, at this rate. You'll be left in the dust!

Jordan: We've got it totally under control. Just you watch. They'll hit you so hard tonight, the game will be over in the first inning.

Hayden: Suuuuuuuure they will. You keep thinking that.

Play Argument—N14 Violation Condition

Hayden: Did you see the game last night? My Cardinals crushed it.

Jordan: Yeah, yeah, I don't want to talk about it.

Hayden: That's 5 of 7 they've taken from your Cubs this season!

Jordan: Yeah. It's a down year for my Cubs, I guess.

Hayden: We're going to run away with the division. World Series, here we come!

Jordan: The Cubs are young this year. They'll get back in the race in a couple of years.

Hayden: Suuuuuuuure they will. You keep thinking that.

Play Argument—N15 Violation Condition

Hayden: Did you see the game last night? My Cardinals crushed it.

Jordan: Ehh, they got lucky.

Hayden: That's 5 of 7 they've taken from your Cubs this season!

Jordan: You'll see. We're just taking it easy on you. Spot you a couple games so you think you can hang in the race.

Hayden: Yeah, right. I've been looking at stats on this all day. The Cardinals' hitters have more hits and home runs, and their pitchers have been the best in the league this month. At this point, it's obvious they're the better team.

Jordan: We've got it totally under control. Just you watch. They'll hit you so hard tonight, the game will be over in the first inning.

Hayden: I don't see why you'd say that. There's no indication that they're the same caliber of team.

Play Argument—N16 Violation Condition

Hayden: Did you see the game last night? My Cardinals crushed it.

Jordan: Ehh, they got lucky.

Hayden: That's 5 of 7 they've taken from your Cubs this season! That ain't luck.

Jordan: How's that?

Hayden: How's that? The Cardinals just dominate them. The Cubs just can't hit our pitching.

Jordan: It's early in the season. They'll come around.

Hayden: Suuuuuuuure they will. You keep thinking that.

Dialogue Vignette Set 2

Public Issue Persuasion Vignette 2—Normative Condition

Alex: What do you think of the plans for the new shopping center?

Eron: The location really bugs me, to be honest. On 55th Street, of all places?

Alex: Well, I mean, it's going to be a lot more convenient though. I used to have to drive all the way up to the supermarket by the metro station to get groceries. This is going to be way closer. And it looks like there are gonna be some cool restaurants, too. I think I'll end up going there a lot.

Eron: But the parkland up there was so nice.

Alex: Yeah, it was a nice area. But there are a bunch of parks around, and they're keeping the walking trails in behind the shopping center, I think.

Eron: I get the convenience aspect, I guess. It's just that the specific location seems really odd. Like, why couldn't they put this stuff in at the intersection of 64th and Klippert? There's nothing up there, but it would still be convenient for a bunch of people.

Alex: I wouldn't have minded that. But maybe there's a cost issue or a zoning issue. I'd have to think the economic board wouldn't have chosen the 55th Street location if it didn't have some advantages.

Eron: I wish we knew more specifics, because it really doesn't seem smart to me.

Public Issue Persuasion Vignette 2—N2 Violation Condition

Alex: What do you think of the plans for the new shopping center?

Eron: The location really bugs me, to be honest. On 55th Street, of all places?

Alex: Well, I mean, it's going to be a lot more convenient though. I used to have to drive all the way up to the supermarket by the metro station to get groceries. This is going to be way closer. And it looks like there are gonna be some cool restaurants, too. I think I'll end up going there a lot.

Eron: Doesn't matter how convenient you might think it is. The parkland up there was so nice. They shouldn't be able to get rid of it.

Alex: Yeah, it was a nice area. But there are a bunch of parks around--

Eron: I don't care how many parks there are. It's completely ridiculous to get rid of it for another one of these strip malls.

Alex: Still, you have to consider the amount of income it will bring--

Eron: I don't need to consider anything. You've got to preserve the parks.

Public Issue Persuasion Vignette 2—N3 Violation Condition

Alex: What do you think of the plans for the new shopping center?

Eron: The location really bugs me, to be honest. On 55th Street, of all places?

Alex: Well, I mean, it's going to be a lot more convenient though. I used to have to drive all the way up to the supermarket by the metro station to get groceries. This is going to be way closer. And it looks like there are gonna be some cool restaurants, too. I think I'll end up going there a lot.

Eron: Who thinks of these plans? I just can't believe the city is allowed to make these decisions.

Alex: Yeah, it was a nice area. But there are a bunch of parks around, and they're keeping the walking trails in behind the shopping center, I think.

Eron: All of these zoning decisions and what not are so arbitrary. It drives me crazy.

Alex: I think it'll ultimately be pretty profitable for the area, though.

Eron: Why don't residents of this area get any real say in this stuff?

Public Issue Persuasion Vignette 2—N4 Violation Condition

Alex: What do you think of the plans for the new shopping center?

Eron: The location really bugs me, to be honest. On 55th Street, of all places?

Alex: Well, I mean, it's going to be a lot more convenient though. I used to have to drive all the way up to the supermarket by the metro station to get groceries. This is going to be way closer. And it looks like there are gonna be some cool restaurants, too. I think I'll end up going there a lot.

Eron: Construction like this makes no sense. Every year there seems to be some random thing like this.

Alex: I mean, sure, it was a nice area. But there are a bunch of parks around.

Eron: So what?

Alex: It'll be convenient and get more business to the area.

Eron: I don't care. It's fine the way it is right now. We don't need more random strip malls.

Public Issue Persuasion Vignette 2—N5 Violation Condition

Alex: What do you think of the plans for the new shopping center?

Eron: The location really bugs me, to be honest. On 55th Street, of all places?

Alex: Well, I mean, it's going to be a lot more convenient though. I used to have to drive all the way up to the supermarket by the metro station to get groceries. This is going to be way closer. And it looks like there are gonna be some cool restaurants, too. I think I'll end up going there a lot.

Eron: But the parkland up there was so nice.

Alex: Yeah, it was a nice area. But there are a bunch of parks around, and they're keeping the walking trails in behind the shopping center, I think.

Eron: But you just can't get rid of parks like that.

Alex: I'd have to think the economic board wouldn't have chosen the 55th Street location if it didn't have some advantages.

Eron: Still, they can't outweigh keeping the park.

Public Issue Persuasion Vignette 2—N6 Violation Condition

Alex: What do you think of the plans for the new shopping center?

Eron: The location really bugs me, to be honest. On 55th Street, of all places?

Alex: Well, I mean, it's going to be a lot more convenient though. I used to have to drive all the way up to the supermarket by the metro station to get groceries. This is going to be way closer. And it looks like there are gonna be some cool restaurants, too. I think I'll end up going there a lot.

Eron: But the parkland up there was so nice.

Alex: Yeah, it was a nice area. But there are a bunch of parks around, and they're keeping the walking trails in behind the shopping center, I think.

Eron: So what? The parkland was really important public space.

Alex: Well, maybe there's a cost issue or a zoning issue. I'd have to think the economic board wouldn't have chosen the 55th Street location if it didn't have some advantages.

Eron: It's a ridiculous place to put the shopping center.

Personal-Issue Persuasion Vignette—Normative Condition

Sam: Where do you want to hang out this weekend?

Pat: I was thinking we could catch a movie and grab some drinks on Saturday, and then maybe just hang out at my place on Sunday, watch the football games and stuff.

Sam: Again?

Pat: Yeah, why not? There are some cool new movies out, and we've only got four weeks left in the football season.

Sam: But we do that stuff all the time. A movie one day, football the next day...there's so much just sitting around and watching stuff. I'd rather do something more active.

Pat: Like what?

Sam: I don't know, maybe go actually *play* a sport? They've got those intramural games down at the rec center basically all day on the weekends. We could do soccer, basketball, softball.

Pat: I'd rather just hang out with you than play a game with twenty other people. If we're going to do things together, we should be able to talk, you know, catch up and stuff.

Sam: It's not like you can talk during a movie, though.

Pat: The movie wasn't the only part of my plan, was it?

Sam: No, but still. If you don't want to play a team sport, we could totally do some tennis. I'd much rather do that than watch another movie. There's nothing out that I really want to see.

Personal-Issue Persuasion Vignette—N7 Violation Condition

Sam: Where do you want to hang out this weekend?

Pat: I was thinking we could catch a movie and grab some drinks on Saturday, and then maybe just hang out at my place on Sunday, watch the football games and stuff.

Sam: Again?

Pat: Yeah, why not? There are some cool new movies out, and we've only got four weeks left in the football season.

Sam: But we do that stuff all the time. A movie one day, football the next day...there's so much just sitting around and watching stuff. I'd rather do something more active.

Pat: Like what?

Sam: I don't know, maybe go actually *play* a sport? They've got those intramural games down at the rec center basically all day on the weekends. We could do soccer, basketball, softball.

Pat: I'd rather just hang out with you than play a game with twenty other people. If we're going to do things together, we should be able to talk, you know, catch up and stuff. What's the point, otherwise?

Sam: It's not like you can talk during a movie, though.

Pat: The movie wasn't the only part of my plan, was it? That's just silly. What's wrong with my plan?

Sam: If you don't want to play a team sport, we could totally do some tennis. I'd much rather do that than watch another movie. There's nothing out that I really want to see.

Pat: If we don't see a movie, we might as well not do anything at all.

Inquiry Vignette 2—Normative Condition

Kelly: Mom's birthday is coming up fast. Do you have any ideas on what to get her?

Jamie: She can be really difficult to shop for. It's tough for me every year. Are there any kitchen things she needs?

Kelly: I got her the toaster last year, and you got her the coffee maker. Isn't the kitchen stuff getting a little stale?

Jamie: Maybe. But she does like to cook, and she likes when technology helps her out with that.

Kelly: Yeah, I just don't know if there's anything she really needs there. Maybe we can ask Dad if she's mentioned anything about needing something.

Jamie: Yeah. But aside from the kitchen, are there any other ideas?

Kelly: Well, she likes going to museums and stuff. Maybe one of us could get one of those Smithsonian memberships, where you get their magazine.

Jamie: Hmm, yeah. Maybe a park membership thing too. She might like that.

Inquiry Vignette 2—N8 Violation Condition

Kelly: Mom's birthday is coming up fast. Do you have any ideas on what to get her?

Jamie: She can be really difficult to shop for. It's tough for me every year. Are there any kitchen things she needs?

Kelly: I got her the toaster last year, and you got her the coffee maker. Isn't the kitchen stuff getting a little stale?

Jamie: I suppose, yeah.

Kelly: Yeah, I just don't know if there's anything she really needs there. Maybe we can ask Dad if she's mentioned anything about needing something.

Jamie: Yeah. But aside from the kitchen, are there any other ideas?

Kelly: Well, she likes going to museums and stuff. Maybe one of us could get one of those Smithsonian memberships, where you get their magazine.

Jamie: I don't know. Why wouldn't we stick with the kitchen stuff?

Inquiry Vignette 2—N9 Violation Condition

Kelly: Mom's birthday is coming up fast. Do you have any ideas on what to get her?

Jamie: She can be really difficult to shop for. It's tough for me every year. Are there any kitchen things she needs?

Kelly: I got her the toaster last year, and you got her the coffee maker. Isn't the kitchen stuff getting a little stale?

Jamie: Maybe. But she does like to cook, and she likes when technology helps her out with that.

Kelly: Yeah, I just don't know if there's anything she really needs there. Maybe we can ask Dad if she's mentioned anything about needing something.

Jamie: I mean, her blender is pretty old. Why not just get her a new one?

Kelly: Well, she likes going to museums and stuff. That seems like it might be more thoughtful.

Jamie: A new cooking thing would be thoughtful too, though. She would use it more than she would go to a museum.

Kelly: Maybe I could get her one of those Smithsonian memberships, where you get their magazine.

Jamie: I don't see how that's better for Mom than the blender.

Inquiry Vignette 2—N10 Violation Condition

Kelly: Mom's birthday is coming up fast. Do you have any ideas on what to get her?

Jamie: She can be really difficult to shop for. It's tough for me every year. Are there any kitchen things she needs?

Kelly: I got her the toaster last year, and you got her the coffee maker. Isn't the kitchen stuff getting a little stale?

Jamie: Maybe. But she does like to cook, and she likes when technology helps her out with that.

Kelly: Yeah, I just don't know if there's anything she really needs there. Maybe we can ask Dad if she's mentioned anything about needing something.

Jamie: Well, here's something. You should get her this blender.

Kelly: Why?

Jamie: The listing says it's the best gift on the market.

Identity Vignette 2—Normative Condition

Ash: Hey Robin, how's it going?

Robin: It's going alright.

Ash: Do anything interesting this week?

Robin: Yeah, I've started volunteering at the library.

Ash: Oh really? What made you do that?

Robin: I just thought it would be a nice thing to do. I go to the library a lot, and I find its resources invaluable. Plus, I think it's really important to give back to areas of the community that need it.

Ash: Interesting. Is it fulfilling?

Robin: Totally. And, I mean, I love books. Doing things with books doesn't feel like work to me. So it's just been a great experience so far.

Ash: Yeah, I feel lucky to have a job that feels like that too, at least some of the time.

Identity Vignette 2—N11 Violation Condition

Ash: Hey Robin, how's it going?

Robin: It's going alright.

Ash: Do anything interesting this week?

Robin: Not much. I guess I've started volunteering at the library.

Ash: Oh really? What made you do that?

Robin: I mean, it always looks good to people to say you volunteer somewhere. And the library is a place I can volunteer without having to do any real work.

Ash: Is it fulfilling at all, though?

Robin: Not really. But it's a resume item. And I can pretty much just chill in the back. They don't really ask me to do much.

Identity Vignette 2—N12 Violation Condition

Ash: Hey Robin, how's it going?

Robin: It's going alright.

Ash: Do anything interesting this week?

Robin: Yeah, I've started volunteering at the library.

Ash: Oh really? What made you do that?

Robin: I just thought it would be a nice thing to do. I go to the library a lot, and I find its resources invaluable. Plus, I think it's really important to give back to areas of the community that need it.

Ash: Since when are you such a book person?

Robin: What do you mean? I love books! Doing things with books doesn't feel like work to me. So it's just been a great experience so far.

Ash: I don't remember you ever talking about books before.

Identity Vignette 2—N13 Violation Condition

Ash: Hey Robin, how's it going?

Robin: It's going alright.

Ash: Do anything interesting this week?

Robin: Yeah, I've started volunteering at the library.

Ash: Yeah?

Robin: I just thought it would be a nice thing to do. I go to the library a lot, and I find its resources invaluable. Plus, I think it's really important to give back to areas of the community that need it.

Ash: I guess so.

Robin: And, I mean, I love books. Doing things with books doesn't feel like work to me. So it's just been a great experience so far.

Ash: Okay.

Play Vignette 2—Normative Condition

Hayden: This new Foo Fighters album is sick!

Jordan: Really, the Foo Fighters? How many times is Dave Grohl going to rewrite the same song?

Hayden: Yeah, yeah, I know, Metallica is just sooooo much better.

Jordan: Hey, the last Metallica album was legitimately great and you know it. And show me any Foo Fighters album that stacks up with the Black Album. Name one. I'll wait.

Hayden: Name any Foo Fighters album that is anywhere near as bad as St. Anger. Yeah, that's right. I'll wait.

Jordan: You got me there. But at least St. Anger is entertainingly bad. The Foo Fighters are always just so boring.

And no matter what, somehow, halfway through the song, Dave Grohl is going to end up screaming.

Hayden: You're a Metallica fan and you're going to get on Dave Grohl for screaming? And I'll take the consistency of the Foo Fighters. You don't see people complain about AC/DC being repetitive.

Jordan: Ha, that's true.

Play Vignette 2—N14 Violation Condition

Hayden: This new Foo Fighters album is sick!

Jordan: Really, the Foo Fighters? How many times is Dave Grohl going to rewrite the same song?

Hayden: Yeah, yeah, I know, Metallica is just sooooo much better.

Jordan: I mean, fine. You can like them if you want.

Hayden: Name any Foo Fighters album that is anywhere near as bad as St. Anger. Yeah, that's right. I'll wait.

Jordan: So what?

Hayden: My favorite band is still relevant.

Jordan: I said you can like them if you want. I don't care.

Play Vignette 2—N15 Violation Condition

Hayden: This new Foo Fighters album is sick!

Jordan: Really, the Foo Fighters? How many times is Dave Grohl going to rewrite the same song?

Hayden: Yeah, yeah, I know, Metallica is just sooooo much better.

Jordan: Hey, the last Metallica album was legitimately great and you know it. And show me any Foo Fighters album that stacks up with the Black Album. Name one. I'll wait.

Hayden: The fact is that the Foo Fighters are the far more consistent band. There aren't any albums in their catalog that have been critically panned. Metallica, on the other hand, hasn't released a well-received album in decades.

