

ABSTRACT

Title of Document: ESSAYS ON MAKING INTERDEPENDENT
DECISIONS AND THEIR EVALUATIONS.

Shweta S. Oza, Doctor of Philosophy, 2007.

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Marketing

This dissertation comprises of two essays that investigate factors influencing interdependent decision-making and the evaluations of such decision outcomes.

In the first essay, we examine the influence of time taken by a bargaining opponent to respond to an offer on bargainers' perceptions of their own bargaining outcomes. Extending previous research in several important ways, we propose and test a conceptualization where inferences of opponent's reservation price lie at the core of the underlying explanation. Second, we provide additional insight into the underlying process by showing that delay influences perceptions of bargaining outcomes only when it is related to the bargaining. Third, unlike previous work that examined the effect of delay when an offer was accepted, we extend the inquiry to situations where an offer is rejected. Fourth, we identify and test two factors – knowledge of opponent's best alternative to negotiated agreement and persuasion knowledge – that moderate the influence of response time on perceptions of bargaining outcomes. Results of five studies

provide insight into the underlying process by identifying and testing boundary conditions for the effect of delay.

In the second essay, we focus on generic campaigns that are funded voluntarily (rather than mandatory contributions), and examine the influence of situational factors (e.g., market trends) and solicitation appeals on voluntary contributions to a generic campaign. Viewing generic advertising campaigns as a public goods problem, a conceptual framework based on goal systems theory is developed to suggest that situational factors such as market trends induce different goals, which in turn, influence voluntary contributions. The conceptual framework also suggests that a solicitation appeal that is more congruent with the induced goal is likely to be more effective in increasing voluntary contributions relative to incongruent appeals. Consistent with the framework, three studies show that voluntary contributions to generic campaigns are higher when the market trend is declining versus increasing. Further, solicitations that make the induced goal and the means to achieve that goal salient are more effective in increasing contributions. The implications of the findings are discussed along with directions for future research.

ESSAYS ON MAKING INTERDEPENDENT DECISIONS AND THEIR
EVALUATIONS.

By

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Dissertation submitted to the Faculty of the Graduate School of the
University of Maryland, College Park, in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
2007

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Dedication

To my grandparents

Ramlaxmi & Kantilal Shah

Ratnamani & Madhukar Oza

Acknowledgements

During one of the many orientations in the first few days of the doctoral program, we were told “*Nobody wants an ‘F’, but completing a doctoral program successfully is a challenge if you don’t have three ‘Fs’ – Faculty, Friends and Family.*” Every day that has passed during the course of my five years in this program, I have found this statement to be true. It is through the combined support of these three that I have finally reached the milestone of finishing my dissertation.

I am indebted to my dissertation chair, Dr. Joydeep Srivastava, for his guidance in every stage of this dissertation. Joydeep has been a great mentor and I am grateful for his time, encouragement and valuable insights. I take this opportunity to thank Dr. Brian Ratchford for his enormous support and guidance not just through this dissertation process but throughout the five years I have been in the program. Special thanks go to Dr. Rebecca W. Hamilton, Dr. Amna Kirmani and Dr. Judson Mills for their helpful comments at various stages of this dissertation.

I also gratefully acknowledge the financial support received from Department of Marketing and through the R.H. Smith School Summer Research Grant for my second essay.

The doctoral program has been wonderfully enriching and stimulating; but at the same time has been immensely challenging and stressful. Nevena, Debora, Peggy, Gauri, Ted, Tashfeen, Dina and Animesh always found time to help me raise the sails when the winds were tough and I am very thankful to them for this.

Last but not the least I thank my parents, my brother and my husband, Krishna; who really made it possible for me to focus and finish my dissertation. They are the wind

beneath my wings and if it was not for their love, encouragement and unconditional support, reaching this milestone would have been nearly impossible. Mummy, Papa, Hiral and Krishna – thanks for everything.

Shweta S. Oza

March 31, 2007

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Chapter 1: Essay 1 – The Sound of Silence in Bargaining: Effect of Delay on Inferences of Opponent's Reservation Price and Perceptions of Outcomes

Summary

This research examines the influence of time taken by a bargaining opponent to respond to an offer on bargainers' perceptions of their own bargaining outcomes.

Extending prior research, this research shows that bargainers may use the time taken by an opponent to respond to infer his/her reservation price, which leads to differences in perceptions of bargaining outcomes. Specifically, holding monetary outcomes constant, we find that bargainers are more satisfied with the outcomes when their offer is accepted after a delay than when it is accepted immediately, but only when the delay is related to the bargaining. Further, the inquiry is extended to situations where an offer is rejected.

Importantly, this research identifies two factors – knowledge of opponent's best alternative to negotiated agreement and persuasion knowledge – that moderate the influence of response time on perceptions of bargaining outcomes. Results of five studies attest to the vulnerability of bargaining perceptions independent of actual outcomes and provide insight into the underlying process by identifying boundary conditions for the effect of delay on perceptions of bargaining outcomes.

Introduction

An extensive literature in psychology underscores the importance and pervasiveness of bargaining. Research in social psychology views bargaining as a social process where two or more parties are involved in an interdependent decision-making situation (e.g., Bazerman, 1983; Thompson, 1991). In general, research suggests that individuals are active in understanding their social world and that social cues play a critical role in shaping attributions, perceptions, and judgments (Fiske & Taylor, 1991). In particular, research shows that bargaining is a form of social decision making that is influenced by bargainers' subjective interpretations of the bargaining situation and its related features (e.g., Bazerman, 1983; Thompson & DeHarpport, 1994; Thompson, Valley, & Kramer, 1995). The social decision making perspective in bargaining has paved the way for descriptive theories that are primarily concerned with bargainers' cognitions and their evaluations of potential bargaining outcomes (Bazerman, 2001; Neale & Bazerman, 1991; Thompson, 1990).

Two critical variables in any bargaining setting are time and information (Cramton, 1992). Often bargaining situations are complex, characterized by uncertainty, asymmetric information, and lack of referents against which to evaluate potential bargaining outcomes (e.g., Morris, Larrick, & Su, 1999; Srivastava, Chakravarti, & Rapoport, 2000; Thompson 1991; White and Neale 1994). In the absence of clearly specified reference points, bargainers may be uncertain regarding the mutual gains from trade (White & Neale, 1994) and strategic communication has to occur before agreement can be reached (Srivastava et al. 2000). Time provides a means for this strategic

communication to occur (Cramton, 1992). Economic models assume that delay is costly and time-related cost is represented either as a fixed cost per period or a time-dependent discount factor (Rubinstein, 1982). A seller (buyer) with a low (high) reservation price, expecting large gains from trade, would be less willing to incur time-related costs by delaying agreement (and thus reduce payoffs) than a high (low) reservation price seller (buyer) who stands to lose little from delay. Although the effect of an explicit time-related cost on bargaining processes and outcomes has been examined in the literature (Rapoport, Erev, & Zwick, 1995; Srivastava et al., 2000), the time taken by a bargaining opponent to respond to an offer has received relatively less attention.

Exceptions are two articles that examine the effect of time taken by a bargaining opponent in accepting an offer on perceptions of one's own bargaining outcomes (Galinsky, Seiden, Kim, & Medvec, 2002; Srivastava & Oza, 2006). These articles showed that bargainers were less satisfied with their outcomes if their first offer was accepted immediately than after a short delay, holding the actual monetary outcomes constant. Galinsky et al. (2002) suggest that immediate acceptance of an offer leads to upward counterfactual thinking thereby lowering satisfaction. Srivastava and Oza (2006) argue that bargainers' use response time to infer opponent's level of conflict, which in turn, influences perceptions of one's own outcomes.

Building on these articles, this research further examines the influence of delay or the time taken by an opponent to respond to an offer on perceptions of bargaining outcomes and extends the literature in several important ways. First, based on attribution theory (e.g., Kelley, 1972), we propose a conceptualization in which inferences of opponent's reservation price lie at the core of the underlying explanation for the effect of

response time on perceptions of bargaining outcomes. Because bargainers' perceptions of their opponents' payoffs play an important role in evaluating bargaining outcomes (Loewenstein, Thompson, & Bazerman, 1989; Thompson et al., 1995), we explicitly examine the extent to which inferences of opponent's reservation price mediates the influence of response time. In addition, we explore whether delay *per se* influences perceptions of bargaining outcomes. To the extent that bargainers attribute the time taken by an opponent to his/her reservation price, it is necessary for the delay to be directly related to the bargaining situation. Second, unlike prior studies that examined the effect of delay only when an offer was accepted, we extend the inquiry to situations where an offer is rejected. While acceptance of an offer obviously terminates the bargaining, a rejection implies that bargaining continues. To the extent response time affects inferences of opponents' reservation price and bargainers' counteroffer, the bargaining process and the eventual outcomes are likely to be systematically impacted. Third, and most importantly, we test two factors that moderate the influence of response time on perceptions of bargaining outcomes. Specifically, we show that knowledge of opponent's best alternative to negotiated agreement (BATNA; Kim and Fragale, 2005; White & Neale, 1991) and persuasion knowledge (Campbell & Kirmani, 2000; Friestad & Wright, 1994) attenuate the effect of delay. Identification of BATNA and persuasion knowledge as moderators provides a deeper understanding of the process by exploring the boundary conditions for the effect of delay on perceptions of bargaining outcomes. In general, this paper considers response time as a source of social referent and examines the relationship between social comparison judgments and perceptions of outcomes in bargaining.