Jordan: But when they're bad, Metallica is *entertainingly* bad. The Foo Fighters are always just so boring. And no matter what, somehow, halfway through the song, Dave Grohl is going to end up screaming.

Hayden: But it's so purposeful. The band just builds up an energy throughout every song.

Jordan: Oh, is that what they're calling it? Energy?

Play Vignette 2—N16 Violation Condition

Hayden: This new Foo Fighters album is sick!

Jordan: Really, the Foo Fighters? How many times is Dave Grohl going to rewrite the same song?

Hayden: Yeah, yeah, I know, Metallica is just sooooo much better.

Jordan: They are.

Hayden: Name any Foo Fighters album that is anywhere near as bad as St. Anger. Yeah, that's right. I'll wait.

Jordan: Well, sure, but that's one album. I'll take like six Metallica albums over anything the Foo Fighters have done.

Hayden: Well, when my favorite band releases a new album, I know it's going to be good. And this one is no different. When your favorite band releases an album, though, you don't know whether you're in for a total disappointment or not.

Jordan: I'll take the risk.

Argument Norms Scale

Each norm is its own subscale.

Frame Synchronization Subscale

1. The participants in this episode did not seem to have the same goal in mind.
2. The participants in this episode seemed to be talking past one another.
3. The participants in this episode are trying to do different things.
4. The participants in this episode seem to be working together.*
5. The participants in this episode are discussing the same issue.*
6. The participants in this episode seem to have the same approach to this interaction.*

Persuasion Subscale

7. (N2) [Arguer] let [other arguer] talk.*
8. (N2) [Arguer] seemed interested in what [other arguer] had to say.*
9. (N2) [Arguer] wants to express [his/her] viewpoint, not to listen to that of [other arguer].
10. (N2) [Arguer] tried to prevent [other arguer] from getting [his/her] point across.
11. (N2) This episode contained back-and-forth dialogue about the issue at hand.*
12. (N2) [Arguer] doesn't seem willing to accept criticism of [his/her] position.
13. (N3) [Arguer]'s statements seemed irrelevant to the issue raised by [other arguer].
14. (N3) [Arguer] raised legitimate points in this discussion.*
15. (N3) [Arguer] seems to miss the point of what [other arguer] was saying.

16. (N3) [Arguer]'s statements make sense in the context of this interaction.*
17. (N3) [Arguer]'s statements seemed disconnected from the rest of the discussion.
18. (N3) The objections raised by [arguer] follow from the statements [other arguer] made.*
19. (N4) [Arguer] provided reasoning for why [he/she] held the opinion [he/she] did.*
20. (N4) [Arguer] explained why [he/she] held [his/her] viewpoint.*
21. (N4) [Arguer] did not support [his/her] position with any reasons.
22. (N4) [Arguer] had a clear argument for [his/her] position.*
23. (N4) [Arguer] did not really make an argument; [he/she] merely stated a position.
24. (N4) [Arguer] does not seem to have thought through the reasoning for [his/her] stance.
25. (N5) [Arguer] seems aware that [he/she] has not fully proven [his/her] position.*
26. (N5) [Arguer] doesn't understand that [he/she] has not fully defended [his/her] point of view.
27. (N5) [Arguer] has prematurely claimed victory.
28. (N5) [Arguer] expects to continue to discuss this issue.*
29. (N5) [Arguer] doesn't believe there could be a valid reason [other arguer] does not agree with [him/her].
30. (N5) [Arguer] is ready to provide more reasons to further explain [his/her] position.*
31. (N6) [Arguer] doesn't seem willing to admit [he/she] is wrong.
32. (N6) If [other arguer]'s point were conclusively proven, [arguer] still would not be willing to back down.
33. (N6) [Arguer] would change [his/her] standpoint if given appropriate evidence.*
34. (N6) [Arguer] recognizes the possibility that [other arguer] may be right.*
35. (N6) [Arguer] would not be willing to change [his/her] mind no matter what [other arguer] might say.
36. (N6) [Arguer] seems to understand there are reasons to doubt [his/her] point of view.*
37. (N7) [Arguer] is treating [other arguer] as you would expect, given their relationship.*
38. (N7) Given the relationship between [the arguers], [arguer]'s attitude seems off.
39. (N7) [Arguer]'s priorities in this discussion are not normal.
40. (N7) Given their relationship between [the arguers], [arguer] is acting normally.*
41. (N7) [Arguer] is being more selfish than [he/she] should be.
42. (N7) [Arguer] understands how to treat [his/her] partner appropriately.*

Inquiry Subscale

43. (N8) [Arguer] did not go back on anything [he/she] said.*
44. (N8) Once [the arguers] agreed on something, they both stuck to it.*
45. (N8) [Arguer] changed [his/her] mind after previously agreeing with [other arguer].
46. (N8) [Arguers] made some progress in working out the issue.*
47. (N8) [Arguer] could not stay committed to a set of ideas.
48. (N8) It was hard to get [arguer] to stick by [his/her] commitments.
49. (N9) [Arguer] moved too quickly to a specific point of view.
50. (N9) [Arguer] stated a position before collecting enough evidence.
51. (N9) [Arguer] wants to carefully think through evidence about this issue.*
52. (N9) [Arguer] is not trying to persuade [other arguer] about the issue yet.*
53. (N9) [Arguer] expects to gather more evidence.*
54. (N9) [Arguer] is ready to try to convince [other arguer] to decide on the issue.
55. (N10) [Arguer] seems to be talking in circles.
56. (N10) [Arguer]'s opinions make logical sense.*
57. (N10) [Arguer]'s reasoning is not adding anything new to the conversation.
58. (N10) [Arguer] does not have a sound basis for [his/her] opinion.
59. (N10) [Arguer]'s reasoning has gotten [the arguers] closer to reaching a consensus.*
60. (N10) [Arguer]'s thoughts have moved the conversation in a positive direction.*

Identity Subscale

61. (N11) [Arguer] should be proud of [his/her] [expressed identity].*
62. (N11) [Arguer's expressed identity] is a good thing to be.*
63. (N11) I would have some concerns about [expressed identity].
64. (N11) I see [expressed identity] as a negative.

65. (N11) [Expressed identity] indicates some sort of character flaw in [arguer].
66. (N11) Expressing [identity] is socially acceptable in this context.
67. (N12) [Arguer] took issue with the identity expressed by [other arguer].
68. (N12) [Expressed identity] seemed to cause a problem in this discussion.
69. (N12) [Arguer] seemed fine with [identity expressed] by [other arguer].*
70. (N12) [Arguer] believes [other arguer] actually is [expressed identity].*
71. (N12) [Arguer] does not like that [other arguer] [expressed identity].
72. (N12) [Arguer] is supportive of [other arguer]'s [expressed identity].*
73. (N13) [Arguer] listened attentively to [other arguer] in this interaction.*
74. (N13) It is clear that [arguer] is paying attention.*
75. (N13) [Arguer] does not seem to care that [other arguer] sees [him/herself] as [expressed identity].
76. (N13) [Arguer] demonstrates to [other arguer] that [he/she] cares about what [he/she] has to say.*
77. (N13) [Arguer] engaged in active listening.
78. (N13) It is hard to tell how engaged [arguer] was in this conversation.

Play Subscale

79. (N14) Both [arguers] seem to find this conversation enjoyable.*
80. (N14) [Arguer] adapts [his/her] statements to [other arguer]'s taste.*
81. (N14) [Arguer] seems to be making statements that [other arguer] doesn't appreciate.
82. (N14) [Arguer] doesn't find [other arguer]'s statements amusing.
83. (N14) It doesn't seem that [the arguers] get enjoyment from the same things.
84. (N14) Both [arguers] understand how to have fun with the other.
85. (N15) It is not clear whether [arguer] is serious.
86. (N15) [Arguer] signals to [other arguer] that what [he/she] says is meant as a joke.*
87. (N15) [Arguer] probably means what [he/she] says.
88. (N15) [Arguer]'s intent in this discussion is [to dominate/persuade about this issue].
89. (N15) [Arguer] makes it clear that [his/her] statements are not to be taken at face value.*
90. (N15) [Arguer] intentionally exaggerates things for comic effect in this interaction.*
91. (N16) [Arguer] appreciates what [other arguer] says.*
92. (N16) It is not clear how [arguer] reacted to [other arguer] in this interaction.
93. (N16) [Arguer] took [other arguer]'s statements the way [he/she] intended.*
94. (N16) [Arguer] took [other arguer]'s statements seriously.
95. (N16) [Arguer] responded to [other arguer] in the way [he/she] would expect.*
96. (N16) [Arguer]'s reaction to [other arguer] was surprising.

Argument Typicality Scale

1. This interaction seemed normal to me.
2. I have a hard time imagining an interaction like this actually happening in real life.*
3. People often behave like [names] did in this interaction.
4. I have a hard time putting myself in [normative arguer's] shoes.*
5. This interaction seems unrealistic.*
6. I often have interactions with others that are similar to this one.
7. Everything that went on in this interaction could easily happen in a normal discussion.

Argument₁ Effectiveness Scale

1. I was convinced by [arguer]'s argument.
2. [Arguer]'s argument seemed weak.*
3. I found [arguer]'s argument to be believable.
4. I disagree with [arguer]'s argument.*
5. [Arguer]'s argument makes me think more about [topic].

Argument₂ Pleasantness Scale

1. This interaction seemed pleasant.
2. It would be nice to take part in an interaction like this one.
3. I try to avoid interactions like this one.*
4. Interactions like this one are often frustrating to me.*
5. I enjoy discussing things the way [names] did here.
6. This kind of interaction is useful in my life.
7. If I was part of this interaction, I would try to get out of it.*
8. This sort of discussion is difficult to participate in.*

Argumentative Goal Attainment Scale

Content Goal Subscale

1. In this discussion, [I/arguer] accomplished [my/their] main goal.
2. I think [I/arguer] generally got [my/their] point across.
3. I don't think [arguer] ever really understood [my/their] main point.*
4. [My/arguer's] argument was convincing in this interaction.
5. This interaction helped to resolve an issue.*
6. Generally, the participants in this episode understood each other's points.
7. There seems to have been some miscommunication in this episode.*

Relational Goal Subscale

1. This episode would strengthen the relationship between the participants.
2. This episode would hinder the participants from making relational progress.*
3. This is the sort of episode that would make the participants not speak to each other again.*
4. The participants in this episode would probably be excited to interact again.
5. This interaction might make the participants less confident in continuing their relationship with the other person.*
6. This episode would have a positive effect on the relationship between the participants.
7. The participants feel this episode brought them closer together.

Future Willingness to Argue Scale

1. I wouldn't mind having a discussion with [this person] at some point.
2. I would be willing to interact with [this person] again.
3. I would try to avoid significant interactions with [this person] in the future.*
4. I don't think I would want to have many future encounters with [this person].*
5. I would generally be forthcoming in future discussions with [this person].
6. I would try to keep future interactions with [this person] as short as possible.*

Quarrel Probability Scale

1. This interaction would likely escalate from here.
2. This interaction has a good chance at a pleasant resolution.*
3. This sort of interaction often leads to a fight.
4. This interaction seems to be heading toward a conflict.
5. [Names] should be able to easily settle this issue.*
6. This interaction will likely stay amicable.*

Appendix B: Study 2 Materials and Measures

All edits and added items appear in bold.

Dialogue Vignettes

Public-Issue Persuasion Argument—Normative Condition

Alex: What do you think of the library not allowing outside food or drink anymore?

Eron: I think it's so silly. Why would they do that?

Alex: People eat there a lot, and it makes a mess.

Eron: But it's important that students can work over lunch.

Alex: I get that. But there are other places you can work and eat if you're that pressed for time. And really, most of us can find time to just eat lunch normally. If you have to eat at the library, you need better time management skills.

Eron: I just don't think that banning food and drink is the right way to go. If they're worried about mess, hire someone to make sure people clean up after themselves. Or just hire someone to clean up.

Alex: That costs resources, having people in there 24/7 to watch over everyone. It's a big library. You'd need quite a lot of staff for that.

Eron: Still, there's got to be something less extreme. Post signs about not littering or something.

Public-Issue Persuasion Argument—N6 Violation Condition

Alex: What do you think of the library not allowing outside food or drink anymore?

Eron: I think it's so silly. Why would they do that?

Alex: People eat there a lot, and it makes a mess.

Eron: But it's important that students can work over lunch.

Alex: I get that. But there are other places you can work and eat if you're that pressed for time. And really, most of us can find time to just eat lunch normally. If you have to eat at the library, you need better time management skills.

Eron: Well, I don't have to. But I know people who do.

Alex: Why do they have to?

Eron: It's just how their day works, I guess. This is such a stupid policy.

Alex: What's so stupid about it? I think it'll make an important campus space cleaner.

Eron: It's just not right.

Personal-Issue Persuasion Argument—Normative Condition

Sam: Hey Pat, isn't it your turn to do the dishes?

Pat: None of the dishes are mine.

Sam: That's not the point, Pat. When we moved into this apartment, we decided on an even split with the chores. This is my week to clean the bathroom, and your week to take care of the dishes.

Pat: But these aren't my dishes. It's not my job to just clean up after you.

Sam: But our roommate agreement says we take turns on this.

Pat: When we made the agreement, I had no idea that you used so many dishes in a week's time.

Sam: Okay, but, I think overall, all the work around here shakes out even. That is why we made this agreement to begin with. Some weeks, you use more dishes and some weeks I use more dishes. If you think that's not working out even, we should talk about that. Maybe we could change it up. If you want to clean the bathroom every week, for instance, I'd be fine doing the dishes every week

Pat: Yeah, we should take a look at how we split stuff up in the agreement. I just don't want to clean up after you all the time. And I don't expect you to clean up after me.

Personal-Issue Persuasion Argument—N7 Violation Condition

Sam: Hey Pat, isn't it your turn to do the dishes?

Pat: None of the dishes are mine.

Sam: That's not the point, Pat. When we moved into this apartment, we decided on an even split with the chores. This is my week to clean the bathroom, and your week to take care of the dishes.

Pat: Sam, I'm not washing the dishes—none of them are mine.

Sam: What about our roommate agreement?

Pat: When we made the agreement, I had no idea that you used so many dishes in a week's time.

Sam: I don't use that many dishes, Pat. This is your week to do the dishes, and you need to do them.

Pat: Why should I have to do the dishes when they are all yours?

Sam: Because of our agreement.

Pat: I think you should do the dishes, it's your mess.

Sam: All the work around here shakes out even. That is why we made this agreement to begin with. Some weeks, you use more dishes and some weeks I use more dishes. Would you rather clean the bathroom every week? I would be more than happy to take on the dishes.

Pat: I don't want to clean up after you all the time.

Sam: Look, the point was that we should be doing an equal amount of the work. Do you not think we're doing that?

Pat: I'm only going to clean up when it's my stuff.

Inquiry Argument—Normative Condition

Kelly: There are three courses we could still get into: epistemology, metaphysics, and ethics. Which do you want to take?

Jamie: I don't know. What would we want to get out of a philosophy class?

Kelly: Well, I've never taken one before. Mostly I just want to get out of there with a decent grade. But I don't want it to be totally boring.

Jamie: Yeah, ethics seems pretty boring. I don't want to get lectured about right and wrong for a whole semester. I can figure that out for myself.

Kelly: I mean, maybe it could be interesting, but yeah. What is metaphysics, anyway?

Jamie: I think it has to do with figuring out what exists and what doesn't. Or something like that?

Kelly: Sounds pretty bizarre. And pretty abstract, too. Who's teaching it?

Jamie: Looks like it's...Dr. Goodman. Have you heard anything about him?

Kelly: Yeah, Josh took one of his classes last semester. He said it was okay, but Goodman rambles a lot. But I think he recorded some of the lectures from that class, so maybe we could listen to one and see if we like his style.

Jamie: That doesn't sound very encouraging. Let's look into the epistemology course.

Inquiry Argument—N8 Violation Condition

Kelly: There are three courses we could still get into: epistemology, metaphysics, and ethics. Which do you want to take?

Jamie: I don't know. What would we want to get out of a philosophy class?

Kelly: Well, I've never taken one before. Mostly I just want to get out of there with a decent grade. But I don't want it to be totally boring.

Jamie: Yeah, ethics seems pretty boring. I don't want to get lectured about right and wrong for a whole semester. I can figure that out for myself.

Kelly: I mean, maybe it could be interesting, but yeah. What is metaphysics, anyway?

Jamie: I think it has to do with figuring out what exists and what doesn't. Or something like that?

Kelly: Sounds pretty bizarre. And pretty abstract, too. Who's teaching it?

Jamie: Looks like it's...Dr. Goodman. Have you heard anything about him?

Kelly: Yeah, Josh took one of his classes last semester. He said it was okay, but Goodman rambles a lot. But I think he recorded some of the lectures from that class, so maybe we could listen to one and see if we like his style. It's important to me that the stuff is entertaining, or else I won't learn anything.

Jamie: Well, Goodman does seem to get rated as very easy. If you want a good grade, that seems like a good place to go.

Kelly: I'm not worried about the grade. It's philosophy. I want the material to be relevant.

Inquiry Argument—N9 Violation Condition

Kelly: There are three courses we could still get into: epistemology, metaphysics, and ethics. Which do you want to take?

Jamie: I don't know. What would we want to get out of a philosophy class?

Kelly: Well, I've never taken one before. Mostly I just want to get out of there with a decent grade. But I don't want it to be totally boring.

Jamie: Yeah, ethics seems pretty boring. Let's just do epistemology, I guess.

Kelly: Well, wait, what is metaphysics?

Jamie: I think it has to do with figuring out what exists and what doesn't. Or something like that?

Kelly: Hmm.

Jamie: Which is pretty bizarre. And pretty abstract, too. I'm down for epistemology.

Kelly: Who's teaching epistemology?

Jamie: Doesn't matter. It has to be better than those. Let's just sign up and be done with it.

Inquiry Argument—N10 Violation Condition

Kelly: There are three courses we could still get into: epistemology, metaphysics, and ethics. Which do you want to take?

Jamie: I don't know. What would we want to get out of a philosophy class?

Kelly: Well, I've never taken one before. Mostly I just want to get out of there with a decent grade. But I don't want it to be totally boring.

Jamie: Yeah, ethics seems pretty boring. I don't want to get lectured about right and wrong for a whole semester. I can figure that out for myself.

Kelly: I mean, maybe it could be interesting, but yeah. What is metaphysics, anyway?

Jamie: I think it has to do with figuring out what exists and what doesn't. Or something like that?

Kelly: Sounds pretty bizarre. And pretty abstract, too. Who's teaching it?

Jamie: Looks like it's...Dr. Goodman. Have you heard anything about him?

Kelly: Yeah, Josh took one of his classes last semester. He said it was okay, but Goodman rambles a lot. But I think he recorded some of the lectures from that class, so maybe we could listen to one and see if we like his style.

Jamie: That doesn't sound very encouraging.

Kelly: Well, epistemology is the most important subfield in philosophy, so I think we should do that.

Jamie: Why is it more important?

Kelly: I'm looking at the syllabus for that class right now, and it says epistemology is the most fundamental course students will take, not just in philosophy, but in their entire time in college. So that has to be the best option.

Jamie: Well, every syllabus says that sort of stuff. What is the class actually about?

Kelly: Important philosophical concepts, clearly.

Identity Argument—Normative Condition

Ash: Hey Robin, how's it going?

Robin: It's going alright.

Ash: Do anything interesting this week?

Robin: I went to a couple of concerts. They were pretty fun.

Ash: Oh, I didn't know you were into music so much.

Robin: Oh yeah. Especially live music. There's nothing like it.

Ash: That's interesting. I've never really gotten into live performances. Studio versions of songs appeal to me more. What do you like about concerts?

Robin: Yeah, the studio stuff is very polished up and all, but there's something about the live energy of a good show that's just so explosive. And there's a lot to be said for the community experience of it all.

Ash: That makes sense. That's cool. It kind of reminds me of the way I feel about going to football games.

Identity Argument—N11 Violation Condition

Ash: Hey Robin, how's it going?

Robin: It's going alright.

Ash: Do anything interesting this week?

Robin: I went to a couple of concerts. They were pretty fun.

Ash: Oh, I didn't know you were into music so much. What kind of concerts were they?

Robin: A bunch of extreme metal stuff. Some black metal, some deathcore.

Ash: Whoa. That'd be way too intense for me. Doesn't that just sound like noise with all the screaming and stuff?

Robin: If you're not into it, I guess. I just love the intensity and insanity of it all. Especially live. It's a total energy rush.

Play Argument—Normative Condition

Hayden: Did you see the game last night? My Cardinals crushed it.

Jordan: Ehh, they got lucky.

Hayden: That's 5 of 7 they've taken from your Cubs this season! That ain't luck.

Jordan: You'll see. We're just taking it easy on you. Spot you a couple games so you think you can hang in the race.

Hayden: It won't be much of a race for long, at this rate. You'll be left in the dust!

Jordan: We've got it totally under control. Just you watch. They'll hit you so hard tonight, the game will be over in the first inning.

Hayden: Suuuuuuuure they will. You keep thinking that.

Play Argument—N16 Violation Condition

Hayden: Did you see the game last night? My Cardinals crushed it.

Jordan: Yep, they won.

Hayden: That's 5 of 7 they've taken from your Cubs this season! We are dominating.

Jordan: How's that?

Hayden: Can't hit our pitching. And we seem to score every other inning.

Jordan: It's early in the season. The Cubs will come around.

Hayden: Suuuuuuuure they will. You keep thinking that.

Jordan: I mean, okay.

Inquiry Vignette 2—Normative Condition

Kelly: Mom's birthday is coming up fast. Do you have any ideas on what to get her?

Jamie: She can be really difficult to shop for. It's tough for me every year. Are there any kitchen things she needs?

Kelly: I got her the toaster last year, and you got her the coffee maker. Isn't the kitchen stuff getting a little stale?

Jamie: Maybe. But she does like to cook, and she likes when technology helps her out with that.

Kelly: Yeah, I just don't know if there's anything she really needs there. Maybe we can ask Dad if she's mentioned anything about needing something.

Jamie: Yeah. But aside from the kitchen, are there any other ideas?

Kelly: Well, she likes going to museums and stuff. Maybe one of us could get one of those Smithsonian memberships, where you get their magazine.

Jamie: Hmm, yeah. Maybe a park membership thing too. She might like that.

Inquiry Vignette 2—N9 Violation Condition

Kelly: Mom's birthday is coming up fast. Do you have any ideas on what to get her?

Jamie: She can be really difficult to shop for. It's tough for me every year. Are there any kitchen things she needs?

Kelly: I got her the toaster last year, and you got her the coffee maker. Isn't the kitchen stuff getting a little stale?

Jamie: Maybe. But she does like to cook, and she likes when technology helps her out with that.

Kelly: Yeah, I just don't know if there's anything she really needs there. Maybe we can ask Dad if she's mentioned anything about needing something.

Jamie: I mean, her blender is pretty old. Why not just get her a new one?

Kelly: Well, she likes going to museums and stuff. That seems like it might be more thoughtful.

Jamie: A new cooking thing would be thoughtful too, though. She would use it more than she would go to a museum.

Kelly: Maybe I could get her one of those Smithsonian memberships, where you get their magazine.

Jamie: I don't see how that's better for Mom than the blender.

Argument Norms Scale

Each norm is its own subscale.

Frame Synchronization Subscale

1. The participants in this episode did not seem to have the same goal in mind.
2. The participants in this episode seemed to be talking past one another.
3. The participants in this episode are trying to do different things.
4. The participants in this episode seem to be working together.*
5. The participants in this episode are discussing the same issue.*
6. The participants in this episode seem to have the same approach to this interaction.*

Persuasion Subscale

7. (N3) [Arguer]'s statements seemed irrelevant to the issue raised by [other arguer].
8. (N3) [Arguer] raised legitimate points in this discussion.*
9. (N3) [Arguer] seems to miss the point of what [other arguer] was saying.
10. (N3) [Arguer]'s statements make sense in the context of this interaction.*
11. (N3) [Arguer]'s statements seemed disconnected from the rest of the discussion.
12. (N3) The objections raised by [arguer] follow from the statements [other arguer] made.*
13. **(N3) [Arguer] stayed on topic.***
14. **(N3) What [arguer] said did not have much to do with what [other arguer] brought up.**
15. (N5) [Arguer] seems aware that [he/she] has not fully proven [his/her] position.*
16. (N5) [Arguer] doesn't understand that [he/she] has not fully defended [his/her] point of view.
17. (N5) [Arguer] has prematurely claimed victory.
18. (N5) [Arguer] expects to continue to discuss this issue.*
19. (N5) [Arguer] doesn't believe there could be a valid reason [other arguer] does not agree with [him/her].
20. (N5) [Arguer] is ready to provide more reasons to further explain [his/her] position.*
21. **(N5) [Arguer] does not see the need to keep explaining their stance on the issue.**
22. **(N5) [Arguer] seems to think their point of view does not need evidence to back it up.**
23. **(N5) [Arguer] thinks the discussion is over.**
24. **(N5) [Arguer] knows more explanation is needed to convince [other arguer] of his/her point of view.***
25. **(N5) [Arguer] thinks the only way for the discussion to continue is for [other arguer] to concede that he/she is right.**
26. (N6) [Arguer] doesn't seem willing to admit [he/she] is wrong.
27. (N6) If [other arguer]'s point were conclusively proven, [arguer] still would not be willing to back down.
28. (N6) [Arguer] would change [his/her] standpoint if given appropriate evidence.*
29. (N6) [Arguer] recognizes the possibility that [other arguer] may be right.*
30. (N6) [Arguer] would not be willing to change [his/her] mind no matter what [other arguer] might say.
31. (N6) [Arguer] seems to understand there are reasons to doubt [his/her] point of view.*
32. (N7) [Arguer] is treating [other arguer] as you would expect, given their relationship.*
33. (N7) Given the relationship between [the arguers], [arguer]'s attitude seems off.
34. (N7) [Arguer]'s priorities in this discussion are not normal.
35. (N7) Given their relationship between [the arguers], [arguer] is acting normally.*
36. (N7) [Arguer] is being more selfish than [he/she] should be.
37. (N7) [Arguer] understands how to treat [his/her] partner appropriately.*

Inquiry Subscale

38. (N8) [Arguer] changed [his/her] mind after previously agreeing with [other arguer].
39. (N8) [Arguers] made some progress in working out the issue.*
40. (N8) [Arguer] could not stay committed to a set of ideas.
41. (N8) It was hard to get [arguer] to stick by [his/her] statements.
42. **(N8) [Arguer] made progress in moving toward a decision.***
43. **(N8) Once [arguer] agreed with an idea, he/she continued to agree with it for the rest of the conversation.***
44. **(N8) As the conversation progressed, [arguer] narrowed down his/her thinking about the issue.***
45. **(N8) [Arguer]'s thinking is becoming clearer as [the arguers] work toward a decision.***
46. **(N8) [Arguer] went back on something he/she said in this conversation.**
47. (N9) [Arguer] moved too quickly to a specific point of view.
48. (N9) [Arguer] stated a position before collecting enough evidence.
49. (N9) [Arguer] wants to carefully think through evidence about this issue.*
50. (N9) [Arguer] is not trying to persuade [other arguer] about the issue yet.*
51. (N9) [Arguer] expects to gather more evidence.*
52. (N9) [Arguer] is ready to try to convince [other arguer] to decide on the issue.
53. **(N9) [Arguer] quickly took a stand on the right decision to make.**
54. **(N9) [Arguer] thinks [the arguers] ought to discuss the issue more before making a decision.***
55. **(N9) [Arguer] isn't thinking through the issue enough.**
56. **(N9) [Arguer] is still exploring the possible options he/she has.***
57. **(N9) [Arguer] isn't sure yet which decision he/she favors.***
58. (N10) [Arguer] seems to be talking in circles.
59. (N10) [Arguer]'s opinions make logical sense.*
60. (N10) [Arguer]'s reasoning is not adding anything new to the conversation.
61. (N10) [Arguer] does not have a sound basis for [his/her] opinion.
62. (N10) [Arguer]'s reasoning has gotten [the arguers] closer to reaching a consensus.*
63. (N10) [Arguer]'s thoughts have moved the conversation in a positive direction.*

Identity Subscale

64. (N11) [Arguer] should be proud of [his/her] [expressed identity].*
65. (N11) [Arguer's expressed identity] is a good thing to be.*
66. (N11) I would have some concerns about [expressed identity].
67. (N11) I see [expressed identity] as a negative.
68. (N11) [Expressed identity] indicates some sort of character flaw in [arguer].
69. (N11) Expressing [identity] is socially acceptable in this context.

Play Subscale

70. (N15) It is not clear whether [arguer] is serious.
71. (N15) [Arguer] signals to [other arguer] that what [he/she] says is meant as a joke.*
72. (N15) [Arguer] probably means what [he/she] says.
73. (N15) [Arguer]'s intent in this discussion is [to dominate/persuade about this issue].
74. (N15) [Arguer] makes it clear that [his/her] statements are not to be taken at face value.*
75. (N15) [Arguer] intentionally exaggerates things for comic effect in this interaction.*
76. **(N15) It's not easy to tell whether [arguer] really means what he/she is saying, or if he/she is just playing around.**
77. **(N15) [Arguer] seems to be trying to assert his/her point of view.**
78. **(N15) [Arguer] might believe what he/she is saying, but it's clear his/her main goal in this conversation is just to be silly.***
79. **(N15) [Arguer]'s tone indicates that he/she is just trying to have a lighthearted exchange about the topic.***
80. (N16) [Arguer] appreciates what [other arguer] says.*
81. (N16) It is not clear how [arguer] reacted to [other arguer] in this interaction.
82. (N16) [Arguer] took [other arguer]'s statements the way [he/she] intended.*
83. (N16) [Arguer] took [other arguer]'s statements seriously.

84. (N16) [Arguer] responded to [other arguer] in the way [he/she] would expect.*
85. (N16) [Arguer]'s reaction to [other arguer] was surprising.
86. **(N16) [Arguer] treated [other arguer] similarly to how [other arguer] treated [arguer].***
87. **(N16) [Arguer]'s tone with [other arguer] was different from how [other arguer] started the conversation.**
88. **(N16) [Arguer] doesn't seem to find [other arguer]'s statements interesting or amusing.**
89. **(N16) [Arguers] seem to have different attitudes toward this conversation.**

Argument Typicality Scale

1. This interaction seemed normal to me.
2. I have a hard time imagining an interaction like this actually happening in real life.*
3. People often behave like [names] did in this interaction.
4. I have a hard time putting myself in [normative arguer's] shoes.*
5. This interaction seems unrealistic.*
6. I often have interactions with others that are similar to this one.
7. Everything that went on in this interaction could easily happen in a normal discussion.

Appendix C: Study 3 Materials and Measures

Dialogue Vignettes—Set 1

Public-Issue Persuasion Argument—Normative Condition

Alex: What do you think of the library not allowing outside food or drink anymore?

Eron: I think it's so silly. Why would they do that?

Alex: People eat there a lot, and it makes a mess.

Eron: But it's important that students can work over lunch.

Alex: I get that. But there are other places you can work and eat if you're that pressed for time. And really, most of us can find time to just eat lunch normally. If you have to eat at the library, you need better time management skills.

Eron: I just don't think that banning food and drink is the right way to go. If they're worried about mess, hire someone to make sure people clean up after themselves. Or just hire someone to clean up.

Alex: That costs resources, having people in there 24/7 to watch over everyone. It's a big library. You'd need quite a lot of staff for that.

Eron: Still, there's got to be something less extreme. Post signs about not littering or something.

Public-Issue Persuasion Argument—N2 Violation Condition

Alex: What do you think of the library not allowing outside food or drink anymore?

Eron: I think it's so silly. Why would they do that?

Alex: People eat there a lot, and it makes a mess.

Eron: But it's important that students can work over lunch.

Alex: I get that. But there are other places you can work--

Eron: Banning food and drink *cannot* be the right way to go. If they're worried about mess, hire someone to make sure people clean up after themselves. Or just hire someone to clean up.

Alex: But that costs--

Eron: I don't care what it costs. You can't take away these kinds of rights for students.

Public-Issue Persuasion Argument—N3 Violation Condition

Alex: What do you think of the library not allowing outside food or drink anymore?

Eron: I think it's so silly. Why would they do that?

Alex: People eat there a lot, and it makes a mess.

Eron: These sorts of rules drive me crazy. They're so arbitrary.

Alex: There are other places you can work and eat if you're that pressed for time. And really, most of us can find time to just eat lunch normally. If you have to eat at the library, you need better time management skills.

Eron: I don't think anyone thinks these policies through at all. I mean, who even decides this stuff? Why do they get to decide?

Alex: It seems like the most cost-efficient way to fix the problem.

Eron: Did students have any say in this? I don't get why people make decisions about students without consulting them.

Public-Issue Persuasion Argument—N4 Violation Condition

Alex: What do you think of the library not allowing outside food or drink anymore?

Eron: I think it's so silly. Why would they do that?

Alex: People eat there a lot, and it makes a mess.

Eron: Policies like this make no sense. Every year it seems like there's a new one.

Alex: There are other places you can work and eat if you're that pressed for time. And really, most of us can find time to just eat lunch normally. If you have to eat at the library, you need better time management skills.