The next section provides the conceptual background and develops the hypotheses. We then describe and report the results of five studies that examine the influence of delay on perceptions of bargaining outcomes in different buyer-seller negotiation contexts. Together, the findings attest to the robustness and generalizability of the effect of opponent's response time. More importantly, the findings shed insight into the underlying process by identifying boundary conditions. The paper concludes by providing a summary of the results, discussing the implications of the findings, and suggesting directions for future research.

Conceptual Background

Delay in Bargaining

A long tradition of research in social psychology suggests that individuals often evaluate outcomes by comparing their outcomes with those of individuals around them (Festinger, 1954). Consistent with social comparison theory, bargaining outcomes may be evaluated based not only on one's own payoff but also on opponents' payoffs (e.g., Loewenstein et al., 1989). Studies have documented the ubiquitous nature of the fixed-pie perception in bargaining wherein people believe that their interests directly conflict with those of their opponents (Bazerman, 1983; Thompson, 1991; Thompson & DeHarpport, 1994). The win-lose orientation that the fixed-pie perception encourages is manifested in the schema that an opponent's gain (loss) is perceived as one's own loss (gain). Thompson et al. (1995) found that bargaining outcomes were evaluated more positively

when bargainers learnt that their opponents felt disappointed with the bargaining outcomes relative to when opponents felt happy. Given the significant role of bargainers' perceptions of their opponents' payoffs in the psychology of conflict resolution (e.g., Boles & Messick, 1995; Loewenstein et al., 1989), the effect of opponent's response time on evaluations of bargaining outcomes is likely to depend on the nature of the attributions that are triggered.

Attribution theory assumes that individuals seek to meaningfully explain others' behavior in terms of its underlying causes (Fiske & Taylor, 1991; Kelley, 1972). Despite the rich tradition of attribution theory in social psychology and its implications for interdependent decision-making, only a handful of studies have directly examined the role of causal attributions in bargaining (Betancourt, 1990; Blount, 1995). These studies show that a bargainer's attributions about an opponent's behavior play a critical role in affecting bargainer's strategic decisions (Blount, 1995; Morris, Larrick, & Su, 1999). An important element of attribution theory, particularly relevant in a bargaining context, is the perceptions of the motivation and self-interest that underlies others' behavior. In the absence of clear and objective referents, an opponent's active and/or passive behavior is likely to trigger attributions as individuals search for plausible explanations for their opponent's behavior. These attributions may influence perceptions of opponents' payoffs and evaluations of bargaining outcomes. Specifically, the nature of the perceived causes that an individual evokes for the time taken by an opponent to respond is likely to influence bargaining perceptions.

Previous research examining the effect of first offers on bargaining outcomes suggests that the individual initiating the bargaining is better off making a relatively high

first offer as opponents tend to anchor on the first offer in reaching agreement (Galinsky & Mussweiler, 2001; Yukl, 1974). Galinsky and Mussweiler (2001) report that the selling (buying) price was higher (lower) for sellers (buyers) who made the first offer than those who did not. However, consider a situation in which an individual's first offer is accepted immediately relative to a situation where the offer is accepted after a few minutes.

Galinsky et al. (2002) argue that despite approaching one's aspiration level, a bargainer may be less satisfied when a first offer is accepted immediately than when it is accepted after a delay. They reason that a first offer that is accepted immediately generates upward counterfactual thinking (i.e., comparison of current bargaining outcome to a better possible outcome) leading bargainers to be less satisfied with such offers than with offers that are accepted after a short delay. Reporting similar findings, Srivastava and Oza (2006) argue that, in information poor environments, bargainers use opponent's response time to infer the level of conflict within the opponent in evaluating one's own potential bargaining outcomes.

Another finding that relates to our conceptualization is that individuals infer the relative attractiveness of an option (or outcome) based on decision difficulty (Lieberman & Forster, 2006). To the extent that opponent's response time is reflective of the level of conflict within the opponent (Srivastava & Oza, 2006) or decision difficulty (Lieberman & Forster, 2006), we argue that bargainers use response time to infer opponent's reservation price.

Building on prior research, we posit that when a seller accepts a buyer's offer after a short delay, buyers may infer that although the offer was higher than the seller's reservation price, the decision was difficult because the potential outcome was not as

attractive as the seller had hoped and the seller may have considered rejecting the offer and holding out for a better outcome. In contrast, an immediate acceptance of an offer by a seller may lead to the inference that the offer was relatively attractive and the decision to accept was not at all difficult. An offer that is accepted immediately suggests that there may have been some room for the seller to yield further had the bargaining continued. The extent to which time taken to respond to an offer is used as a reflection of the level of conflict within the opponent or decision difficulty, bargainers are likely to be more satisfied with their outcomes when an offer is accepted after a delay than immediately. Importantly, it follows that buyers' estimate of the minimum price that the seller would have been willing to accept is likely to be higher when an offer is accepted after a delay than when it is accepted immediately. Given that level of conflict and decision difficulty are mere indicators of the attractiveness of a potential outcome, inferences of opponent's reservation price lies at the core of these explanations. This research thus explicitly measures and tests the mediating role of inferred reservation price.

Does any kind of delay influence perceptions of bargaining outcomes? Attribution theory suggests that in order for time taken by an opponent to affect inferences of opponent's reservation price and hence perceptions of outcomes, it is necessary for the delay to be directly related to the bargaining situation. In other words, the predicted effects are not due to delay *per se*. To the extent the delay can be attributed to an event (or cause) that is not related to the bargaining, bargainers would not attempt to find causal explanations for opponents' behavior. It is therefore hypothesized that response time will influence inferences of opponents' reservation price and perceptions of bargaining outcomes only when the delay is clearly related to the bargaining situation but not

otherwise. The relatedness of the delay to the bargaining allows us to control bargainers' attributions about an opponent's behavior, thus providing additional insight into the underlying process.

H1: Bargainers will be more satisfied with their outcomes and their estimate of opponents' reservation price will be higher when their offer is accepted after a short delay than immediately only when the delay is related to the bargaining but not when the delay is unrelated.

H2: The effect of delay on perceptions of bargaining outcomes will be mediated by inferences of opponent's reservation price.

Unlike previous research that examined the effect of delay only when an offer was accepted (Galinsky et al., 2002; Srivastava & Oza, 2006), we extend the conceptualization to the negative domain where an offer is rejected. Rejection of an offer clearly prolongs the bargaining and any systematic influence of response time on inferences of opponents' reservation price and the counteroffer is reflective of the extent to which response time is likely to affect the bargaining process and eventual outcome. Note that Galinsky et al. (2002) argued that upward counterfactuals are generated when a first offer is accepted immediately. However, the nature of the counterfactuals, if at all generated, is not clear when an offer is rejected, particularly because no outcome is reached when an offer is rejected.

However, using delay to infer level of conflict or decision difficulty extends to the negative domain (Lieberman & Forster, 2006). When an offer is rejected immediately, bargainers may infer that the offer was quite unattractive and the decision to reject was relatively easy. In contrast, when an offer is rejected after a short delay, bargainers may infer that the offer was “almost” acceptable making the decision difficult. As such, estimate of the minimum price that the seller would be willing to accept and buyers’ counteroffer are likely to be higher when an offer is rejected immediately than after a delay. Our conceptualization suggests that an inverted-U relationship between decision difficulty and attractiveness of an option (or offer; c.f. Liberman & Forster, 2006). Extending previous work, our research includes offers that are rejected and explicitly provides a link between perceptions of bargaining outcomes (and counteroffers) and inferences of opponent’s reservation price based on response time.

H3: Bargainer’s estimate of their opponent’s reservation price and their own counteroffer will be higher when their offer is rejected immediately than after a short delay.

Opponent’s Best Alternative to Negotiated Agreement (BATNA)

In discussing the effect of delay on perceptions of bargaining outcomes, we have thus far ignored the role of contextual factors. Contextual factors are an important aspect of any bargaining setting and knowledge of these factors provides the milieu within which factors arising from the bargaining process are interpreted. The influence of interaction process factors such as the time taken to respond to an offer may therefore be

moderated by bargainers' knowledge of contextual factors (Neale & Bazerman, 1991; White & Neale, 1991).

A contextual factor that has received considerable attention in the bargaining literature is a bargainer's best alternative to a negotiated agreement (BATNA) or the outside option available to the bargainer if an agreement is not reached (White & Neale, 1991; White, Valley, Bazerman, Neale, & Peck, 1994). BATNAs and outside options represent a source of power because bargainers with an attractive BATNA are less dependent on the focal bargaining and reduce the likelihood of concessions (e.g., Kim & Fragale, 2005; Kim, Pinkley, & Fragale, 2005).