Eron: So what?

Alex: It seems like the most cost-efficient way to fix the problem.

Eron: I don't care. It was fine the way it was.

Public-Issue Persuasion Argument—N5 Violation Condition

Alex: What do you think of the library not allowing outside food or drink anymore?

Eron: I think it's so silly. Why would they do that?

Alex: People eat there a lot, and it makes a mess.

Eron: I eat there all the time and always pick up after myself. Why should that apply to me?

Alex: I get that. But there are other places you can work and eat if you're that pressed for time. And really, most of us can find time to just eat lunch normally. If you have to eat at the library, you need better time management skills.

Eron: Come on, it's a bad policy. I shouldn't have to deal with this.

Alex: But it seems like the most cost-efficient way to fix the problem. And that means a cleaner space for you, too.

Eron: Doesn't matter. It's not fair to those of us who eat there and don't cause any problems.

Public-Issue Persuasion Argument—N6 Violation Condition

Alex: What do you think of the library not allowing outside food or drink anymore?

Eron: I think it's so silly. Why would they do that?

Alex: People eat there a lot, and it makes a mess.

Eron: But it's important that students can work over lunch.

Alex: I get that. But there are other places you can work and eat if you're that pressed for time. And really, most of us can find time to just eat lunch normally. If you have to eat at the library, you need better time management skills.

Eron: Well, I don't have to. But I know people who do.

Alex: Why do they have to?

Eron: It's just how their day works, I guess. This is such a stupid policy.

Alex: What's so stupid about it? I think it'll make an important campus space cleaner.

Eron: It's just not right.

Personal-Issue Persuasion Argument—Normative Condition

Sam: Hey Pat, isn't it your turn to do the dishes?

Pat: None of the dishes are mine.

Sam: That's not the point, Pat. When we moved into this apartment, we decided on an even split with the chores. This is my week to clean the bathroom, and your week to take care of the dishes.

Pat: But these aren't my dishes. It's not my job to just clean up after you.

Sam: But our roommate agreement says we take turns on this.

Pat: When we made the agreement, I had no idea that you used so many dishes in a week's time.

Sam: Okay, but, I think overall, all the work around here shakes out even. That is why we made this agreement to begin with. Some weeks, you use more dishes and some weeks I use more dishes. If you think that's not working out even, we should talk about that. Maybe we could change it up. If you want to clean the bathroom every week, for instance, I'd be fine doing the dishes every week.

Pat: Yeah, we should take a look at how we split stuff up in the agreement. I just don't want to clean up after you all the time. And I don't expect you to clean up after me.

Personal-Issue Persuasion Argument—N7 Violation Condition

Sam: Hey Pat, isn't it your turn to do the dishes?

Pat: None of the dishes are mine.

Sam: That's not the point, Pat. When we moved into this apartment, we decided on an even split with the chores. This is my week to clean the bathroom, and your week to take care of the dishes.

Pat: Sam, I'm not washing the dishes—none of them are mine.

Sam: What about our roommate agreement?

Pat: When we made the agreement, I had no idea that you used so many dishes in a week's time.

Sam: I don't use that many dishes, Pat. This is your week to do the dishes, and you need to do them.

Pat: Why should I have to do the dishes when they are all yours?

Sam: Because of our agreement.

Pat: I think you should do the dishes, it's your mess.

Sam: All the work around here shakes out even. That is why we made this agreement to begin with. Some weeks, you use more dishes and some weeks I use more dishes. Would you rather clean the bathroom every week? I would be more than happy to take on the dishes.

Pat: I don't want to clean up after you all the time.

Sam: Look, the point was that we should be doing an equal amount of the work. Do you not think we're doing that?

Pat: I'm only going to clean up when it's my stuff.

Inquiry Argument—Normative Condition

Kelly: There are three courses we could still get into: epistemology, metaphysics, and ethics. Which do you want to take?

Jamie: I don't know. What would we want to get out of a philosophy class?

Kelly: Well, I've never taken one before. Mostly I just want to get out of there with a decent grade. But I don't want it to be totally boring.

Jamie: Yeah, ethics seems pretty boring. I don't want to get lectured about right and wrong for a whole semester. I can figure that out for myself.

Kelly: I mean, maybe it could be interesting, but yeah. What is metaphysics, anyway?

Jamie: I think it has to do with figuring out what exists and what doesn't. Or something like that?

Kelly: Sounds pretty bizarre. And pretty abstract, too. Who's teaching it?

Jamie: Looks like it's...Dr. Goodman. Have you heard anything about him?

Kelly: Yeah, Josh took one of his classes last semester. He said it was okay, but Goodman rambles a lot. But I think he recorded some of the lectures from that class, so maybe we could listen to one and see if we like his style.

Jamie: That doesn't sound very encouraging. Let's look into the epistemology course.

Inquiry Argument—N8 Violation Condition

Kelly: There are three courses we could still get into: epistemology, metaphysics, and ethics. Which do you want to take?

Jamie: I don't know. What would we want to get out of a philosophy class?

Kelly: Well, I've never taken one before. Mostly I just want to get out of there with a decent grade. But I don't want it to be totally boring.

Jamie: Yeah, ethics seems pretty boring. I don't want to get lectured about right and wrong for a whole semester. I can figure that out for myself.

Kelly: I mean, maybe it could be interesting, but yeah. What is metaphysics, anyway?

Jamie: I think it has to do with figuring out what exists and what doesn't. Or something like that?

Kelly: Sounds pretty bizarre. And pretty abstract, too. Who's teaching it?

Jamie: Looks like it's...Dr. Goodman. Have you heard anything about him?

Kelly: Yeah, Josh took one of his classes last semester. He said it was okay, but Goodman rambles a lot. But I think he recorded some of the lectures from that class, so maybe we could listen to one and see if we like his style. It's important to me that the stuff is entertaining, or else I won't learn anything.

Jamie: Well, Goodman does seem to get rated as very easy. If you want a good grade, that seems like a good place to go.

Kelly: I'm not worried about the grade. It's philosophy. I want the material to be relevant.

Inquiry Argument—N9 Violation Condition

Kelly: There are three courses we could still get into: epistemology, metaphysics, and ethics. Which do you want to take?

Jamie: I don't know. What would we want to get out of a philosophy class?

Kelly: Well, I've never taken one before. Mostly I just want to get out of there with a decent grade. But I don't want it to be totally boring.

Jamie: Yeah, ethics seems pretty boring. Let's just do epistemology, I guess.
 Kelly: Well, wait, what is metaphysics?
 Jamie: I think it has to do with figuring out what exists and what doesn't. Or something like that?
 Kelly: Hmm.
 Jamie: Which is pretty bizarre. And pretty abstract, too. I'm down for epistemology.
 Kelly: Who's teaching epistemology?
 Jamie: Doesn't matter. It has to be better than those. Let's just sign up and be done with it.

Inquiry Argument—N10 Violation Condition

Kelly: There are three courses we could still get into: epistemology, metaphysics, and ethics. Which do you want to take?
 Jamie: I don't know. What would we want to get out of a philosophy class?
 Kelly: Well, I've never taken one before. Mostly I just want to get out of there with a decent grade. But I don't want it to be totally boring.
 Jamie: Yeah, ethics seems pretty boring. I don't want to get lectured about right and wrong for a whole semester. I can figure that out for myself.
 Kelly: I mean, maybe it could be interesting, but yeah. What is metaphysics, anyway?
 Jamie: I think it has to do with figuring out what exists and what doesn't. Or something like that?
 Kelly: Sounds pretty bizarre. And pretty abstract, too. Who's teaching it?
 Jamie: Looks like it's...Dr. Goodman. Have you heard anything about him?
 Kelly: Yeah, Josh took one of his classes last semester. He said it was okay, but Goodman rambles a lot. But I think he recorded some of the lectures from that class, so maybe we could listen to one and see if we like his style.
 Jamie: That doesn't sound very encouraging.
 Kelly: Well, epistemology is the most important subfield in philosophy, so I think we should do that.
 Jamie: Why is it more important?
 Kelly: I'm looking at the syllabus for that class right now, and it says epistemology is the most fundamental course students will take, not just in philosophy, but in their entire time in college. So that has to be the best option.
 Jamie: Well, every syllabus says that sort of stuff. What is the class actually about?
 Kelly: Important philosophical concepts, clearly.

Identity Argument—Normative Condition

Ash: Hey Robin, how's it going?
 Robin: It's going alright.
 Ash: Do anything interesting this week?
 Robin: I went to a couple of concerts. They were pretty fun.
 Ash: Oh, I didn't know you were into music so much.
 Robin: Oh yeah. Especially live music. There's nothing like it.
 Ash: That's interesting. I've never really gotten into live performances. Studio versions of songs appeal to me more. What do you like about concerts?
 Robin: Yeah, the studio stuff is very polished up and all, but there's something about the live energy of a good show that's just so explosive. And there's a lot to be said for the community experience of it all.
 Ash: That makes sense. That's cool. It kind of reminds me of the way I feel about going to football games.

Identity Argument—N11 Violation Condition

Ash: Hey Robin, how's it going?
 Robin: It's going alright.
 Ash: Do anything interesting this week?
 Robin: I went to a couple of concerts. They were pretty fun.
 Ash: Oh, I didn't know you were into music so much. What kind of concerts were they?
 Robin: A bunch of extreme metal stuff. Some black metal, some deathcore.
 Ash: Whoa. That'd be way too intense for me. Doesn't that just sound like noise with all the screaming and stuff?
 Robin: If you're not into it, I guess. I just love the intensity and insanity of it all. Especially live. It's a total energy rush.

Identity Argument—N12 Violation Condition

Ash: Hey Robin, how's it going?

Robin: It's going alright.

Ash: Do anything interesting this week?

Robin: I went to a couple of concerts. They were pretty fun.

Ash: Oh, I didn't know you were into music so much.

Robin: Oh yeah. Especially live music. There's nothing like it.

Ash: I've never really gotten into live performances. Studio versions of songs appeal to me more. Why would you pay so much to see worse versions of the songs?

Robin: The studio stuff is very polished up and all, but there's something about the live energy of a good show that's just so explosive. And there's a lot to be said for the community experience of it all.

Ash: Still, you can experience that stuff on YouTube. It gets uploaded there anyway. You're just throwing your money away.

Identity Argument—N13 Violation Condition

Ash: Hey Robin, how's it going?

Robin: It's going alright.

Ash: Do anything interesting this week?

Robin: I went to a couple of concerts. They were pretty fun.

Ash: Sure

Robin: Experiencing live music is one of my favorite things to do. It really restores my energy.

Ash: Yeah.

Robin: There's something about the live energy of a good show that's just so explosive. And there's a lot to be said for the community experience of it all.

Ash: I see.

Play Argument—Normative Condition

Hayden: Did you see the game last night? My Cardinals crushed it.

Jordan: Ehh, they got lucky.

Hayden: That's 5 of 7 they've taken from your Cubs this season! That ain't luck.

Jordan: You'll see. We're just taking it easy on you. Spot you a couple games so you think you can hang in the race.

Hayden: It won't be much of a race for long, at this rate. You'll be left in the dust!

Jordan: We've got it totally under control. Just you watch. They'll hit you so hard tonight, the game will be over in the first inning.

Hayden: Suuuuuuuure they will. You keep thinking that.

Play Argument—N14 Violation Condition

Hayden: Did you see the game last night? My Cardinals crushed it.

Jordan: Yeah, yeah, I don't want to talk about it.

Hayden: That's 5 of 7 they've taken from your Cubs this season!

Jordan: Yeah. It's a down year for my Cubs, I guess.

Hayden: We're going to run away with the division. World Series, here we come!

Jordan: The Cubs are young this year. They'll get back in the race in a couple of years.

Hayden: Suuuuuuuure they will. You keep thinking that.

Play Argument—N15 Violation Condition

Hayden: Did you see the game last night? My Cardinals crushed it.

Jordan: Ehh, they got lucky.

Hayden: That's 5 of 7 they've taken from your Cubs this season!

Jordan: You'll see. We're just taking it easy on you. Spot you a couple games so you think you can hang in the race.

Hayden: Yeah, right. I've been looking at stats on this all day. The Cardinals' hitters have more hits and home runs, and their pitchers have been the best in the league this month. At this point, it's obvious they're the better team.

Jordan: We've got it totally under control. Just you watch. They'll hit you so hard tonight, the game will be over in the first inning.

Hayden: I don't see why you'd say that. There's no indication that they're the same caliber of team.

Play Argument—N16 Violation Condition

Jordan: Did you see the game last night? My Cardinals crushed it.

Hayden: Yep, they won.

Jordan: That's 5 of 7 they've taken from your Cubs this season! We are dominating.

Hayden: How's that?

Jordan: Can't hit our pitching. And we seem to score every other inning.

Hayden: It's early in the season. The Cubs will come around.

Jordan: Suuuuuuure they will. You keep thinking that.

Hayden: I mean, okay.

Dialogue Vignette Set 2

Public Issue Persuasion Vignette 2—Normative Condition

Alex: What do you think of the plans for the new shopping center?

Eron: The location really bugs me, to be honest. On 55th Street, of all places?

Alex: Well, I mean, it's going to be a lot more convenient though. I used to have to drive all the way up to the supermarket by the metro station to get groceries. This is going to be way closer. And it looks like there are gonna be some cool restaurants, too. I think I'll end up going there a lot.

Eron: But the parkland up there was so nice.

Alex: Yeah, it was a nice area. But there are a bunch of parks around, and they're keeping the walking trails in behind the shopping center, I think.

Eron: I get the convenience aspect, I guess. It's just that the specific location seems really odd. Like, why couldn't they put this stuff in at the intersection of 64th and Klippert? There's nothing up there, but it would still be convenient for a bunch of people.

Alex: I wouldn't have minded that. But maybe there's a cost issue or a zoning issue. I'd have to think the economic board wouldn't have chosen the 55th Street location if it didn't have some advantages.

Eron: I wish we knew more specifics, because it really doesn't seem smart to me.

Public Issue Persuasion Vignette 2—N2 Violation Condition

Alex: What do you think of the plans for the new shopping center?

Eron: The location really bugs me, to be honest. On 55th Street, of all places?

Alex: Well, I mean, it's going to be a lot more convenient though. I used to have to drive all the way up to the supermarket by the metro station to get groceries. This is going to be way closer. And it looks like there are gonna be some cool restaurants, too. I think I'll end up going there a lot.

Eron: Doesn't matter how convenient you might think it is. The parkland up there was so nice. They shouldn't be able to get rid of it.

Alex: Yeah, it was a nice area. But there are a bunch of parks around--

Eron: I don't care how many parks there are. It's completely ridiculous to get rid of it for another one of these strip malls.

Alex: Still, you have to consider the amount of income it will bring--

Eron: I don't need to consider anything. You've got to preserve the parks.

Public Issue Persuasion Vignette 2—N3 Violation Condition

Alex: What do you think of the plans for the new shopping center?

Eron: The location really bugs me, to be honest. On 55th Street, of all places?

Alex: Well, I mean, it's going to be a lot more convenient though. I used to have to drive all the way up to the supermarket by the metro station to get groceries. This is going to be way closer. And it looks like there are gonna be some cool restaurants, too. I think I'll end up going there a lot.

Eron: Who thinks of these plans? I just can't believe the city is allowed to make these decisions.

Alex: Yeah, it was a nice area. But there are a bunch of parks around, and they're keeping the walking trails in behind the shopping center, I think.

Eron: All of these zoning decisions and what not are so arbitrary. It drives me crazy.

Alex: I think it'll ultimately be pretty profitable for the area, though.

Eron: Why don't residents of this area get any real say in this stuff?

Public Issue Persuasion Vignette 2—N4 Violation Condition

Alex: What do you think of the plans for the new shopping center?

Eron: The location really bugs me, to be honest. On 55th Street, of all places?

Alex: Well, I mean, it's going to be a lot more convenient though. I used to have to drive all the way up to the supermarket by the metro station to get groceries. This is going to be way closer. And it looks like there are gonna be some cool restaurants, too. I think I'll end up going there a lot.

Eron: Construction like this makes no sense. Every year there seems to be some random thing like this.

Alex: I mean, sure, it was a nice area. But there are a bunch of parks around.

Eron: So what?

Alex: It'll be convenient and get more business to the area.

Eron: I don't care. It's fine the way it is right now. We don't need more random strip malls.

Public Issue Persuasion Vignette 2—N5 Violation Condition

Alex: What do you think of the plans for the new shopping center?

Eron: The location really bugs me, to be honest. On 55th Street, of all places?

Alex: Well, I mean, it's going to be a lot more convenient though. I used to have to drive all the way up to the supermarket by the metro station to get groceries. This is going to be way closer. And it looks like there are gonna be some cool restaurants, too. I think I'll end up going there a lot.

Eron: But the parkland up there was so nice.

Alex: Yeah, it was a nice area. But there are a bunch of parks around, and they're keeping the walking trails in behind the shopping center, I think.

Eron: But you just can't get rid of parks like that.

Alex: I'd have to think the economic board wouldn't have chosen the 55th Street location if it didn't have some advantages.

Eron: Still, they can't outweigh keeping the park.

Public Issue Persuasion Vignette 2—N6 Violation Condition

Alex: What do you think of the plans for the new shopping center?

Eron: The location really bugs me, to be honest. On 55th Street, of all places?

Alex: Well, I mean, it's going to be a lot more convenient though. I used to have to drive all the way up to the supermarket by the metro station to get groceries. This is going to be way closer. And it looks like there are gonna be some cool restaurants, too. I think I'll end up going there a lot.

Eron: But the parkland up there was so nice.

Alex: Yeah, it was a nice area. But there are a bunch of parks around, and they're keeping the walking trails in behind the shopping center, I think.

Eron: So what? The parkland was really important public space.

Alex: Well, maybe there's a cost issue or a zoning issue. I'd have to think the economic board wouldn't have chosen the 55th Street location if it didn't have some advantages.

Eron: It's a ridiculous place to put the shopping center.

Personal-Issue Persuasion Vignette—Normative Condition

Sam: Where do you want to hang out this weekend?

Pat: I was thinking we could catch a movie and grab some drinks on Saturday, and then maybe just hang out at my place on Sunday, watch the football games and stuff.

Sam: Again?

Pat: Yeah, why not? There are some cool new movies out, and we've only got four weeks left in the football season.

Sam: But we do that stuff all the time. A movie one day, football the next day...there's so much just sitting around and watching stuff. I'd rather do something more active.

Pat: Like what?

Sam: I don't know, maybe go actually *play* a sport? They've got those intramural games down at the rec center basically all day on the weekends. We could do soccer, basketball, softball.

Pat: I'd rather just hang out with you than play a game with twenty other people. If we're going to do things together, we should be able to talk, you know, catch up and stuff.

Sam: It's not like you can talk during a movie, though.

Pat: The movie wasn't the only part of my plan, was it?

Sam: No, but still. If you don't want to play a team sport, we could totally do some tennis. I'd much rather do that than watch another movie. There's nothing out that I really want to see.

Personal-Issue Persuasion Vignette—N7 Violation Condition

Sam: Where do you want to hang out this weekend?

Pat: I was thinking we could catch a movie and grab some drinks on Saturday, and then maybe just hang out at my place on Sunday, watch the football games and stuff.

Sam: Again?

Pat: Yeah, why not? There are some cool new movies out, and we've only got four weeks left in the football season.

Sam: But we do that stuff all the time. A movie one day, football the next day...there's so much just sitting around and watching stuff. I'd rather do something more active.

Pat: Like what?

Sam: I don't know, maybe go actually *play* a sport? They've got those intramural games down at the rec center basically all day on the weekends. We could do soccer, basketball, softball.

Pat: I'd rather just hang out with you than play a game with twenty other people. If we're going to do things together, we should be able to talk, you know, catch up and stuff. What's the point, otherwise?

Sam: It's not like you can talk during a movie, though.

Pat: The movie wasn't the only part of my plan, was it? That's just silly. What's wrong with my plan?

Sam: If you don't want to play a team sport, we could totally do some tennis. I'd much rather do that than watch another movie. There's nothing out that I really want to see.

Pat: If we don't see a movie, we might as well not do anything at all.

Inquiry Vignette 2—Normative Condition

Kelly: Mom's birthday is coming up fast. Do you have any ideas on what to get her?

Jamie: She can be really difficult to shop for. It's tough for me every year. Are there any kitchen things she needs?

Kelly: I got her the toaster last year, and you got her the coffee maker. Isn't the kitchen stuff getting a little stale?

Jamie: Maybe. But she does like to cook, and she likes when technology helps her out with that.

Kelly: Yeah, I just don't know if there's anything she really needs there. Maybe we can ask Dad if she's mentioned anything about needing something.

Jamie: Yeah. But aside from the kitchen, are there any other ideas?

Kelly: Well, she likes going to museums and stuff. Maybe one of us could get one of those Smithsonian memberships, where you get their magazine.

Jamie: Hmm, yeah. Maybe a park membership thing too. She might like that.

Inquiry Vignette 2—N8 Violation Condition

Kelly: Mom's birthday is coming up fast. Do you have any ideas on what to get her?

Jamie: She can be really difficult to shop for. It's tough for me every year. Are there any kitchen things she needs?

Kelly: I got her the toaster last year, and you got her the coffee maker. Isn't the kitchen stuff getting a little stale?

Jamie: I suppose, yeah.

Kelly: Yeah, I just don't know if there's anything she really needs there. Maybe we can ask Dad if she's mentioned anything about needing something.

Jamie: Yeah. But aside from the kitchen, are there any other ideas?

Kelly: Well, she likes going to museums and stuff. Maybe one of us could get one of those Smithsonian memberships, where you get their magazine.

Jamie: I don't know. Why wouldn't we stick with the kitchen stuff?

Inquiry Vignette 2—N9 Violation Condition

Kelly: Mom's birthday is coming up fast. Do you have any ideas on what to get her?

Jamie: She can be really difficult to shop for. It's tough for me every year. Are there any kitchen things she needs?

Kelly: I got her the toaster last year, and you got her the coffee maker. Isn't the kitchen stuff getting a little stale?

Jamie: Maybe. But she does like to cook, and she likes when technology helps her out with that.

Kelly: Yeah, I just don't know if there's anything she really needs there. Maybe we can ask Dad if she's mentioned anything about needing something.

Jamie: I mean, her blender is pretty old. Why not just get her a new one?

Kelly: Well, she likes going to museums and stuff. That seems like it might be more thoughtful.

Jamie: A new cooking thing would be thoughtful too, though. She would use it more than she would go to a museum.

Kelly: Maybe I could get her one of those Smithsonian memberships, where you get their magazine.

Jamie: I don't see how that's better for Mom than the blender.

Inquiry Vignette 2—N10 Violation Condition

Kelly: Mom's birthday is coming up fast. Do you have any ideas on what to get her?

Jamie: She can be really difficult to shop for. It's tough for me every year. Are there any kitchen things she needs?

Kelly: I got her the toaster last year, and you got her the coffee maker. Isn't the kitchen stuff getting a little stale?

Jamie: Maybe. But she does like to cook, and she likes when technology helps her out with that.

Kelly: Yeah, I just don't know if there's anything she really needs there. Maybe we can ask Dad if she's mentioned anything about needing something.

Jamie: Well, here's something. You should get her this blender.

Kelly: Why?

Jamie: The listing says it's the best gift on the market.

Identity Vignette 2—Normative Condition

Ash: Hey Robin, how's it going?

Robin: It's going alright.

Ash: Do anything interesting this week?

Robin: Yeah, I've started volunteering at the library.

Ash: Oh really? What made you do that?

Robin: I just thought it would be a nice thing to do. I go to the library a lot, and I find its resources invaluable. Plus, I think it's really important to give back to areas of the community that need it.

Ash: Interesting. Is it fulfilling?

Robin: Totally. And, I mean, I love books. Doing things with books doesn't feel like work to me. So it's just been a great experience so far.

Ash: Yeah, I feel lucky to have a job that feels like that too, at least some of the time.

Identity Vignette 2—N11 Violation Condition

Ash: Hey Robin, how's it going?

Robin: It's going alright.

Ash: Do anything interesting this week?

Robin: Not much. I guess I've started volunteering at the library.

Ash: Oh really? What made you do that?

Robin: I mean, it always looks good to people to say you volunteer somewhere. And the library is a place I can volunteer without having to do any real work.

Ash: Is it fulfilling at all, though?

Robin: Not really. But it's a resume item. And I can pretty much just chill in the back. They don't really ask me to do much.

Identity Vignette 2—N12 Violation Condition

Ash: Hey Robin, how's it going?

Robin: It's going alright.

Ash: Do anything interesting this week?

Robin: Yeah, I've started volunteering at the library.

Ash: Oh really? What made you do that?

Robin: I just thought it would be a nice thing to do. I go to the library a lot, and I find its resources invaluable. Plus, I think it's really important to give back to areas of the community that need it.

Ash: Since when are you such a book person?

Robin: What do you mean? I love books! Doing things with books doesn't feel like work to me. So it's just been a great experience so far.

Ash: I don't remember you ever talking about books before.

Identity Vignette 2—N13 Violation Condition

Ash: Hey Robin, how's it going?

Robin: It's going alright.

Ash: Do anything interesting this week?

Robin: Yeah, I've started volunteering at the library.

Ash: Yeah?

Robin: I just thought it would be a nice thing to do. I go to the library a lot, and I find its resources invaluable. Plus, I think it's really important to give back to areas of the community that need it.

Ash: I guess so.

Robin: And, I mean, I love books. Doing things with books doesn't feel like work to me. So it's just been a great experience so far.

Ash: Okay.

Play Vignette 2—Normative Condition

Hayden: This new Foo Fighters album is sick!

Jordan: Really, the Foo Fighters? How many times is Dave Grohl going to rewrite the same song?

Hayden: Yeah, yeah, I know, Metallica is just sooooo much better.

Jordan: Hey, the last Metallica album was legitimately great and you know it. And show me any Foo Fighters album that stacks up with the Black Album. Name one. I'll wait.

Hayden: Name any Foo Fighters album that is anywhere near as bad as St. Anger. Yeah, that's right. I'll wait.

Jordan: You got me there. But at least St. Anger is entertainingly bad. The Foo Fighters are always just so boring.

And no matter what, somehow, halfway through the song, Dave Grohl is going to end up screaming.

Hayden: You're a Metallica fan and you're going to get on Dave Grohl for screaming? And I'll take the consistency of the Foo Fighters. You don't see people complain about AC/DC being repetitive.

Jordan: Ha, that's true.

Play Vignette 2—N14 Violation Condition

Hayden: This new Foo Fighters album is sick!

Jordan: Really, the Foo Fighters? How many times is Dave Grohl going to rewrite the same song?

Hayden: Yeah, yeah, I know, Metallica is just sooooo much better.

Jordan: I mean, fine. You can like them if you want.

Hayden: Name any Foo Fighters album that is anywhere near as bad as St. Anger. Yeah, that's right. I'll wait.

Jordan: So what?

Hayden: My favorite band is still relevant.

Jordan: I said you can like them if you want. I don't care.

Play Vignette 2—N15 Violation Condition

Hayden: This new Foo Fighters album is sick!

Jordan: Really, the Foo Fighters? How many times is Dave Grohl going to rewrite the same song?

Hayden: Yeah, yeah, I know, Metallica is just sooooo much better.

Jordan: Hey, the last Metallica album was legitimately great and you know it. And show me any Foo Fighters album that stacks up with the Black Album. Name one. I'll wait.

Hayden: The fact is that the Foo Fighters are the far more consistent band. There aren't any albums in their catalog that have been critically panned. Metallica, on the other hand, hasn't released a well-received album in decades.

Jordan: But when they're bad, Metallica is *entertainingly* bad. The Foo Fighters are always just so boring. And no matter what, somehow, halfway through the song, Dave Grohl is going to end up screaming.

Hayden: But it's so purposeful. The band just builds up an energy throughout every song.

Jordan: Oh, is that what they're calling it? Energy?

Play Vignette 2—N16 Violation Condition

Jordan: This new Foo Fighters album is sick!

Hayden: Really, the Foo Fighters? How many times is Dave Grohl going to rewrite the same song?

Jordan: Yeah, yeah, I know, Metallica is just sooooo much better.

Hayden: They are.

Jordan: Name any Foo Fighters album that is anywhere near as bad as St. Anger. Yeah, that's right. I'll wait.

Hayden: Well, sure, but that's one album. I'll take like six Metallica albums over anything the Foo Fighters have done.

Jordan: Well, when my favorite band releases a new album, I know it's going to be good. And this one is no different. When your favorite band releases an album, though, you don't know whether you're in for a total disappointment or not.

Hayden: I'll take the risk.

Argument Norms Scale

Each norm is its own subscale.

Frame Synchronization Subscale

1. The participants in this episode did not seem to have the same goal in mind.
2. The participants in this episode seemed to be talking past one another.
3. The participants in this episode are trying to do different things.
4. The participants in this episode seem to be working together.*
5. The participants in this episode are discussing the same issue.*
6. The participants in this episode seem to have the same approach to this interaction.*

Persuasion Subscale

7. (N2) [Arguer] let [other arguer] talk.*
8. (N2) [Arguer] seemed interested in what [other arguer] had to say.*
9. (N2) [Arguer] wants to express [his/her] viewpoint, not to listen to that of [other arguer].
10. (N2) [Arguer] tried to prevent [other arguer] from getting [his/her] point across.
11. (N2) This episode contained back-and-forth dialogue about the issue at hand.*
12. (N2) [Arguer] doesn't seem willing to accept criticism of [his/her] position.
13. (N3) [Arguer]'s statements seemed irrelevant to the issue raised by [other arguer].
14. (N3) [Arguer] raised legitimate points in this discussion.*
15. (N3) [Arguer] seems to miss the point of what [other arguer] was saying.

16. (N3) [Arguer]'s statements make sense in the context of this interaction.*
17. (N3) [Arguer]'s statements seemed disconnected from the rest of the discussion.
18. (N3) The objections raised by [arguer] follow from the statements [other arguer] made.*
19. (N3) [Arguer] stayed on topic.
20. (N3) What [arguer] said did not have much to do with what [other arguer] brought up.*
21. (N4) [Arguer] provided reasoning for why [he/she] held the opinion [he/she] did.*
22. (N4) [Arguer] explained why [he/she] held [his/her] viewpoint.*
23. (N4) [Arguer] did not support [his/her] position with any reasons.
24. (N4) [Arguer] had a clear argument for [his/her] position.*
25. (N4) [Arguer] did not really make an argument; [he/she] merely stated a position.
26. (N4) [Arguer] does not seem to have thought through the reasoning for [his/her] stance.
27. (N5) [Arguer] seems aware that [he/she] has not fully proven [his/her] position.*
28. (N5) [Arguer] doesn't understand that [he/she] has not fully defended [his/her] point of view.
29. (N5) [Arguer] has prematurely claimed victory.
30. (N5) [Arguer] expects to continue to discuss this issue.*
31. (N5) [Arguer] doesn't believe there could be a valid reason [other arguer] does not agree with [him/her].
32. (N5) [Arguer] is ready to provide more reasons to further explain [his/her] position.*
33. (N5) [Arguer] does not see the need to keep explaining their stance on the issue.
34. (N5) [Arguer] seems to think their point of view does not need evidence to back it up.
35. (N5) [Arguer] thinks the discussion is over.
36. (N5) [Arguer] knows more explanation is needed to convince [other arguer] of his/her point of view.
37. (N5) [Arguer] thinks the only way for the discussion to continue is for [other arguer] to concede that he/she is right.
38. (N6) [Arguer] doesn't seem willing to admit [he/she] is wrong.
39. (N6) If [other arguer]'s point were conclusively proven, [arguer] still would not be willing to back down.
40. (N6) [Arguer] would change [his/her] standpoint if given appropriate evidence.*
41. (N6) [Arguer] recognizes the possibility that [other arguer] may be right.*
42. (N6) [Arguer] would not be willing to change [his/her] mind no matter what [other arguer] might say.
43. (N6) [Arguer] seems to understand there are reasons to doubt [his/her] point of view.*
44. (N7) [Arguer] is treating [other arguer] as you would expect, given their relationship.*
45. (N7) Given the relationship between [the arguers], [arguer]'s attitude seems off.
46. (N7) [Arguer]'s priorities in this discussion are not normal.
47. (N7) Given their relationship between [the arguers], [arguer] is acting normally.*
48. (N7) [Arguer] is being more selfish than [he/she] should be.
49. (N7) [Arguer] understands how to treat [his/her] partner appropriately.*

Inquiry Subscale

50. (N8) [Arguer] changed [his/her] mind after previously agreeing with [other arguer].
51. (N8) [Arguers] made some progress in working out the issue.*
52. (N8) [Arguer] could not stay committed to a set of ideas.
53. (N8) It was hard to get [arguer] to stick by [his/her] statements.
54. (N8) [Arguer] made progress in moving toward a decision.*
55. (N8) Once [arguer] agreed with an idea, he/she continued to agree with it for the rest of the conversation.*
56. (N8) As the conversation progressed, [arguer] narrowed down his/her thinking about the issue.*
57. (N8) [Arguer]'s thinking is becoming clearer as [the arguers] work toward a decision.*
58. (N8) [Arguer] went back on something he/she said in this conversation.
59. (N9) [Arguer] moved too quickly to a specific point of view.
60. (N9) [Arguer] stated a position before collecting enough evidence.
61. (N9) [Arguer] wants to carefully think through evidence about this issue.*
62. (N9) [Arguer] is not trying to persuade [other arguer] about the issue yet.*
63. (N9) [Arguer] expects to gather more evidence.*
64. (N9) [Arguer] is ready to try to convince [other arguer] to decide on the issue.
65. (N9) [Arguer] quickly took a stand on the right decision to make.
66. (N9) [Arguer] thinks [the arguers] ought to discuss the issue more before making a decision.*