In addition to influencing power, BATNAs also constitute a referent against which potential outcomes may be evaluated (White & Neale, 1991; White et al., 1994). Several descriptive studies show that bargainers generally evaluate the quality of bargaining outcomes relative to reference points and that the outcomes are coded as gains or losses based on these reference points (White et al., 1994). To the extent that knowledge of BATNA affects perceptions of relative power and provides a reference point against which to compare potential outcomes, the time taken by an opponent to respond to an offer is unlikely to influence perceptions of bargaining outcomes. First, knowledge that a bargaining opponent has an attractive BATNA may lead a bargainer with no BATNA (or unattractive BATNA) to believe that most outcomes are good enough (compared to no agreement). Second, given that BATNA provides a clear reference point against which to compare potential outcomes, bargainers are less likely to rely on the time taken by an opponent to infer decision difficulty and their reservation price. More generally, knowledge of a contextual factor such as an opponent's attractive

BATNA is likely to attenuate the effect of time taken by an opponent to respond to an offer.

H4: The influence of time taken by an opponent to respond to an offer on perceptions of bargaining outcomes is likely to be stronger when bargainers have no knowledge (vs. knowledge) of their opponent's BATNA.

Persuasion Knowledge

The susceptibility to opponent's response time suggests that experienced and skillful bargainers may use response time as a bargaining tactic to manage perceptions (in accepting an offer) or influence the bargaining process and outcome (in rejecting an offer) in their favor. Although previous research points to the malleability of perceptions of bargaining outcomes, the bargaining scenarios used were relatively innocuous where bargainers are unlikely to recognize response time as a potential bargaining tactic. Recognition of response time as a bargaining tactic is likely to occur when persuasion knowledge is activated thereby raising bargainers' perceptual defenses (Friestad & Wright, 1994).

Persuasion knowledge model (PKM) suggests that individuals develop theories and beliefs about persuasion motives, attempts, and tactics and that this knowledge helps in coping with persuasion attempts (Friestad & Wright, 1994). The knowledge structure or the set of beliefs and intuitive theories evolve and update over time as a function of new information in the form of one's own experiences, knowledge of others' experiences, etc. For example, individuals may be exposed to certain tactics and learn to recognize

them as such. This knowledge is used to interpret, evaluate, and react to such tactics in the future. The process by which an action comes to be perceived as a tactic is termed the “change of meaning” principle (Friestad & Wright, 1994; Williams, Fitzsimons, & Block, 2004). The implication is that an action that is not perceived to be a tactic is likely to have a strong influence as individuals’ persuasion knowledge and its associated coping strategies are not activated. In contrast, to the extent an action is recognized as a tactic, persuasion knowledge and its associated coping strategies are activated thus reducing the potential influence of the tactic. Although PKM has been studied in a sales context (Campbell & Kirmani, 2000; Kirmani & Campbell, 2004), it has not been examined in a bargaining context. This is particularly surprising given the relevance of PKM in bargaining where, in general, bargainers perceive that an opponent’s gain (loss) is one’s loss (gain).

In the present bargaining context, we argue that time taken by an opponent is likely to influence perceptions of bargaining outcomes when response time is not perceived to be a tactic but not when it is perceived to be a tactic. In other words, when individuals’ persuasion knowledge is not activated, then opponent’s response time will be used to infer opponent’s reservation price thereby influencing perceptions of bargaining outcomes. In contrast, when individuals’ persuasion knowledge is activated, then the associated defense mechanisms and coping strategies will attenuate the influence of response time.

H5: The influence of time taken by an opponent to respond to an offer on perceptions of bargaining perceptions is likely to be stronger when bargainers' persuasion knowledge is not activated (vs. when persuasion knowledge is activated).

Study 1: Attribution of Delay

Study 1 tests hypothesis 1 and 2 and explores whether the effect of delay on perceptions of bargaining outcomes manifests when the delay is related to the bargaining but not when it is unrelated. Further, it tests the extent to which inferences of opponent's reservation price mediate the effect of delay on perceptions of bargaining outcomes.

Method

Sixty undergraduate seniors enrolled in an introductory business course were randomly assigned to one of three conditions (no delay, delay with reason, delay). Study 1 used a sublet scenario where participants were asked to imagine themselves in a situation where they were looking to sublet an apartment for three months in summer. The scenario read "It is the end of the school year, and you realize that you must stay around campus over the summer for summer school. You are unable to live in your current apartment for the summer and have therefore decided to sublet an apartment. A sublet is when the original renter leases out the apartment or a room in the apartment for a limited period. The new renter does not pay the rent to the owner of the apartment. Rather, they pay the rent to the original renter." The next paragraph read "In the

classified section of the local newspaper, you come across a listing for a one-bedroom apartment which is conveniently located. You make an appointment with the current tenant, Nina, and then she shows you around the apartment. The apartment is fully furnished with a spacious bedroom, bathroom, kitchen, hardwood floor, and is definitely a place you would like to rent.” The third paragraph read “Although the rent was listed in the ad, you ask Nina, ‘So, how much are you charging for the summer?’ Her response is ‘I am asking \$2000 for the entire summer.’ You decide that you would like to try and negotiate the price and say, ‘How about \$1850?’”

The experimental manipulations were embedded in the fourth paragraph by altering the Nina’s response to the offer. In the no delay condition, the fourth paragraph read “Nina immediately accepts your offer of \$1850 and the deal is finalized. The apartment is now yours for the summer, and you leave to go home.” In the delay condition, the fourth paragraph read “Nina says, ‘Well, come back tomorrow and I will let you know.’ The next day when you go, Nina agrees to accept your offer of \$1850 and the deal is finalized. The apartment is now yours for the summer, and you leave to go home.” In the delay with reason condition, the fourth paragraph read “Right then Nina’s phone rang and she excused herself saying, ‘I am sorry but I have to take this call as it is very important. Can you please come back tomorrow and I will let you know.’ The next day when you go, Nina agrees to accept your offer of \$1850 and the deal is finalized. The apartment is now yours for the summer, and you leave to go home.”

After reading the subplot scenario, participants were asked to respond to the dependent measures. Perceptions of bargaining outcome were measured by averaging subjects’ responses to two items measuring satisfaction and pleased with the outcome (1

= Not at all; 7 = Very; $r = .88$). After participants had responded to the two items, they were explicitly asked “In your opinion, the lowest price at which Nina would have rented the sublet is \$ _____. ” Other covariates were also measured but were not significant.

Results

A one-way three level analysis of variance revealed that perceptions of bargaining outcome were significantly different across the three conditions ($F(2, 57) = 7.58, p < .001$). A planned contrast showed that perceptions of bargaining outcomes were significantly higher in the delay condition compared to the no delay condition (M 's = 5.99 and 4.74; $F(1, 57) = 11.44, p < .001$). Importantly, while perceptions of bargaining outcome did not differ across the no delay and delay with reason conditions (M 's = 4.74 and 4.77; $F(1, 57) < 1, ns$), perceptions of bargaining outcome were significantly higher in the delay condition relative to the delay with reason condition (M 's = 5.99 and 4.77; $F(2, 57) = 11.59, p < .001$).

Analysis of participants' estimates of the lowest price at which Nina would rent the place (opponent's reservation price) revealed a significant difference across the three conditions ($F(2, 57) = 3.74, p < .03$). Estimates of the opponent's reservation price were significantly higher in the delay condition relative to no delay condition (M 's = 1792.11 and 1705.26; $F(1, 57) = 6.55, p < .01$). Further, estimates of the opponent's reservation price were significantly higher in the delay condition relative to the delay with reason condition (M 's = 1792.11 and 1721.59; $F(1, 57) = 4.63, p < .03$). However, estimates of the opponent's reservation price did not differ significantly across no delay and delay with reason conditions (M 's = 1721.59 and 1705.26; $F(1, 57) < 1, ns$). These data support

hypothesis 1 and demonstrate that when delay is unrelated to the bargaining, perceptions of bargaining outcomes are not affected. However, when time taken to respond cannot be attributed to unrelated reasons, individuals search for an explanation for opponents' behavior. This search for a plausible explanation leads individuals to believe that the time taken by an opponent to respond to an offer is reflective of opponent's reservation price.

To test the extent to which inferences of opponent's reservation price mediate the influence of response time, estimate of opponent's reservation price was included as an explanatory factor along with the three response time conditions (Baron & Kenny, 1986). Consistent with hypothesis 2, the analysis revealed partial mediation as the significance of response time reduced considerably ($F(2, 56) = 3.87, p < .05$) but the estimates of opponent's reservation price was significant ($F(1, 56) = 16.30, p < .0001$; Sobel $Z = 3.06, p < .002$). Study 1 supports hypothesis 1 and 2 and demonstrates that the effect of response time on perceptions of bargaining outcome and estimates of opponent's reservation price manifest only when the delay is related to the bargaining. The data show that delay per se cannot account for the findings. Rather, in an information poor environment, opponent's response time is used to infer opponent's reservation price, which in turn, influences perceptions of bargaining outcomes.

Study 2: Rejection of Offers

Study 2 tests hypothesis 3 and extends previous research to examine the effect of delay in the negative domain where an offer is rejected. In addition, it explicitly links perceptions of bargaining outcomes to the inferences of opponent's reservation price.

Method

Twenty-eight undergraduate seniors participated in a study where they were told that the purpose was to investigate how a seller and a buyer negotiate the price of a product. Participants were told that they would be randomly assigned to play the role of the buyer or seller and their task was to bargain in their respective roles with another individual over a computer. Participants were then informed that they had been randomly assigned to play the role of a buyer and another student was assigned to play the role of the seller. In reality, all participants were assigned the role of the buyer against a programmed seller. Participants were to bargain over the price of a 4 year old, well maintained car. In addition, they were told that they had checked the used car dealers to find that the price of a similar car would be \$9000. Participants were then informed that the seller had started the process by asking for a price of \$8600 for the car (note that our test is conservative given that the outcome would be relatively satisfactory given that the agreed upon price was guaranteed to be a gain relative to the reference point of \$9000). After receiving the seller's offer, participants were told that they were unsure as to how to proceed and after consulting with a friend, who had just purchased a used car, were advised to reject the offer and make an offer of \$7000 for the car. After the participants had sent the offer of \$7000, the computer screen read, "Please wait for the seller's decision."

The programmed seller's response to the counteroffer was altered to create the experimental conditions. The seller always rejected the \$7000 offer and made another offer of \$7500 after 5 seconds in the no delay condition and after 2 minutes in the delay

condition. Unlike study 1, participants actually experienced delay in this study. Participants were then asked to indicate their counteroffer, if they rejected the seller's offer, as well as estimate the minimum offer that the seller would be willing to accept. Participants did not know that the bargaining would be terminated before an agreement was reached. Debriefing suggested that participants believed the cover story that they were bargaining with another individual.

Results

Hypothesis 3 predicted that estimate of the opponent's reservation price and participants' counteroffer is likely to be higher when an offer is rejected immediately than after a delay. Consistent with hypothesis 3, participants' estimate of the minimum price that the seller would be willing to accept was significantly higher when the offer was rejected after 5 seconds than after 2 minutes (M 's = 7265.63 and 7040.91; $F(1, 26) = 4.68, p < .04$). Their next counteroffer was also significantly higher when the offer was rejected immediately than after a small delay (M 's = 7228.19 and 7045.45; $F(1, 26) = 27.64, p < .0001$). The data show that time taken to respond to an offer influences estimates of opponent's reservation price and participant's counteroffer when an offer is rejected.¹

¹Another study with 97 participants in a 2 (delay and no delay) x 2 (accept and reject) between-subjects design replicated these findings. While perceptions of the lowest price that the seller would accept were significantly higher in the delay versus the no delay condition when the offer was accepted ($p < .03$), perceptions of the lowest price were significantly lower in the delay versus no delay condition when the offer was rejected ($p < .02$). However, in this study, participants did not actually experience delay as time taken to respond was manipulated via a scenario. Details are available on request.

Study 2 extends the previous research by demonstrating that the time taken by an opponent to respond to an offer affects estimates of opponent's reservation price and the counteroffer when the offer is rejected. It is important to note that given the significant effect on counteroffer and opponent's reservation price, response time is likely to have a systematic influence on bargaining processes and outcomes. Studies 1 and 2 extend our understanding about the effect of opponent's response time by showing that only delay related to bargaining situation influences the perceptions of bargaining outcomes and that this effect also holds in the negative domain. Studies 3, 4, and 5 test the boundary conditions.

Study 3: Knowledge of Opponent's BATNA

Study 3 tests hypothesis 4 and examines whether the knowledge of opponent's BATNA moderates the effect of response time on perceptions of bargaining outcomes. In study 3, individuals were seated on opposite sides of a table and bargained through written offers. Although delay was experienced in study 2, individuals were restricted to comply with the instructions regarding the offer they were allowed to make in order for the bargaining outcomes to be equivalent across conditions. Study 3 allowed individuals to be relatively unconstrained in their decisions of what to offer and what to accept or reject. Further, in both studies 1 and 2, participants were assigned the role of a buyer and thus the effect is demonstrated from the buyer's perspective. Study 3 uses a salary negotiation scenario where the participant, playing the role of a recruit, is negotiating his/her salary. Given that a recruit may be viewed as a seller and a recruiter as a buyer,

this study explores the generalizability of the effect by examining the influence of response time from the seller's perspective.

Method

Fifty-eight undergraduate students enrolled in an advanced business course were randomly assigned to one of four conditions of a 2 (no delay and delay) x 2 (knowledge of opponent's BATNA and no knowledge of opponent's BATNA) between-subjects design. Participants were informed that they would be participating in a negotiation simulation between a recruiter and a recruit who is about to graduate with an undergraduate degree in business. They were told that since they would be in a similar situation in the future they would represent the recruit and would negotiate in that specific role. The instructions emphasized that the recruiter would reject very high offers immediately and terminate the negotiation. Based on a pretest, these instructions were inserted to prevent participants from making unrealistically high offers and to constrain the offers within a realistic and meaningful range. To further motivate careful decision making, participants were told that cash prizes will be awarded to individuals reaching the three best outcomes.

Participants read the salary negotiation scenario and were then asked to go to an adjacent room to negotiate with the recruiter. The scenario stated that the recruiter had made an offer of \$42,000 and it was the participant's turn to make an offer. It was emphasized that salary was the only aspect they would be negotiating. On reaching the assigned room, participants were given a negotiation sheet on which to record all the relevant information. They were told that the negotiation will be conducted via written

offers on the negotiation sheet and that no verbal exchange was to take place between them and the recruiter. Another student, from a different class than the participants, played the role of the recruiter. The recruiter, blind to the hypotheses, was actually a confederate whose responses were predetermined based on the condition to which participants were randomly assigned. The recruiter was told to terminate the negotiation if participants' offer was higher than \$50,000 (three participants were eliminated on this basis and the results reported are based on the remaining 55 participants).

The two response time conditions differed on how the confederate responded to the participants' offer. In the no delay condition, the confederate accepted the participants' offer immediately whereas in the delay condition, the confederate waited for 2 minutes before accepting the offer. Knowledge of opponent's BATNA was manipulated by informing participants that the recruiter already had an acceptable candidate who was ready to accept the job at an annual salary of \$41,500 but the recruiter was looking to see if they could find a better candidate. This information was provided as a part of the salary negotiation scenario that the participants read when participants had knowledge of opponent's BATNA but not when participants had no knowledge of opponent's BATNA.

After the negotiation, participants returned to the main area where they responded to the dependent measures. The final bargaining outcomes reached were directly recorded and perceptions of bargaining outcomes were measured by averaging participants' responses to three seven-point items (Cronbach's $\alpha = .89$). The three items were "How satisfied/pleased/happy are you with the negotiated salary?" (1 = Not at all; 7 = Very much).

Results

An analysis of covariance with participant's final outcome as a covariate revealed a significant effect of time taken to respond ($F(1, 53) = 4.15, p < .05$) on perceptions of bargaining outcomes. Although knowledge of opponent's BATNA did not affect perceptions of bargaining outcomes ($F(1, 53) = 0.72; p > .40$), the two-way interaction was significant ($F(1, 53) = 4.96, p < .03$). Figure 1a shows that consistent with hypothesis 4, time taken to respond had a stronger influence on perceptions of bargaining outcomes for bargainers who did not know their opponent's BATNA relative to those who did know. Follow up contrasts revealed that when bargainers did not know their opponent's BATNA, perceptions of bargaining outcomes were significantly higher when the offer was accepted after a delay than when it was accepted immediately (M 's = 5.53 and 4.51; $F(1, 53) = 9.62, p < .003$). In contrast, when bargainers knew their opponent's BATNA, there was no difference in perceptions of bargaining outcomes across the no delay and delay conditions (M 's = 5.27 and 5.23; $F(1, 53) < 1, ns$).

Analysis of the final monetary outcomes revealed a significant effect of knowledge of opponent's BATNA ($F(1, 54) = 16.93, p < .001$) and a marginal effect of time taken to respond ($F(1, 54) = 3.30, p < .08$). The two-way interaction between time taken to respond and knowledge of BATNA was also marginally significant ($F(1, 54) = 3.09, p < .08$). Interestingly, there seems to be a discrepancy between actual monetary outcomes and bargainers' perceptions of these outcomes (see figure 1b). When opponent's BATNA was known, although perceptions of bargaining outcomes did not differ across the immediate acceptance and delayed acceptance conditions, the final

monetary outcomes were inexplicably higher in the delayed acceptance condition than in the immediate acceptance condition (M 's = 45436 and 43321; $F(1, 54) = 6.38, p < .014$).