67. (N9) [Arguer] isn't thinking through the issue enough.
68. (N9) [Arguer] is still exploring the possible options he/she has.*
69. (N9) [Arguer] isn't sure yet which decision he/she favors.*
70. (N10) [Arguer] seems to be talking in circles.
71. (N10) [Arguer]'s opinions make logical sense.*
72. (N10) [Arguer]'s reasoning is not adding anything new to the conversation.
73. (N10) [Arguer] does not have a sound basis for [his/her] opinion.
74. (N10) [Arguer]'s reasoning has gotten [the arguers] closer to reaching a consensus.*
75. (N10) [Arguer]'s thoughts have moved the conversation in a positive direction.*

Identity Subscale

76. (N11) [Arguer] should be proud of [his/her] [expressed identity].*
77. (N11) [Arguer]'s expressed identity] is a good thing to be.*
78. (N11) I would have some concerns about [expressed identity].
79. (N11) I see [expressed identity] as a negative.
80. (N11) [Expressed identity] indicates some sort of character flaw in [arguer].
81. (N11) Expressing [identity] is socially acceptable in this context.
82. (N12) [Arguer] took issue with the identity expressed by [other arguer].
83. (N12) [Expressed identity] seemed to cause a problem in this discussion.
84. (N12) [Arguer] seemed fine with [identity expressed] by [other arguer].*
85. (N12) [Arguer] believes [other arguer] actually is [expressed identity].*
86. (N12) [Arguer] does not like that [other arguer] [expressed identity].
87. (N12) [Arguer] is supportive of [other arguer]'s [expressed identity].*
88. (N13) [Arguer] listened attentively to [other arguer] in this interaction.*
89. (N13) It is clear that [arguer] is paying attention.*
90. (N13) [Arguer] does not seem to care that [other arguer] sees [him/herself] as [expressed identity].
91. (N13) [Arguer] demonstrates to [other arguer] that [he/she] cares about what [he/she] has to say.*
92. (N13) [Arguer] engaged in active listening.
93. (N13) It is hard to tell how engaged [arguer] was in this conversation.

Play Subscale

94. (N14) Both [arguers] seem to find this conversation enjoyable.*
95. (N14) [Arguer] adapts [his/her] statements to [other arguer]'s taste.*
96. (N14) [Arguer] seems to be making statements that [other arguer] doesn't appreciate.
97. (N14) [Arguer] doesn't find [other arguer]'s statements amusing.
98. (N14) It doesn't seem that [the arguers] get enjoyment from the same things.
99. (N14) Both [arguers] understand how to have fun with the other.
100. (N15) It is not clear whether [arguer] is serious.
101. (N15) [Arguer] signals to [other arguer] that what [he/she] says is meant as a joke.*
102. (N15) [Arguer] probably means what [he/she] says.
103. (N15) [Arguer]'s intent in this discussion is [to dominate/persuade about this issue].
104. (N15) [Arguer] makes it clear that [his/her] statements are not to be taken at face value.*
105. (N15) [Arguer] intentionally exaggerates things for comic effect in this interaction.*
106. (N15) It's not easy to tell whether [arguer] really means what he/she is saying, or if he/she is just playing around.
107. (N15) [Arguer] seems to be trying to assert his/her point of view.
108. (N15) [Arguer] might believe what he/she is saying, but it's clear his/her main goal in this conversation is just to be silly.*
109. (N15) [Arguer]'s tone indicates that he/she is just trying to have a lighthearted exchange about the topic.*
110. (N16) [Arguer] appreciates what [other arguer] says.*
111. (N16) It is not clear how [arguer] reacted to [other arguer] in this interaction.
112. (N16) [Arguer] took [other arguer]'s statements the way [he/she] intended.*
113. (N16) [Arguer] took [other arguer]'s statements seriously.
114. (N16) [Arguer] responded to [other arguer] in the way [he/she] would expect.*

- 115.(N16) [Arguer]'s reaction to [other arguer] was surprising.
- 116.(N16) [Arguer] treated [other arguer] similarly to how [other arguer] treated [arguer].*
- 117.(N16) [Arguer]'s tone with [other arguer] was different from how [other arguer] started the conversation.
- 118.(N16) [Arguer] doesn't seem to find [other arguer]'s statements interesting or amusing.
- 119.(N16) [Arguers] seem to have different attitudes toward this conversation.

Argument Typicality Scale

1. This interaction seemed normal to me.
2. I have a hard time imagining an interaction like this actually happening in real life.*
3. People often behave like [names] did in this interaction.
4. I have a hard time putting myself in [normative arguer's] shoes.*
5. This interaction seems unrealistic.*
6. I often have interactions with others that are similar to this one.
7. Everything that went on in this interaction could easily happen in a normal discussion.

Argument₁ Effectiveness Scale

1. I was convinced by [arguer]'s argument.
2. [Arguer]'s argument seemed weak.*
3. I found [arguer]'s argument to be believable.
4. I disagree with [arguer]'s argument.*
5. [Arguer]'s argument makes me think more about [topic].

Argument₂ Pleasantness Scale

1. This interaction seemed pleasant.
2. It would be nice to take part in an interaction like this one.
3. I try to avoid interactions like this one.*
4. Interactions like this one are often frustrating to me.*
5. I enjoy discussing things the way [names] did here.
6. This kind of interaction is useful in my life.
7. If I was part of this interaction, I would try to get out of it.*
8. This sort of discussion is difficult to participate in.*

Trait Measures

Argumentativeness scale (almost never true to almost always true)

1. I feel excitement when I expect that a conversation I am in is leading to an argument.
2. I try to avoid getting into arguments.
3. I have the ability to do well in an argument.
4. I feel refreshed and satisfied after an argument on a controversial issue.
5. I find myself unable to think of effective points during an argument.
6. I consider an argument an exciting intellectual challenge.
7. I prefer being with people who rarely disagree with me.
8. I do not like to miss the opportunity to argue a controversial issue.
9. I am happy when I keep an argument from happening.
10. I enjoy defending my point of view on an issue.
11. I get an unpleasant feeling when I realize I am about to get into an argument.
12. I enjoy a good argument over a controversial issue.
13. When I finish arguing with someone I feel nervous and upset.
14. I have a pleasant, good feeling when I win a point in an argument.
15. Arguing with a person creates more problems for me than it solves.
16. Once I finish an argument I promise myself that I will not get into another.
17. I am energetic and enthusiastic when I argue.

18. I enjoy avoiding arguments.
19. Arguing over controversial issues improves my intelligence.
20. While in an argument, I worry that the person I am arguing with will form a negative impression of me.

Verbal aggressiveness scale (almost never true to almost always true)

1. I am very careful to avoid attacking individuals' intelligence when I attack their ideas.
2. When individuals are very stubborn, I use insults to soften the stubbornness.
3. I try very hard to avoid having other people feel bad about themselves when I try to influence them.
4. When people refuse to do a task I know is important, without good reason, I tell them they are unreasonable.
5. When others do things I regard as stupid, I try to be extremely gentle with them.
6. If individuals I am trying to influence really deserve it, I attack their character.
7. When people behave in ways that are in very poor taste, I insult them in order to shock them into proper behavior.
8. I try to make people feel good about themselves even when their ideas are stupid.
9. When people simply will not budge on a matter of importance, I lose my temper and say rather strong things to them.
10. When people criticize my shortcomings, I take it in good humor and do not try to get back at them.
11. When individuals insult me, I get a lot of pleasure out of really telling them off.
12. When I dislike someone, I try not to show it in what I say or how I say it.
13. I like poking fun at people who do things that are very stupid in order to stimulate their intelligence.
14. When I attack a person's ideas, I try not to damage their self-concept.
15. When I try to influence people, I make a great effort not to offend them.
16. When people do things that are mean or cruel, I attack their character in order to help correct their behavior.
17. I refuse to participate in arguments when they involve personal attacks.
18. When nothing seems to work in trying to influence others, I yell and scream in order to get some movement from them.
19. When I am not able to refute someone's position, I try to make them feel defensive in order to weaken their position.
20. When an argument shifts to personal attacks, I try very hard to change the subject.

Frames scale

1. I use arguments to display my intellectual ability.
2. Other people often use arguments to display their intellectual ability.
3. Arguments are useful in showing what I believe.
4. Arguments are useful in showing how smart I am.
5. You can learn a lot about another person by watching what sorts of things he or she will say during an argument.
6. An argument can reveal as much about another person's character as friendly conversation.
7. I use arguments to gain respect.
8. You can see other people at their best or their worst when they argue with people.
9. Arguing is fun.
10. Arguing is sometimes just a way of passing the time between two friends.
11. I like to challenge what other people say, just to see what else they'll say.
12. Sometimes I say something outrageous, just to have the entertainment of defending it.
13. Arguing successfully is a way of being dominant over the other person.
14. Losing an argument means that the other person is dominant over me, at least for the moment.
15. When I'm in an argument, winning is more important to me than being kind.
16. When I'm in an argument, winning is more important to me than being correct in what I say.
17. Regardless of what an argument is supposed to be about, it is very often really about who has power over whom.
18. When I'm in an argument, I feel like I always have to win.
19. I think it's important in arguing to feel flexible.
20. A genuine agreement from the other person is more satisfying to me than a forced agreement.
21. The other person's needs are really an important consideration to me when I'm trying to settle a disagreement with him or her.

22. The basic idea in arguing is to come together on some issue, not to overwhelm the other person.
23. People who think that winning is the main idea in arguing are a little immature.
24. When you're arguing with another person, you have to keep your long term relationship with him or her in mind all the time.
25. I try to be cooperative when I'm arguing.
26. I am often competitive when I'm arguing.
27. Arguments involve loud and negative voices.
28. Arguments involve cooperation by parties.
29. Positive relational outcomes occur after an argument is over.
30. Arguments involve close-mindedness by the parties.
31. Arguments involve successful problem solving.
32. Arguments involve irrational emotional displays.
33. Negative relational outcomes occur after an argument is over.
34. Arguments involve hostility.
35. Arguments involve genuine exchange of views by both parties.
36. Arguments involve physical violence.
37. When I argue with someone it is to get what I want.
38. People argue for other reasons than simply to get what they want.
39. Arguments happen because two people need to settle a disagreement.
40. Arguing is a way to get what you want.
41. If I want someone else to do something, giving the other person a reason to do something is the best approach.
42. I use arguing as a way to get things done.
43. If someone is arguing with me, I assume that we're on our way to settling something.
44. Arguing doesn't accomplish anything.
45. Arguing is meant to resolve issues.
46. I only argue to achieve a specific outcome.
47. Arguments rarely resolve anything.
48. There are many reasons to argue other than to get what you want.
49. The most important reason for arguing is to get something you need.
50. When I interact with another person I just say what's on my mind.
51. During arguments, I don't have time to think about what I'm going to say.
52. After an argument, I often regret some of the things I said.
53. While arguing, you should adapt your message to the needs of others.
54. Proper communication involves noticing what others want.
55. I think that it's dishonest to think one thing and say another.
56. In an argument, if I think it, I will say it.
57. I argue without thinking before I speak.
58. I always say what's on my mind.
59. In an argument, the other person knows exactly where I stand.
60. I fully think through my argument before I speak.
61. During a heated argument, my mouth is engaged, but my mind often isn't.
62. When I make a point in an argument, I'm usually not very concerned about how the other person is going to take it.
63. I sometimes offend other people during arguments.
64. Sometimes when I think of a really good point to make, I just can't stop myself from making it, even if I should.
65. I'm always careful to edit what I say during arguments.

Epistemological Beliefs Index

1. Most things worth knowing are easy to understand
2. What is true is a matter of opinion.
3. Students who learn things quickly are the most successful.
4. People should always obey the law.
5. People's intellectual potential is fixed at birth.
6. Absolute moral truth does not exist.

7. Parents should teach their children all there is to know about life.
8. Really smart students don't have to work as hard to do well in school.
9. If a person tries too hard to understand a problem, they will most likely end up being confused.
10. Too many theories just complicate things.
11. The best ideas are often the most simple.
12. Instructors should focus on facts instead of theories.
13. Some people are born with special gifts and talents.
14. How well you do in school depends on how smart you are.
15. If you don't learn something quickly, you won't ever learn it.
16. Some people just have a knack for learning and others don't.
17. Things are simpler than most professors would have you believe.
18. If two people are arguing about something, at least one of them must be wrong.
19. Children should be allowed to question their parents' authority.
20. If you haven't understood a chapter the first time through, going back over it won't help.
21. Science is easy to understand because it contains so many facts.
22. The more you know about a topic, the more there is to know.
23. What is true today will be true tomorrow.
24. Smart people are born that way.
25. When someone in authority tells me what to do, I usually do it.
26. People shouldn't question authority.
27. Working on a problem with no quick solution is a waste of time.
28. Sometimes there are no right answers to life's big problems.

Appendix D: Study 4 Materials and Measures

Dialogue Vignettes

Public Issue Persuasion Vignette—Normative Condition

Alex: What do you think of the plans for the new shopping center?

Eron: The location really bugs me, to be honest. On 55th Street, of all places?

Alex: Well, I mean, it's going to be a lot more convenient though. I used to have to drive all the way up to the supermarket by the metro station to get groceries. This is going to be way closer. And it looks like there are gonna be some cool restaurants, too. I think I'll end up going there a lot.

Eron: But the parkland up there was so nice.

Alex: Yeah, it was a nice area. But there are a bunch of parks around, and they're keeping the walking trails in behind the shopping center, I think.

Eron: I get the convenience aspect, I guess. It's just that the specific location seems really odd. Like, why couldn't they put this stuff in at the intersection of 64th and Klippert? There's nothing up there, but it would still be convenient for a bunch of people.

Alex: I wouldn't have minded that. But maybe there's a cost issue or a zoning issue. I'd have to think the economic board wouldn't have chosen the 55th Street location if it didn't have some advantages.

Eron: I wish we knew more specifics, because it really doesn't seem smart to me.

Public Issue Persuasion Vignette—N2 Violation Condition

Alex: What do you think of the plans for the new shopping center?

Eron: The location really bugs me, to be honest. On 55th Street, of all places?

Alex: Well, I mean, it's going to be a lot more convenient though. I used to have to drive all the way up to the supermarket by the metro station to get groceries. This is going to be way closer. And it looks like there are gonna be some cool restaurants, too. I think I'll end up going there a lot.

Eron: Doesn't matter how convenient you might think it is. The parkland up there was so nice. They shouldn't be able to get rid of it.

Alex: Yeah, it was a nice area. But there are a bunch of parks around--

Eron: I don't care how many parks there are. It's completely ridiculous to get rid of it for another one of these strip malls.

Alex: Still, you have to consider the amount of income it will bring--

Eron: I don't need to consider anything. You've got to preserve the parks.

Public Issue Persuasion Vignette—N3 Violation Condition

Alex: What do you think of the plans for the new shopping center?

Eron: The location really bugs me, to be honest. On 55th Street, of all places?

Alex: Well, I mean, it's going to be a lot more convenient though. I used to have to drive all the way up to the supermarket by the metro station to get groceries. This is going to be way closer. And it looks like there are gonna be some cool restaurants, too. I think I'll end up going there a lot.

Eron: Who thinks of these plans? I just can't believe the city is allowed to make these decisions.

Alex: Yeah, it was a nice area. But there are a bunch of parks around, and they're keeping the walking trails in behind the shopping center, I think.

Eron: All of these zoning decisions and what not are so arbitrary. It drives me crazy.

Alex: I think it'll ultimately be pretty profitable for the area, though.

Eron: Why don't residents of this area get any real say in this stuff?

Public Issue Persuasion Vignette—N4 Violation Condition

Alex: What do you think of the plans for the new shopping center?

Eron: The location really bugs me, to be honest. On 55th Street, of all places?

Alex: Well, I mean, it's going to be a lot more convenient though. I used to have to drive all the way up to the supermarket by the metro station to get groceries. This is going to be way closer. And it looks like there are gonna be some cool restaurants, too. I think I'll end up going there a lot.

Eron: Construction like this makes no sense. Every year there seems to be some random thing like this.

Alex: I mean, sure, it was a nice area. But there are a bunch of parks around.