FIGURE 1a - Perceptions of Bargaining Outcomes

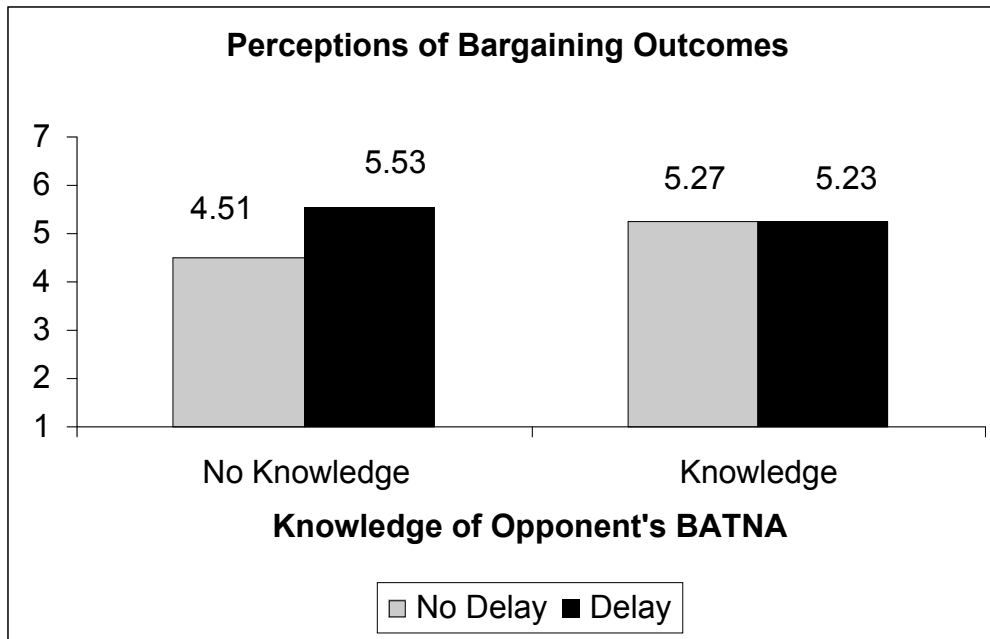
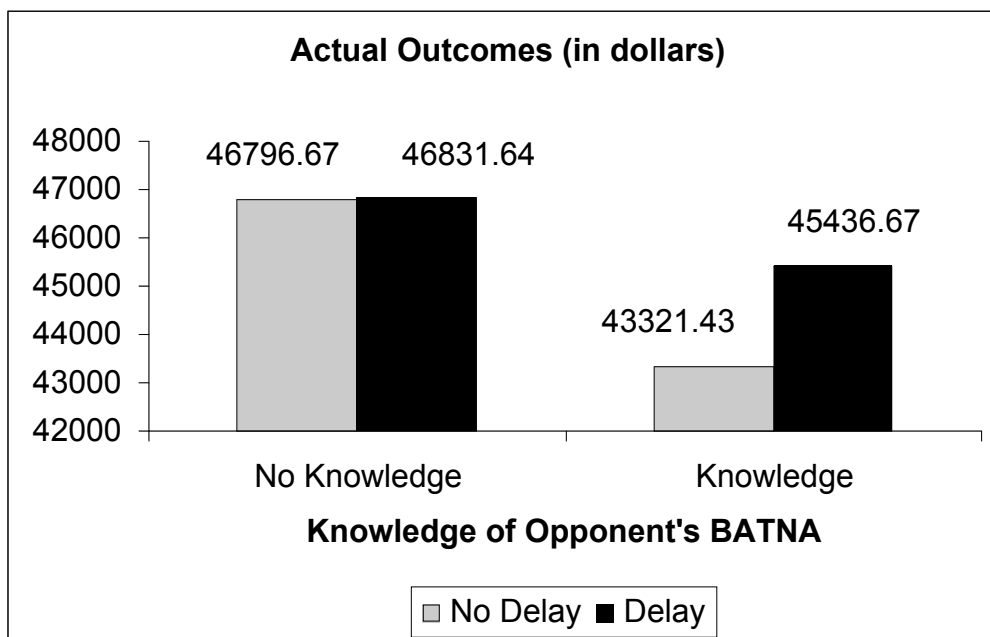


FIGURE 1b - Actual Bargaining Outcomes



In contrast, when opponent's BATNA was not known, although there was no difference in the actual monetary outcomes ($F(1, 54) < 1, ns$), bargainers' perceptions of their outcomes were lower in the no delay condition relative to the delay condition.

According to hypothesis 4, the time taken by an opponent to respond to an offer should have a greater influence on perceptions of bargaining outcomes when bargainers have no knowledge (vs. knowledge) of their opponent's BATNA. The results of study 3 support hypothesis 3 and show that response time influenced perceptions of bargaining outcomes even when participants played the role of the seller. Study 3 also shows that there is a discrepancy between actual monetary outcomes and bargainers' perceptions of these outcomes. Perceptions of bargaining outcomes differed when the monetary outcomes were not different and did not differ when the monetary outcomes were actually different. These findings suggest that response time may influence perceptions of bargaining outcomes, independent of actual outcomes. More importantly, the findings suggest the knowledge of opponent's BATNA provides bargainers a context within which to interpret the time taken by an opponent to respond.

Study 4: Activating Persuasion Knowledge via Priming

Study 4 tests hypothesis 5 and examines whether activation of bargainers' persuasion knowledge attenuates the influence of response time. In this study, participants are primed with a description of bargaining processes and associated tactics to activate persuasion knowledge. To the extent that such priming provides "change of meaning" and attenuates the effect of response time on perceptions of bargaining

outcomes, the implication is that it is possible to educate consumers to guard against potential impact of such tactics.

Method

Ninety eight undergraduate students enrolled in an introductory business course participated in an hour long research session involving several studies. They were given several booklets for the different studies. For this study, they were randomly assigned to a 2 (Time taken to respond: no delay and delay) x 2 (Persuasion knowledge: activated and not activated) between-subjects experimental design. Participants were asked to imagine a scenario in which they were purchasing a used bike. They were told that towards the end of their second year as an undergraduate university student, they had decided to buy a bike to go around campus. Participants read “You come across an ad by a graduating senior who is selling a variety of stuff including a bike. After emailing the student who is selling the bike, you go over to check out the bike. As claimed in the ad, you find the bike in good condition, and after riding it around, you are satisfied with the bike. You are now ready to talk about the price of the bike. On asking the price of the bike, the graduating student starts by telling you that the bike is in great condition, is only two years old and that it has been well maintained. Then he states that he is asking \$160 for the bike. Knowing the price is open to bargaining in this kind of a situation, and in an attempt to get the best possible price; you make a counteroffer of \$125.”

The time taken by the seller to respond to the counteroffer was altered to create the two response time conditions. In the no delay condition, participants were told that the seller accepted their offer immediately and sold them the bike for \$125. In the delay

condition, participants were told that the seller waited for 15 minutes before agreeing to sell them the bike for \$125. Persuasion knowledge was activated by priming the participants. Participants in the priming condition read a short description of bargaining in business contexts and the common use of tactics in negotiations in the first booklet they were given. They read the description under the guise that graduating seniors were thinking of a newsletter that would cover various aspects of doing business in the real world and the booklet was being administered to assess the usefulness of such a newsletter. Consistent with the cover story, participants responded to several questions about usefulness, content quality, layout quality, and future intentions, before moving to the next study. The second study, which took about 15 minutes to complete, provided the filler task prior to this study. Participants in the no prime condition did not receive the priming booklet but completed the filler study prior to this study. Since all participants had a stack of booklets, it is unlikely that participants in the no prime condition would notice that they had one less booklet.

After reading the scenario, participants were required to respond to the dependent measures. An average of two items was used to measure perceptions of bargaining outcomes ($r = .90$). The two measures were: “How pleased are you with the outcome?” (1 = Not at all pleased; 7 = Very pleased) and “How successful do you feel with the outcome?” (1 = Not at all successful; 7 = Very successful). Opponent’s reservation price was measured by asking participants to estimate the lowest price that the opponent would have been willing to accept. In addition, they were asked to rate the extent to which their opponent was knowledgeable about various bargaining tactics and the extent to which the opponent used those tactics (1 = Not at all; 7 = A lot). In the delay conditions,

participants were additionally asked to rate the likelihood that the opponent used delay as a tactic and the likelihood that opponent used delay to influence how they feel about the outcome (1 = Not at all likely; 7 = Very likely). All these measures were collected on a separate page following perceptions of bargaining outcomes.

Results

A 2 x 2 ANOVA revealed that response time ($F(1, 94) = 6.55, p < .01$) and persuasion knowledge ($F(1, 94) = 5.93, p < .02$) had a significant influence on perceptions of bargaining outcomes. These main effects were qualified by a significant two-way interaction ($F(1, 94) = 6.81, p < .01$). Table 1 shows that response time influenced perceptions of bargaining outcomes when persuasion knowledge was not activated but not when persuasion knowledge was activated by priming. Planned contrasts showed that in the absence of the prime where persuasion knowledge was not activated, perceptions of the bargaining outcomes were significantly higher when the offer was accepted after a delay than when it was accepted immediately ($M's = 5.23$ and $3.77; F(1, 94) = 12.13, p < .001$). However, when persuasion knowledge was activated with the prime, perceptions of bargaining outcomes did not vary across the delay and no delay conditions ($M's = 3.81$ and $3.82; F(1, 94) < 1, ns$). These data support hypothesis 5.

Another 2 x 2 ANOVA revealed that response time ($F(1, 94) = 6.66, p < .01$) and persuasion knowledge ($F(1, 94) = 4.57, p < .04$) significantly affected estimates of opponent's reservation price but these main effects were qualified by a significant two-way interaction ($F(1, 94) = 5.68, p < .02$). Consistent with the findings of earlier studies, estimates of opponent's reservation price were significantly lower in the no delay

condition than in the delay condition when persuasion knowledge was not activated (M 's = 89.77 and 105.23; $F(1, 94) = 11.19, p < .001$) but there was no difference when persuasion knowledge was activated (M 's = 90.54 and 91.15; $F(1, 94) < 1, ns$).

Importantly, when estimates of opponent's reservation price was added as an explanatory variable, the effect of estimates of opponent's reservation price was significant ($F(1, 93) = 53.53, p < .0001$), but the effect of response time was no longer significant ($F(1, 93) = 1.46, p > .23$) (Baron & Kenny, 1986).

TABLE 1 – Effect of Delay and Persuasion Knowledge (via priming) on Dependent Variables

Persuasion Knowledge (via Priming)	Activated		Not Activated	
	No Delay	Delay	No Delay	Delay
Perceptions of bargaining outcome	3.82 (1.23)	3.81 (1.51)	3.77 (1.49)	5.23 (1.3)
Estimates of opponent's reservation price	90.54 (15.65)	91.15 (17.51)	89.77 (14.76)	105.23 (12.39)
Extent to which opponent knowledgeable about bargaining tactics	3.32 (1.47)	4.35 (1.52)	3.18 (1.56)	3.09 (1.34)
Extent to which opponent used tactics	3.43 (1.53)	4.54 (1.56)	3.18 (1.56)	3.41 (1.56)
Likelihood of using delay as a bargaining tactic	--	5.31 (1.41)	--	3.64 (1.68)
Likelihood that opponent used delay to influence how you feel about the outcomes	--	5.31 (1.35)	--	3.91 (1.48)

The notion that the time taken to respond to an offer is more likely to be perceived as an influence tactic when persuasion knowledge is activated is supported by additional data. Table 1 shows that the extent to which opponent was knowledgeable about bargaining tactics (M 's = 3.83 and 3.13; $F(1, 94) = 5.46, p < .02$) and the extent to which opponent used those tactics (M 's = 3.98 and 3.29; $F(1, 94) = 4.77, p < .03$) were significantly higher when participants were primed relative to when they were not. Additionally, participants in the delay condition believed that the likelihood of delay being used as a tactic by the opponent (M 's = 5.31 and 3.64; $F(1, 46) = 14.10, p < .001$) and the likelihood of opponent using delay to influence how they feel about the outcomes (M 's = 5.31 and 3.91; $F(1, 46) = 11.74, p < .001$) was significantly higher in the prime condition than in the no prime condition. These data show that the prime was effective in activating persuasion knowledge.

Study 4 supports hypothesis 5 and shows that activation of persuasion knowledge attenuates the influence of response time on perceptions of bargaining outcomes. It is noteworthy that activation of persuasion knowledge had a significant influence on bargaining outcomes only in the delay conditions but not when the offer was accepted immediately. This pattern supports our contention that activation of persuasion knowledge influences the manner in which individuals interpret and respond to delay.

Although study 4 demonstrates that priming activates persuasion knowledge and can thus be used to educate consumers to guard against such bargaining tactics, the prime may have activated persuasion knowledge in at least two ways. First, as was intended, the prime imparts knowledge of tactics, stimulates a “change of meaning,” thereby activating persuasion knowledge. The implications for such change of meaning are important for

consumer learning and education. Second, the prime may have activated persuasion knowledge by increasing the accessibility of pre-existing knowledge. Study 5 tests hypothesis 5 by using a more spontaneous manipulation of persuasion knowledge (i.e., without an external intervention such as a prime).

Study 5: Activating Persuasion Knowledge

Study 5 manipulates persuasion knowledge by altering the description of the seller. Persuasion knowledge is activated by describing the seller as someone who has considerable expertise in selling. We expect that knowledge that a bargaining opponent has the ability to use tactics in a selling situation will activate persuasion knowledge and perceptions of bargaining outcomes are less likely to be influenced by the time taken by such an opponent to respond. Note that unlike previous research where persuasion knowledge is activated by making ulterior motives accessible (Campbell & Kirmani, 2000), we activate persuasion knowledge by manipulating the ability of an opponent to use selling (or bargaining) tactics.

Method

Eighty five undergraduate students enrolled in an introductory business course were randomly assigned to a 2 (Time taken to respond: no delay and delay) x 2 (Persuasion knowledge: activated and not activated) between-subjects experimental design. The bike purchase scenario used in study 4 was used in this study as well.

Although the response time manipulation was identical to that used in study 4, persuasion knowledge was manipulated by varying the characteristics of the opponent. When persuasion knowledge was activated, the opponent was described as an expert in selling. Participants read “In course of your small talk with the graduating senior, you find out that he is a marketing major specializing in sales, has worked as a sales person for last three years selling all sorts of stuff from bikes to cars to electronics, and will be joining XYZ Company as a Sales Specialist.” When persuasion knowledge was not activated, participants read “In course of your small talk with the graduating senior, you find out that he is a computer major specializing in networking, has worked as a networking person for last three years, and will be joining XYZ Company as a Network Specialist.” After reading the scenario, participants were asked to respond to several dependent measures. These were identical to those collected in study 4.

Results

Table 2 displays the means and standard deviations of the dependent measures as a function of the manipulated factors. A 2 x 2 ANOVA revealed that time taken to respond ($F(1, 81) = 4.45, p < .04$) and persuasion knowledge ($F(1, 81) = 7.67, p < .007$) significantly influenced perceptions of bargaining outcomes but these effects were qualified by a significant two-way interaction ($F(1, 81) = 5.103, p < .03$). Consistent with hypothesis 5, planned contrasts revealed that when persuasion knowledge was not activated, perceptions of bargaining outcomes were significantly higher when the offer was accepted after a delay than when it was accepted immediately (M 's = 5.00 and 3.74; $F(1, 81) = 9.43, p < .003$). In contrast, when persuasion knowledge was activated,

perceptions of bargaining outcomes did not vary across the delay and no delay conditions (M 's = 3.55 and 3.59; $F(1, 81) < 1$, *ns*).

TABLE 2 - Effect of Delay and Persuasion Knowledge on Dependent Variables

Persuasion Knowledge (via description)	Activated		Not Activated	
	No Delay	Delay	No Delay	Delay
Perceptions of bargaining outcome	3.59 (1.21)	3.55 (0.95)	3.74 (1.64)	5.00 (1.43)
Estimates of opponent's reservation price	89.55 (11.74)	89.76 (27.09)	88.10 (12.19)	104.29 (9.52)
Extent to which opponent knowledgeable about bargaining tactics	5.00 (1.45)	5.33 (1.59)	2.71 (1.55)	3.43 (1.54)
Extent to which opponent used tactics	4.32 (1.64)	5.19 (1.91)	2.71 (1.42)	3.52 (1.81)
Likelihood of using delay as a bargaining tactic	--	5.95 (1.28)	--	3.90 (1.79)
Likelihood that opponent used delay to influence how you feel about the outcomes	--	5.90 (1.34)	--	4.05 (1.57)

Another 2 x 2 ANOVA revealed a significant effect of response time ($F(1, 81) = 5.18$, $p < .02$) and a significant two-way interaction ($F(1, 81) = 4.91$, $p < .03$) on estimates of opponent's reservation price. As in study 4, planned contrasts showed that estimates of opponent's reservation price were significantly lower in the no delay condition relative to the delay condition when the persuasion knowledge was not activated (M 's = 88.10 and 104.29; $F(1, 81) = 9.972$, $p < .002$) but there was no

difference when the persuasion knowledge was activated ($M's = 89.55$ and 89.76 ; $F(1, 81) < 1$, *ns*).