Eron: So what?

Alex: It'll be convenient and get more business to the area.

Eron: I don't care. It's fine the way it is right now. We don't need more random strip malls.

Public Issue Persuasion Vignette—N5 Violation Condition

Alex: What do you think of the plans for the new shopping center?

Eron: The location really bugs me, to be honest. On 55th Street, of all places?

Alex: Well, I mean, it's going to be a lot more convenient though. I used to have to drive all the way up to the supermarket by the metro station to get groceries. This is going to be way closer. And it looks like there are gonna be some cool restaurants, too. I think I'll end up going there a lot.

Eron: But the parkland up there was so nice.

Alex: Yeah, it was a nice area. But there are a bunch of parks around, and they're keeping the walking trails in behind the shopping center, I think.

Eron: But you just can't get rid of parks like that.

Alex: I'd have to think the economic board wouldn't have chosen the 55th Street location if it didn't have some advantages.

Eron: Still, they can't outweigh keeping the park.

Public Issue Persuasion Vignette—N6 Violation Condition

Alex: What do you think of the plans for the new shopping center?

Eron: The location really bugs me, to be honest. On 55th Street, of all places?

Alex: Well, I mean, it's going to be a lot more convenient though. I used to have to drive all the way up to the supermarket by the metro station to get groceries. This is going to be way closer. And it looks like there are gonna be some cool restaurants, too. I think I'll end up going there a lot.

Eron: But the parkland up there was so nice.

Alex: Yeah, it was a nice area. But there are a bunch of parks around, and they're keeping the walking trails in behind the shopping center, I think.

Eron: So what? The parkland was really important public space.

Alex: Well, maybe there's a cost issue or a zoning issue. I'd have to think the economic board wouldn't have chosen the 55th Street location if it didn't have some advantages.

Eron: It's a ridiculous place to put the shopping center.

Personal-Issue Persuasion Vignette—Normative Condition

Sam: Where do you want to hang out this weekend?

Pat: I was thinking we could catch a movie and grab some drinks on Saturday, and then maybe just hang out at my place on Sunday, watch the football games and stuff.

Sam: Again?

Pat: Yeah, why not? There are some cool new movies out, and we've only got four weeks left in the football season.

Sam: But we do that stuff all the time. A movie one day, football the next day...there's so much just sitting around and watching stuff. I'd rather do something more active.

Pat: Like what?

Sam: I don't know, maybe go actually *play* a sport? They've got those intramural games down at the rec center basically all day on the weekends. We could do soccer, basketball, softball.

Pat: I'd rather just hang out with you than play a game with twenty other people. If we're going to do things together, we should be able to talk, you know, catch up and stuff.

Sam: It's not like you can talk during a movie, though.

Pat: The movie wasn't the only part of my plan, was it?

Sam: No, but still. If you don't want to play a team sport, we could totally do some tennis. I'd much rather do that than watch another movie. There's nothing out that I really want to see.

Personal-Issue Persuasion Vignette—N7 Violation Condition

Sam: Where do you want to hang out this weekend?

Pat: I was thinking we could catch a movie and grab some drinks on Saturday, and then maybe just hang out at my place on Sunday, watch the football games and stuff.

Sam: Again?

Pat: Yeah, why not? There are some cool new movies out, and we've only got four weeks left in the football season.

Sam: But we do that stuff all the time. A movie one day, football the next day...there's so much just sitting around and watching stuff. I'd rather do something more active.

Pat: Like what?

Sam: I don't know, maybe go actually *play* a sport? They've got those intramural games down at the rec center basically all day on the weekends. We could do soccer, basketball, softball.

Pat: I'd rather just hang out with you than play a game with twenty other people. If we're going to do things together, we should be able to talk, you know, catch up and stuff. What's the point, otherwise?

Sam: It's not like you can talk during a movie, though.

Pat: The movie wasn't the only part of my plan, was it? That's just silly. What's wrong with my plan?

Sam: If you don't want to play a team sport, we could totally do some tennis. I'd much rather do that than watch another movie. There's nothing out that I really want to see.

Pat: If we don't see a movie, we might as well not do anything at all.

Inquiry Vignette—Normative Condition

Kelly: Mom's birthday is coming up fast. Do you have any ideas on what to get her?

Jamie: She can be really difficult to shop for. It's tough for me every year. Are there any kitchen things she needs?

Kelly: I got her the toaster last year, and you got her the coffee maker. Isn't the kitchen stuff getting a little stale?

Jamie: Maybe. But she does like to cook, and she likes when technology helps her out with that.

Kelly: Yeah, I just don't know if there's anything she really needs there. Maybe we can ask Dad if she's mentioned anything about needing something.

Jamie: Yeah. But aside from the kitchen, are there any other ideas?

Kelly: Well, she likes going to museums and stuff. Maybe one of us could get one of those Smithsonian memberships, where you get their magazine.

Jamie: Hmm, yeah. Maybe a park membership thing too. She might like that.

Inquiry Vignette—N8 Violation Condition

Kelly: Mom's birthday is coming up fast. Do you have any ideas on what to get her?

Jamie: She can be really difficult to shop for. It's tough for me every year. Are there any kitchen things she needs?

Kelly: I got her the toaster last year, and you got her the coffee maker. Isn't the kitchen stuff getting a little stale?

Jamie: I suppose, yeah.

Kelly: Yeah, I just don't know if there's anything she really needs there. Maybe we can ask Dad if she's mentioned anything about needing something.

Jamie: Yeah. But aside from the kitchen, are there any other ideas?

Kelly: Well, she likes going to museums and stuff. Maybe one of us could get one of those Smithsonian memberships, where you get their magazine.

Jamie: I don't know. Why wouldn't we stick with the kitchen stuff?

Inquiry Vignette—N9 Violation Condition

Kelly: Mom's birthday is coming up fast. Do you have any ideas on what to get her?

Jamie: She can be really difficult to shop for. It's tough for me every year. Are there any kitchen things she needs?

Kelly: I got her the toaster last year, and you got her the coffee maker. Isn't the kitchen stuff getting a little stale?

Jamie: Maybe. But she does like to cook, and she likes when technology helps her out with that.

Kelly: Yeah, I just don't know if there's anything she really needs there. Maybe we can ask Dad if she's mentioned anything about needing something.

Jamie: I mean, her blender is pretty old. Why not just get her a new one?

Kelly: Well, she likes going to museums and stuff. That seems like it might be more thoughtful.

Jamie: A new cooking thing would be thoughtful too, though. She would use it more than she would go to a museum.

Kelly: Maybe I could get her one of those Smithsonian memberships, where you get their magazine.

Jamie: I don't see how that's better for Mom than the blender.

Inquiry Vignette—N10 Violation Condition

Kelly: Mom's birthday is coming up fast. Do you have any ideas on what to get her?

Jamie: She can be really difficult to shop for. It's tough for me every year. Are there any kitchen things she needs?

Kelly: I got her the toaster last year, and you got her the coffee maker. Isn't the kitchen stuff getting a little stale?

Jamie: Maybe. But she does like to cook, and she likes when technology helps her out with that.

Kelly: Yeah, I just don't know if there's anything she really needs there. Maybe we can ask Dad if she's mentioned anything about needing something.

Jamie: Well, here's something. You should get her this blender.

Kelly: Why?

Jamie: The listing says it's the best gift on the market.

Identity Vignette—Normative Condition

Ash: Hey Robin, how's it going?

Robin: It's going alright.

Ash: Do anything interesting this week?

Robin: Yeah, I've started volunteering at the library.

Ash: Oh really? What made you do that?

Robin: I just thought it would be a nice thing to do. I go to the library a lot, and I find its resources invaluable. Plus, I think it's really important to give back to areas of the community that need it.

Ash: Interesting. Is it fulfilling?

Robin: Totally. And, I mean, I love books. Doing things with books doesn't feel like work to me. So it's just been a great experience so far.

Ash: Yeah, I feel lucky to have a job that feels like that too, at least some of the time.

Identity Vignette—N11 Violation Condition

Ash: Hey Robin, how's it going?

Robin: It's going alright.

Ash: Do anything interesting this week?

Robin: Not much. I guess I've started volunteering at the library.

Ash: Oh really? What made you do that?

Robin: I mean, it always looks good to people to say you volunteer somewhere. And the library is a place I can volunteer without having to do any real work.

Ash: Is it fulfilling at all, though?

Robin: Not really. But it's a resume item. And I can pretty much just chill in the back. They don't really ask me to do much.

Identity Vignette—N12 Violation Condition

Ash: Hey Robin, how's it going?

Robin: It's going alright.

Ash: Do anything interesting this week?

Robin: Yeah, I've started volunteering at the library.

Ash: Oh really? What made you do that?

Robin: I just thought it would be a nice thing to do. I go to the library a lot, and I find its resources invaluable. Plus, I think it's really important to give back to areas of the community that need it.

Ash: Since when are you such a book person?

Robin: What do you mean? I love books! Doing things with books doesn't feel like work to me. So it's just been a great experience so far.

Ash: I don't remember you ever talking about books before.

Identity Vignette—N13 Violation Condition

Ash: Hey Robin, how's it going?

Robin: It's going alright.

Ash: Do anything interesting this week?

Robin: Yeah, I've started volunteering at the library.

Ash: Yeah?

Robin: I just thought it would be a nice thing to do. I go to the library a lot, and I find its resources invaluable. Plus, I think it's really important to give back to areas of the community that need it.

Ash: I guess so.

Robin: And, I mean, I love books. Doing things with books doesn't feel like work to me. So it's just been a great experience so far.

Ash: Okay.

Play Vignette—Normative Condition

Hayden: This new Foo Fighters album is sick!

Jordan: Really, the Foo Fighters? How many times is Dave Grohl going to rewrite the same song?

Hayden: Yeah, yeah, I know, Metallica is just sooooo much better.

Jordan: Hey, the last Metallica album was legitimately great and you know it. And show me any Foo Fighters album that stacks up with the Black Album. Name one. I'll wait.

Hayden: Name any Foo Fighters album that is anywhere near as bad as St. Anger. Yeah, that's right. I'll wait.

Jordan: You got me there. But at least St. Anger is entertainingly bad. The Foo Fighters are always just so boring.

And no matter what, somehow, halfway through the song, Dave Grohl is going to end up screaming.

Hayden: You're a Metallica fan and you're going to get on Dave Grohl for screaming? And I'll take the consistency of the Foo Fighters. You don't see people complain about AC/DC being repetitive.

Jordan: Ha, that's true.

Play Vignette—N14 Violation Condition

Hayden: This new Foo Fighters album is sick!

Jordan: Really, the Foo Fighters? How many times is Dave Grohl going to rewrite the same song?

Hayden: Yeah, yeah, I know, Metallica is just sooooo much better.

Jordan: I mean, fine. You can like them if you want.

Hayden: Name any Foo Fighters album that is anywhere near as bad as St. Anger. Yeah, that's right. I'll wait.

Jordan: So what?

Hayden: My favorite band is still relevant.

Jordan: I said you can like them if you want. I don't care.

Play Vignette—N15 Violation Condition

Hayden: This new Foo Fighters album is sick!

Jordan: Really, the Foo Fighters? How many times is Dave Grohl going to rewrite the same song?

Hayden: Yeah, yeah, I know, Metallica is just sooooo much better.

Jordan: Hey, the last Metallica album was legitimately great and you know it. And show me any Foo Fighters album that stacks up with the Black Album. Name one. I'll wait.

Hayden: The fact is that the Foo Fighters are the far more consistent band. There aren't any albums in their catalog that have been critically panned. Metallica, on the other hand, hasn't released a well-received album in decades.

Jordan: But when they're bad, Metallica is *entertainingly* bad. The Foo Fighters are always just so boring. And no matter what, somehow, halfway through the song, Dave Grohl is going to end up screaming.

Hayden: But it's so purposeful. The band just builds up an energy throughout every song.

Jordan: Oh, is that what they're calling it? Energy?

Play Vignette—N16 Violation Condition

Hayden: This new Foo Fighters album is sick!

Jordan: Really, the Foo Fighters? How many times is Dave Grohl going to rewrite the same song?

Hayden: Yeah, yeah, I know, Metallica is just sooooo much better.

Jordan: They are.

Hayden: Name any Foo Fighters album that is anywhere near as bad as St. Anger. Yeah, that's right. I'll wait.

Jordan: Well, sure, but that's one album. I'll take like six Metallica albums over anything the Foo Fighters have done.

Hayden: Well, when my favorite band releases a new album, I know it's going to be good. And this one is no different. When your favorite band releases an album, though, you don't know whether you're in for a total disappointment or not.

Jordan: I'll take the risk.

Argument Norms Scale

Each norm is its own subscale.

Frame Synchronization Subscale

1. The participants in this episode did not seem to have the same goal in mind.
2. The participants in this episode seemed to be talking past one another.
3. The participants in this episode are trying to do different things.
4. The participants in this episode seem to be working together.*
5. The participants in this episode are discussing the same issue.*
6. The participants in this episode seem to have the same approach to this interaction.*

Persuasion Subscale

7. (N2) [Arguer] let [other arguer] talk.*
8. (N2) [Arguer] seemed interested in what [other arguer] had to say.*
9. (N2) [Arguer] wants to express [his/her] viewpoint, not to listen to that of [other arguer].
10. (N2) [Arguer] tried to prevent [other arguer] from getting [his/her] point across.
11. (N2) This episode contained back-and-forth dialogue about the issue at hand.*
12. (N2) [Arguer] doesn't seem willing to accept criticism of [his/her] position.
13. (N3) [Arguer]'s statements seemed irrelevant to the issue raised by [other arguer].
14. (N3) [Arguer] raised legitimate points in this discussion.*
15. (N3) [Arguer] seems to miss the point of what [other arguer] was saying.
16. (N3) [Arguer]'s statements make sense in the context of this interaction.*
17. (N3) [Arguer]'s statements seemed disconnected from the rest of the discussion.
18. (N3) The objections raised by [arguer] follow from the statements [other arguer] made.*
19. (N3) [Arguer] stayed on topic.
20. (N3) What [arguer] said did not have much to do with what [other arguer] brought up.*
21. (N4) [Arguer] provided reasoning for why [he/she] held the opinion [he/she] did.*
22. (N4) [Arguer] explained why [he/she] held [his/her] viewpoint.*
23. (N4) [Arguer] did not support [his/her] position with any reasons.
24. (N4) [Arguer] had a clear argument for [his/her] position.*
25. (N4) [Arguer] did not really make an argument; [he/she] merely stated a position.
26. (N4) [Arguer] does not seem to have thought through the reasoning for [his/her] stance.
27. (N5) [Arguer] seems aware that [he/she] has not fully proven [his/her] position.*

28. (N5) [Arguer] doesn't understand that [he/she] has not fully defended [his/her] point of view.
29. (N5) [Arguer] has prematurely claimed victory.
30. (N5) [Arguer] expects to continue to discuss this issue.*
31. (N5) [Arguer] doesn't believe there could be a valid reason [other arguer] does not agree with [him/her].
32. (N5) [Arguer] is ready to provide more reasons to further explain [his/her] position.*
33. (N5) [Arguer] does not see the need to keep explaining their stance on the issue.
34. (N5) [Arguer] seems to think their point of view does not need evidence to back it up.
35. (N5) [Arguer] thinks the discussion is over.
36. (N5) [Arguer] knows more explanation is needed to convince [other arguer] of his/her point of view.
37. (N5) [Arguer] thinks the only way for the discussion to continue is for [other arguer] to concede that he/she is right.
38. (N6) [Arguer] doesn't seem willing to admit [he/she] is wrong.
39. (N6) If [other arguer]'s point were conclusively proven, [arguer] still would not be willing to back down.
40. (N6) [Arguer] would change [his/her] standpoint if given appropriate evidence.*
41. (N6) [Arguer] recognizes the possibility that [other arguer] may be right.*
42. (N6) [Arguer] would not be willing to change [his/her] mind no matter what [other arguer] might say.
43. (N6) [Arguer] seems to understand there are reasons to doubt [his/her] point of view.*
44. (N7) [Arguer] is treating [other arguer] as you would expect, given their relationship.*
45. (N7) Given the relationship between [the arguers], [arguer]'s attitude seems off.
46. (N7) [Arguer]'s priorities in this discussion are not normal.
47. (N7) Given their relationship between [the arguers], [arguer] is acting normally.*
48. (N7) [Arguer] is being more selfish than [he/she] should be.
49. (N7) [Arguer] understands how to treat [his/her] partner appropriately.*