As in study 4, the notion that knowledge of the opponent's ability in using tactics would activate persuasion knowledge is borne out by the additional data. Table 3 shows that the extent to which opponent was knowledgeable about bargaining tactics ($M's = 5.17$ and 3.07 ; $F(1, 81) = 39.73$, $p < .001$) and extent to which the opponent used those tactics ($M's = 4.75$ and 3.12 ; $F(1, 81) = 19.53$, $p < .001$) were significantly higher when the seller was described as an expert in selling than when the seller was described as a computer expert. Additionally, in the delay condition, the likelihood that the opponent used delay as a tactic ($M's = 3.90$ and 5.95 ; $F(1, 40) = 18.20$, $p < .001$) and the likelihood that the opponent used delay to influence how they feel about the outcomes ($M's = 4.05$ and 5.90 $F(1, 39) = 16.61$, $p < .001$) was significantly higher when the seller was described as an expert in selling rather than networking. As in study 4, note that persuasion knowledge affected perceptions of outcomes when the offer was accepted after a delay but not when it was accepted immediately.

Study 5 provides additional support for the hypothesis that response time affects perceptions of bargaining outcomes when persuasion knowledge is not activated but the effect is attenuated when persuasion knowledge is activated. Consistent with study 4, study 5 supports the idea that activation of persuasion knowledge influences the manner in which individuals interpret and respond to delay. Study 5 also demonstrates that knowledge of an opponent's ability to use tactics is sufficient to activate persuasion knowledge. Importantly, persuasion knowledge may be activated spontaneously by cues that are present in the bargaining environment.

General Discussion

Recognizing that time and information are two key factors in bargaining, this paper examines the influence of time taken by an opponent to respond to an offer on perceptions of bargaining outcomes. This paper reports the results of five studies that extend the previous literature in several important ways (Galinsky et al., 2002; Srivastava & Oza, 2006). In general, consistent with the literature in social psychology, the findings suggest that individuals are active in understanding their social world and interaction process factors such as the time taken to respond to an offer may play an important role in shaping attributions and judgments.

This research provides an explicit link between perceptions of bargaining outcomes and inferences of opponent's reservation based on response time. Consistent with prior research, our conceptualization draws on the finding that individuals infer relative attractiveness of a potential outcome based on decision difficulty (Lieberman & Forster, 2006). We argue that the extent to which time taken to respond is reflective of level of conflict (Srivastava & Oza, 2006) or decision difficulty (Lieberman & Forster, 2006), bargainers use response time to infer opponent's reservation price. The results highlight the role of attributions for an opponent's behavior in influencing bargaining perceptions. The results indicate that the time taken to respond to an offer is used to infer opponents' reservation price based on the associated indecisiveness or ambivalence with the decision. It appears that when an offer was accepted immediately, it was inferred that the offer was relatively attractive with no need for deliberation. However, when an offer

was accepted with delay, individuals inferred that because the offer was relatively unattractive the opponent was ambivalent about the decision and had to deliberate before accepting the offer. Study 1 demonstrates that it is not delay *per se* that affect perceptions of bargaining outcomes. Rather, response time affect bargaining perceptions only when the delay can be plausibly attributed to the bargaining situation. These findings suggest that uncertainty prompts causal analysis and individuals are more susceptible to response time because of the inherent need to seek a causal explanation for others' behavior (Kelley, 1972).

While previous research examined the effect of response time when an offer was accepted, this research extended the inquiry to the negative domain where an offer is rejected. Bargainers' inferences of opponent's reservation price as well as their counteroffers were higher when their offer was rejected immediately than after a short delay. The importance of these findings in the negative domain underscores the idea that time taken to respond can influence bargaining processes and outcomes. Extending the inquiry to the negative domain suggests that there is an inverted-U shaped relationship between attractiveness of a potential outcome and decision difficulty. Combining studies 1 and 2, our results suggest that clearly attractive and clearly unattractive offers are relatively easy to accept and reject, respectively. However, it is relatively difficult to accept a moderately attractive offer or reject a moderately unattractive offer because it may be just above or below a bargainer's reservation price, respectively.

Most importantly, this research extends the existing literature by examining the conditions under which time taken to respond affects perceptions of bargaining outcomes. This research shows two factors – knowledge of opponent's BATNA and persuasion

knowledge – that attenuate the influence of response time on perceptions of bargaining outcomes. Study 3 demonstrates that knowledge of opponent's BATNA attenuates the effect such that bargainers were more satisfied with the delayed acceptance relative to the immediate acceptance when they had no knowledge of opponent's BATNA, but there was no effect when they knew their opponent's BATNA. Although BATNA is not technically the opponent's reservation price (White & Neale, 1991), knowledge of opponent's attractive BATNA not only tilts the power in favor of the opponent (Kim & Fragale, 2005) but also provides a referent against which potential outcomes can be compared (White et al., 1994). In particular, knowledge of opponent's attractive BATNA precludes the need to causally explain opponent's behavior and thus bargainers can be more objective in assessing their own and their opponent's outcomes.

Studies 4 and 5 demonstrate that activation of persuasion knowledge attenuates the influence of response time on perceptions of bargaining outcomes. When delay is recognized as a persuasive tactic, persuasion knowledge and its associated defense mechanisms reduce the potential influence of the tactic (Friestad & Wright, 1994). Study 4 showed that when bargainers are primed with a description of bargaining processes and associated tactics, opponent's response time does not influence perceptions of bargaining outcomes. The implication of the priming is clear in that these results show that consumers can be educated to guard against bargaining tactics such as response time. Study 5 shows that persuasion knowledge can be activated without the external intervention of a prime. In fact, persuasion knowledge may be activated spontaneously by cues that may exist in the bargaining situation. For example, study 5 showed that persuasion knowledge was activated by altering the description of the opponent. When

the opponent was described as an expert in selling, time taken to respond had no effect on perceptions of bargaining outcomes. It is noteworthy that unlike previous research that activates persuasion knowledge via ulterior motives (e.g., Campbell & Kirmani, 2000), we activated persuasion knowledge by altering whether the opponent had the ability and knowledge to employ bargaining or persuasive tactics. Importantly, this research highlights the relevance and applicability of the persuasion knowledge model to a bargaining setting.

Overall, this research examines an interaction process factor, such as time taken to respond, that may emerge from within the bargaining environment to influence bargaining processes and outcomes. In addition, the findings provide insight into the boundary conditions for the influence of time taken by an opponent to respond to an offer. From a behavioral negotiation theory perspective, while much of the previous work has examined contextual factors and negotiator factors independently, this research attempts to unify the two streams of research and improve our understanding of the interactive influence of these factors on bargaining processes and outcomes (Bazerman, 2001). Our findings suggest that contextual factors provide the milieu within which process factors may be interpreted more effectively and efficiently. In the absence of contextual factors, process factors may assume more significance and bargainers may overweigh them when making evaluations. From a consumer welfare perspective, we identify at least two factors that can attenuate the influence of response time on perceptions of bargaining outcomes. Given consumers' susceptibility to response time in inferring whether they are better off or worse off in the bargaining relative to opponents

(Thompson et al., 1995), knowledge of these factors may help make consumers less prone to attributions and fall prey to bargaining tactics.

Chapter 2: Essay 2 – Generic Advertising Campaigns: A Goals-Based Perspective on the Effect of Market Trends and Solicitation Appeals on Voluntary Contributions

Summary

Although generic advertising campaigns, intended to increase primary (or category) demand, are common in the marketplace, such campaigns have received relatively little attention in the literature. Focusing on generic campaigns that are funded voluntarily (rather than mandatory contributions), this research examines the influence of situational factors (i.e., market trends) and solicitation appeals on voluntary contributions to a generic campaign. Viewing generic advertising campaigns as a public goods problem, a conceptual framework based on goal systems theory is developed to suggest that market trends induce different goals, which in turn, influence voluntary contributions. The conceptual framework also suggests that solicitation appeals that are more congruent with the existing mean-goal association are likely to be more effective in increasing voluntary contributions relative to incongruent appeals. Consistent with the framework, three studies show that voluntary contributions to generic campaigns are higher when the market trend is declining versus increasing. Further, solicitation appeals which reinforce the association between induced goal and the means to achieve that goal

are more effective in increasing contributions. The implications of the findings are discussed along with directions for future research.

Introduction

Millions of dollars are spent every year on generic advertising campaigns that are intended to promote an entire product category (or group). In 2002, the annual expenditure on generic advertising for cheese and Florida orange juice was \$47 million and \$24 million, respectively whereas the advertising expenditure for Kraft cheese and Tropicana orange juice was \$26.6 million and \$32.4 million, respectively. While the Kraft and Tropicana campaigns serve to stimulate selective brand demand, generic advertising campaigns serve to stimulate primary category demand (Forker and Ward 1993). Some common examples of generic advertising are the “Got Milk?” campaign, “The New Steel” campaign, “Pork: The Other White Meat” campaign, and “Cotton: The Fabric of Our Lives” campaign. Although generic advertising campaigns are common in the marketplace, it is surprising that such campaigns have received relatively little attention in the literature.