Inquiry Subscale

50. (N8) [Arguer] changed [his/her] mind after previously agreeing with [other arguer].
51. (N8) [Arguers] made some progress in working out the issue.*
52. (N8) [Arguer] could not stay committed to a set of ideas.
53. (N8) It was hard to get [arguer] to stick by [his/her] statements.
54. (N8) [Arguer] made progress in moving toward a decision.*
55. (N8) Once [arguer] agreed with an idea, he/she continued to agree with it for the rest of the conversation.*
56. (N8) As the conversation progressed, [arguer] narrowed down his/her thinking about the issue.*
57. (N8) [Arguer]'s thinking is becoming clearer as [the arguers] work toward a decision.*
58. (N8) [Arguer] went back on something he/she said in this conversation.
59. (N9) [Arguer] moved too quickly to a specific point of view.
60. (N9) [Arguer] stated a position before collecting enough evidence.
61. (N9) [Arguer] wants to carefully think through evidence about this issue.*
62. (N9) [Arguer] is not trying to persuade [other arguer] about the issue yet.*
63. (N9) [Arguer] expects to gather more evidence.*
64. (N9) [Arguer] is ready to try to convince [other arguer] to decide on the issue.
65. (N9) [Arguer] quickly took a stand on the right decision to make.
66. (N9) [Arguer] thinks [the arguers] ought to discuss the issue more before making a decision.*
67. (N9) [Arguer] isn't thinking through the issue enough.
68. (N9) [Arguer] is still exploring the possible options he/she has.*
69. (N9) [Arguer] isn't sure yet which decision he/she favors.*
70. (N10) [Arguer] seems to be talking in circles.
71. (N10) [Arguer]'s opinions make logical sense.*
72. (N10) [Arguer]'s reasoning is not adding anything new to the conversation.
73. (N10) [Arguer] does not have a sound basis for [his/her] opinion.
74. (N10) [Arguer]'s reasoning has gotten [the arguers] closer to reaching a consensus.*
75. (N10) [Arguer]'s thoughts have moved the conversation in a positive direction.*

Identity Subscale

76. (N11) [Arguer] should be proud of [his/her] [expressed identity].*
77. (N11) [Arguer's expressed identity] is a good thing to be.*
78. (N11) I would have some concerns about [expressed identity].
79. (N11) I see [expressed identity] as a negative.
80. (N11) [Expressed identity] indicates some sort of character flaw in [arguer].
81. (N11) Expressing [identity] is socially acceptable in this context.
82. (N12) [Arguer] took issue with the identity expressed by [other arguer].
83. (N12) [Expressed identity] seemed to cause a problem in this discussion.
84. (N12) [Arguer] seemed fine with [identity expressed] by [other arguer].*
85. (N12) [Arguer] believes [other arguer] actually is [expressed identity].*
86. (N12) [Arguer] does not like that [other arguer] [expressed identity].
87. (N12) [Arguer] is supportive of [other arguer]'s [expressed identity].*
88. (N13) [Arguer] listened attentively to [other arguer] in this interaction.*
89. (N13) It is clear that [arguer] is paying attention.*
90. (N13) [Arguer] does not seem to care that [other arguer] sees [him/herself] as [expressed identity].
91. (N13) [Arguer] demonstrates to [other arguer] that [he/she] cares about what [he/she] has to say.*
92. (N13) [Arguer] engaged in active listening.
93. (N13) It is hard to tell how engaged [arguer] was in this conversation.

Play Subscale

94. (N14) Both [arguers] seem to find this conversation enjoyable.*
95. (N14) [Arguer] adapts [his/her] statements to [other arguer]'s taste.*
96. (N14) [Arguer] seems to be making statements that [other arguer] doesn't appreciate.
97. (N14) [Arguer] doesn't find [other arguer]'s statements amusing.
98. (N14) It doesn't seem that [the arguers] get enjoyment from the same things.
99. (N14) Both [arguers] understand how to have fun with the other.
100. (N15) It is not clear whether [arguer] is serious.
101. (N15) [Arguer] signals to [other arguer] that what [he/she] says is meant as a joke.*
102. (N15) [Arguer] probably means what [he/she] says.
103. (N15) [Arguer]'s intent in this discussion is [to dominate/persuade about this issue].
104. (N15) [Arguer] makes it clear that [his/her] statements are not to be taken at face value.*
105. (N15) [Arguer] intentionally exaggerates things for comic effect in this interaction.*
106. (N15) It's not easy to tell whether [arguer] really means what he/she is saying, or if he/she is just playing around.
107. (N15) [Arguer] seems to be trying to assert his/her point of view.
108. (N15) [Arguer] might believe what he/she is saying, but it's clear his/her main goal in this conversation is just to be silly.*
109. (N15) [Arguer]'s tone indicates that he/she is just trying to have a lighthearted exchange about the topic.*
110. (N16) [Arguer] appreciates what [other arguer] says.*
111. (N16) It is not clear how [arguer] reacted to [other arguer] in this interaction.
112. (N16) [Arguer] took [other arguer]'s statements the way [he/she] intended.*
113. (N16) [Arguer] took [other arguer]'s statements seriously.
114. (N16) [Arguer] responded to [other arguer] in the way [he/she] would expect.*
115. (N16) [Arguer]'s reaction to [other arguer] was surprising.
116. (N16) [Arguer] treated [other arguer] similarly to how [other arguer] treated [arguer].*
117. (N16) [Arguer]'s tone with [other arguer] was different from how [other arguer] started the conversation.
118. (N16) [Arguer] doesn't seem to find [other arguer]'s statements interesting or amusing.
119. (N16) [Arguers] seem to have different attitudes toward this conversation.

Argument₁ Effectiveness Scale (Vignettes Only)

1. I was convinced by [arguer]'s argument.
2. [Arguer]'s argument seemed weak.*
3. I found [arguer]'s argument to be believable.
4. I disagree with [arguer]'s argument.*

5. [Arguer]'s argument makes me think more about [topic].

Argument₂ Pleasantness Scale (Vignettes Only)

1. This interaction seemed pleasant.
2. It would be nice to take part in an interaction like this one.
3. I try to avoid interactions like this one.*
4. Interactions like this one are often frustrating to me.*
5. I enjoy discussing things the way [names] did here.
6. This kind of interaction is useful in my life.
7. If I was part of this interaction, I would try to get out of it.*
8. This sort of discussion is difficult to participate in.*

Argumentative Goal Attainment Scale (Both Own Arguments and Vignettes)

Content Goal Subscale

1. In this discussion, [I/arguer] accomplished [my/their] main goal.
2. I think [I/arguer] generally got [my/their] point across.
3. I don't think [arguer] ever really understood [my/their] main point.*
4. [My/arguer's] argument was convincing in this interaction.
5. This interaction helped to resolve an issue.*
6. Generally, the participants in this episode understood each other's points.
7. There seems to have been some miscommunication in this episode.*

Relational Goal Subscale

8. This episode would strengthen the relationship between the participants.
9. This episode would hinder the participants from making relational progress.*
10. This is the sort of episode that would make the participants not speak to each other again.*
11. The participants in this episode would probably be excited to interact again.
12. This interaction might make the participants less confident in continuing their relationship with the other person.*
13. This episode would have a positive effect on the relationship between the participants.
14. The participants feel this episode brought them closer together.

Future Willingness to Argue Scale (Both Own Arguments and Vignettes)

1. I wouldn't mind having a discussion with [this person] at some point.
2. I would be willing to interact with [this person] again.
3. I would try to avoid significant interactions with [this person] in the future.*
4. I don't think I would want to have many future encounters with [this person].*
5. I would generally be forthcoming in future discussions with [this person].
6. I would try to keep future interactions with [this person] as short as possible.*

Quarrel Probability Scale (Both Own Arguments and Vignettes)

1. This interaction would likely escalate from here.
2. This interaction has a good chance at a pleasant resolution.*
3. This sort of interaction often leads to a fight.
4. This interaction seems to be heading toward a conflict.
5. [Names] should be able to easily settle this issue.*
6. This interaction will likely stay amicable.*

Trait Measures

Argumentativeness scale (almost never true to almost always true)

1. I feel excitement when I expect that a conversation I am in is leading to an argument.
2. I try to avoid getting into arguments.
3. I have the ability to do well in an argument.
4. I feel refreshed and satisfied after an argument on a controversial issue.
5. I find myself unable to think of effective points during an argument.
6. I consider an argument an exciting intellectual challenge.
7. I prefer being with people who rarely disagree with me.
8. I do not like to miss the opportunity to argue a controversial issue.
9. I am happy when I keep an argument from happening.
10. I enjoy defending my point of view on an issue.
11. I get an unpleasant feeling when I realize I am about to get into an argument.
12. I enjoy a good argument over a controversial issue.
13. When I finish arguing with someone I feel nervous and upset.
14. I have a pleasant, good feeling when I win a point in an argument.
15. Arguing with a person creates more problems for me than it solves.
16. Once I finish an argument I promise myself that I will not get into another.
17. I am energetic and enthusiastic when I argue.
18. I enjoy avoiding arguments.
19. Arguing over controversial issues improves my intelligence.
20. While in an argument, I worry that the person I am arguing with will form a negative impression of me.

Verbal aggressiveness scale (almost never true to almost always true)

1. I am very careful to avoid attacking individuals' intelligence when I attack their ideas.
2. When individuals are very stubborn, I use insults to soften the stubbornness.
3. I try very hard to avoid having other people feel bad about themselves when I try to influence them.
4. When people refuse to do a task I know is important, without good reason, I tell them they are unreasonable.
5. When others do things I regard as stupid, I try to be extremely gentle with them.
6. If individuals I am trying to influence really deserve it, I attack their character.
7. When people behave in ways that are in very poor taste, I insult them in order to shock them into proper behavior.
8. I try to make people feel good about themselves even when their ideas are stupid.
9. When people simply will not budge on a matter of importance, I lose my temper and say rather strong things to them.
10. When people criticize my shortcomings, I take it in good humor and do not try to get back at them.
11. When individuals insult me, I get a lot of pleasure out of really telling them off.
12. When I dislike someone, I try not to show it in what I say or how I say it.
13. I like poking fun at people who do things that are very stupid in order to stimulate their intelligence.
14. When I attack a person's ideas, I try not to damage their self-concept.
15. When I try to influence people, I make a great effort not to offend them.
16. When people do things that are mean or cruel, I attack their character in order to help correct their behavior.
17. I refuse to participate in arguments when they involve personal attacks.
18. When nothing seems to work in trying to influence others, I yell and scream in order to get some movement from them.
19. When I am not able to refute someone's position, I try to make them feel defensive in order to weaken their position.
20. When an argument shifts to personal attacks, I try very hard to change the subject.

Frames scale

1. I use arguments to display my intellectual ability.
2. Other people often use arguments to display their intellectual ability.
3. Arguments are useful in showing what I believe.

4. Arguments are useful in showing how smart I am.
5. You can learn a lot about another person by watching what sorts of things he or she will say during an argument.
6. An argument can reveal as much about another person's character as friendly conversation.
7. I use arguments to gain respect.
8. You can see other people at their best or their worst when they argue with people.
9. Arguing is fun.
10. Arguing is sometimes just a way of passing the time between two friends.
11. I like to challenge what other people say, just to see what else they'll say.
12. Sometimes I say something outrageous, just to have the entertainment of defending it.
13. Arguing successfully is a way of being dominant over the other person.
14. Losing an argument means that the other person is dominant over me, at least for the moment.
15. When I'm in an argument, winning is more important to me than being kind.
16. When I'm in an argument, winning is more important to me than being correct in what I say.
17. Regardless of what an argument is supposed to be about, it is very often really about who has power over whom.
18. When I'm in an argument, I feel like I always have to win.
19. I think it's important in arguing to feel flexible.
20. A genuine agreement from the other person is more satisfying to me than a forced agreement.
21. The other person's needs are really an important consideration to me when I'm trying to settle a disagreement with him or her.
22. The basic idea in arguing is to come together on some issue, not to overwhelm the other person.
23. People who think that winning is the main idea in arguing are a little immature.
24. When you're arguing with another person, you have to keep your long term relationship with him or her in mind all the time.
25. I try to be cooperative when I'm arguing.
26. I am often competitive when I'm arguing.
27. Arguments involve loud and negative voices.
28. Arguments involve cooperation by parties.
29. Positive relational outcomes occur after an argument is over.
30. Arguments involve close-mindedness by the parties.
31. Arguments involve successful problem solving.
32. Arguments involve irrational emotional displays.
33. Negative relational outcomes occur after an argument is over.
34. Arguments involve hostility.
35. Arguments involve genuine exchange of views by both parties.
36. Arguments involve physical violence.
37. When I argue with someone it is to get what I want.
38. People argue for other reasons than simply to get what they want.
39. Arguments happen because two people need to settle a disagreement.
40. Arguing is a way to get what you want.
41. If I want someone else to do something, giving the other person a reason to do something is the best approach.
42. I use arguing as a way to get things done.
43. If someone is arguing with me, I assume that we're on our way to settling something.
44. Arguing doesn't accomplish anything.
45. Arguing is meant to resolve issues.
46. I only argue to achieve a specific outcome.
47. Arguments rarely resolve anything.
48. There are many reasons to argue other than to get what you want.
49. The most important reason for arguing is to get something you need.
50. When I interact with another person I just say what's on my mind.
51. During arguments, I don't have time to think about what I'm going to say.
52. After an argument, I often regret some of the things I said.
53. While arguing, you should adapt your message to the needs of others.
54. Proper communication involves noticing what others want.

55. I think that it's dishonest to think one thing and say another.
56. In an argument, if I think it, I will say it.
57. I argue without thinking before I speak.
58. I always say what's on my mind.
59. In an argument, the other person knows exactly where I stand.
60. I fully think through my argument before I speak.
61. During a heated argument, my mouth is engaged, but my mind often isn't.
62. When I make a point in an argument, I'm usually not very concerned about how the other person is going to take it.
63. I sometimes offend other people during arguments.
64. Sometimes when I think of a really good point to make, I just can't stop myself from making it, even if I should.
65. I'm always careful to edit what I say during arguments.

Epistemological Beliefs Index

1. Most things worth knowing are easy to understand
2. What is true is a matter of opinion.
3. Students who learn things quickly are the most successful.
4. People should always obey the law.
5. People's intellectual potential is fixed at birth.
6. Absolute moral truth does not exist.
7. Parents should teach their children all there is to know about life.
8. Really smart students don't have to work as hard to do well in school.
9. If a person tries too hard to understand a problem, they will most likely end up being confused.
10. Too many theories just complicate things.
11. The best ideas are often the most simple.
12. Instructors should focus on facts instead of theories.
13. Some people are born with special gifts and talents.
14. How well you do in school depends on how smart you are.
15. If you don't learn something quickly, you won't ever learn it.
16. Some people just have a knack for learning and others don't.
17. Things are simpler than most professors would have you believe.
18. If two people are arguing about something, at least one of them must be wrong.
19. Children should be allowed to question their parents' authority.
20. If you haven't understood a chapter the first time through, going back over it won't help.
21. Science is easy to understand because it contains so many facts.
22. The more you know about a topic, the more there is to know.
23. What is true today will be true tomorrow.
24. Smart people are born that way.
25. When someone in authority tells me what to do, I usually do it.
26. People shouldn't question authority.
27. Working on a problem with no quick solution is a waste of time.
28. Sometimes there are no right answers to life's big problems.

Coding Manual for Submitted Argumentative Episodes

Which argumentative domain is this a part of?

1. Persuasion
2. Inquiry
3. Identity
4. Play

With this, we're generally looking for **what the discussion was before** it went off the rails, because once that happens, it can often be dominance. We want to know what the conversation was *supposed* to be. We can also pull from their main goal descriptions to help if it's not clear.

Was the **topic** of the discussion...

1. Public
2. Personal
3. Other people's personal

Who was the argument with?

1. Romantic partner
2. Friend
3. Roommate
4. Sibling
5. Parent
6. Coworker/classmate (co-schoolworker)
7. Stranger
8. Acquaintance
9. Extended family member(s)
10. Boss/teacher (authority figure)

What was the first norm violation committed in this argument? (pick N1-N16)

Did the arguers operate from different argument frames at any point?

0. No
1. Yes

For each relevant norm in the domain you coded the argument in, did anyone in the argument violate that norm?

0. No
1. Yes

Did the person report the argument directly ending the relationship?

0. No
1. Yes

Did the person report the argument contributing to a weakening of the relationship? (only applies if the relationship did not end)

0. No
1. Yes

Did the person report the argument leading to a break in communication of some sort after the argument?

0. No
1. Yes

Did the person report wanting/trying to avoid the domain of the argument in the future when talking to the other person?

0. No
1. Yes

Did the person report wanting/trying to avoid the topic of the argument in the future when talking to the other person?

- 0. No
- 1. Yes

Did the person report changing their view of the other person in a negative direction as a result of the argument (or being seen more negatively by the other person)?

- 0. No
- 1. Yes

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