The few studies that do examine generic advertising campaigns have focused on the impact of these campaigns on consumers, particularly on contrasting the costs and benefits of generic versus brand advertising (Borden 1965; Chakravarti and Janiszewski 2004; Krishnamurthy 2000). As such, little is known about the trials and tribulations of organizing and funding generic advertising campaigns. Many generic advertising campaigns, particularly in the agricultural products and commodities market, are funded via mandatory contributions (also called check-offs) of the individual producers (members). These check-off programs, made possible through government legislation, require members to contribute to a common pool that is used for generic advertising as

well as other activities designed to stimulate demand for the entire category. However, not all generic advertising campaigns are funded through mandatory check-offs. Instead, many generic campaigns are funded by voluntary contributions from the individual members (Krishnamurthy 2000).

Voluntarily funded generic advertising campaigns benefit all individual members, regardless of whether an individual member contributes towards the campaign (Forker and Ward 1993; Krishnamurthy 2000) and the benefits are not reduced for one member just because another member has benefited from it. Viewed this way, voluntarily funded generic advertising campaigns may be conceptualized as a social dilemma, specifically as a public goods problem (Dawes 1980). First, individual members benefit from generic advertising even if they do not contribute towards the campaign. The dominant strategy for a member is thus not to contribute at all with the hope that the other members will contribute. Second, if all members decide not to contribute, no one benefits. The dilemma arises because the dominant strategy based on individual rationality is for an individual member to contribute nothing whereas the optimal strategy based on group rationality is for every member to contribute the maximum (Dawes and Thaler 1988). Viewing voluntarily funded generic advertising campaigns from the lens of a public goods problem, this research examines factors that may influence the level of cooperation and thus enhance contributions towards a generic advertising campaign.

Focusing on voluntarily funded generic advertising campaigns, this research examines the influence of situational (or environmental) factors such as market trends as well as solicitation appeals on individual members' contribution decisions. Research in economics suggests that the overall market or industry situation affects the level of

competition/cooperation (e.g., Rotemberg and Saloner 1986). However, the findings are mixed as some studies show that there is more competition among firms in periods of high demand (Rotemberg and Saloner 1986), whereas others show that there is more competition in periods of declining demand (Green and Porter 1984; Scherer 1980).

In the present context, market (or industry) trends provides the milieu in which individual members decide on whether to contribute to a generic advertising campaign, and if so, how much? In other words, the level of cooperation or contribution decisions may be influenced by whether the individual members face an industry with increasing versus declining demand (and profit trend). On one hand, when members face a declining trend, marketing and advertising budgets are typically curtailed with the goal of conserving valuable resources. On the other hand, members may feel the urge to cooperate and increase their advertising budget in tough market conditions (Krishnamurthy, Bottom, and Rao 2003). Although there is limited evidence that generic advertising are more likely to be used when the industry is on the decline, the underlying process is not clear, particularly because any contribution to a generic campaign can potentially be used in ways that would solely benefit the individual member. Given the mixed findings in the economics literature, this research examines the level of cooperation or contribution towards a generic advertising campaign when the industry is facing an increasing versus a decreasing profit trend.

The second factor that we examine is solicitation appeals. It is common for industry wide consortiums to encourage individual members to contribute to a generic advertising campaign using different solicitation appeals (Forker and Ward 1993). Since decisions about generic advertising campaigns are made in the context of market trends,

effectiveness of these solicitation messages is likely to vary with trend. Although there is considerable research that suggests that the effectiveness of a message is likely to vary based on the manner it is framed (e.g., Levin, Schneider, and Gaeth 1998), the pattern of results regarding the effectiveness of different frames (e.g., positive/negative or gain/loss) in different conditions has been inconsistent (Block and Keller 1995; Lee and Aaker 2004; Maheswaran and Meyers-Levy 1990). In this research, our interest is in the differential effectiveness of solicitation appeals in the different market conditions. Specifically, we identify and test solicitation appeals that will be most effective in enhancing contributions towards a generic advertising campaign in both an increasing as well as a decreasing market trend.

More important, this research develops and tests a conceptual framework based on goal systems theory (e.g., Kruglanski et al. 2002), that allows an assessment of the simultaneous effect of situational factors (e.g., market trends) and solicitation appeals on voluntary contributions to generic advertising campaigns. In particular, the goal systems framework suggests that situational factors such as market trends prime or induce different goals, which in turn influence voluntary contributions. Further, the framework suggests that solicitation appeals that reinforce the association between the induced goals and contributing to generic advertising campaign as a means to achieve those goals are likely to be more effective in enhancing voluntary contributions to generic advertising. The goal systems framework thus explicitly accounts for the different situational factors and allows us to predict which solicitation appeal is likely to be most effective in increasing voluntary contributions.

The rest of the paper is organized as follows. The next section provides the conceptual background and develops the hypotheses. Subsequently, we describe and report the results of three studies that test these hypotheses. The paper concludes by providing a summary of the results, discussing the implications of our findings, and suggesting directions for future research.

Conceptual Background

Considerable research has examined various factors that may enhance cooperation in social dilemma problems (Dawes 1980; Messick and Brewer 1983). A key finding to emerge from this literature is that the level of cooperation depends on how the social dilemma situation is viewed by the decision maker (Weber, Kopelman, and Messick 2004). In studying the influence of market trend on voluntary contributions, we argue that the decision of whether contribute and if so, how much to contribute is viewed differently when the market trend is increasing in profit relative to declining in profit. In particular, we propose that different market trends prime or induce different goals, which in turn, affect contribution decisions. We use the goal systems theory to develop hypotheses regarding the influence of market trends and solicitation appeals on voluntary contributions towards a generic advertising campaign.

Goal Systems Theory

Goal systems theory explores the relationship between motivational constructs such as goals and the means to attain those goals from both a cognitive as well as a motivational perspective (Kruglanski et al. 2002). According to the theory, goal systems are defined as mental representations of motivational networks consisting of interconnected goals and means. Two major aspects of the interconnectedness are the form and strength of connections. Form of the connections refers to the idea that several means can be linked to one goal, several goals can be linked to one mean, and a single goal can be connected to a single mean. In addition, goals can be connected to other goals and means can be connected to other means.

The strength of the connections between goals and means is another important aspect that is dependent on the form of the connections. The more unique the interconnection, the stronger the connection between a goal and its corresponding mean. Thus, when a specific goal can be attained by one (several) mean(s), the association between the goal and mean is considered to be strong (weak). The stronger the association between a goal and its corresponding mean, the greater is the amount of effort invested in the mean. The choice of a specific mean also depends on the extent to which the goal can be attained through the mean implying that a specific mean may be chosen over others because it is perceived to be more efficacious in attaining the goal.

Effect of Market Trends

Recognizing that market trends provide the backdrop against which the benefits of a generic advertising campaign are assessed, contribution decisions are likely to be

influenced by whether the industry is facing an increasing versus decreasing profit trend. When the industry is facing a declining profit trend, individual members may feel the need for joint action and thus contribute more towards a generic advertising campaign (Krishnamurthy et al. 2003). However, we argue that beyond these differences that may exist across increasing versus decreasing market trends, different market trends activate different goal systems through environmental priming (Bargh and Barndollar 1996; Kruglanski et al. 2002).

Based on the idea that environment factors can prime goal systems, we propose that an increasing market trend induces a goal of increasing profits whereas a decreasing market trend induces a goal of preventing a decline in profits (Kruglanski et al. 2002; Higgins 1987; 2000). Recent research on regulatory focus theory provides considerable evidence that the goals of promotion (increasing profits) and prevention (preventing a decline in profits) are associated with distinct strategic orientation as well as means of goal attainment (Higgins 2000).

The opportunity to contribute towards a generic advertising campaign may be viewed as an available mean to attain a specific goal and a functional connection between an induced goal and its corresponding mean may be forged (Shah and Kruglanski 2003). Based on goal systems theory that the strength between a goal and mean may vary, we propose that when profits show a declining trend, due to the goal of preventing a decline in profits, the opportunity of contributing towards a generic advertising campaign may be viewed as a necessary mean in order to attain the induced goal. In contrast, when profits show an increasing trend, this same opportunity may not be viewed as a necessary mean as there may be more effective ways to increase own profits. In other words, contributing

to a generic advertising campaign is viewed as a more instrumental mean in the declining trend condition as compared to an increasing trend condition leading to greater strength of association between the mean and induced goal in the declining trend condition (Kruglanski et al. 2002).

The amount of effort associated with the mean is directly proportional to the strength of the association between the goal(s) and the mean (Kruglanski et al. 2002). For example, Kruglanski et al. (2002) demonstrated that when participants strongly associated the task of completing an anagram with the goal of having high verbal fluency, they persisted more at the task and ended up solving more anagrams than those who did not associate the two as strongly. Accordingly, holding all else equal, we predict that contributions towards a generic advertising campaign are likely to be higher when the market trend shows declining profits than increasing profits.

H1: Market trends influence voluntary contributions to generic advertising campaigns such that contributions will be higher when the trend is declining relative to when the trend is increasing.

H2a: Market trends induce goals such that an increasing trend induces a goal of increasing profit and a declining trend induces a goal of preventing a decline in profits.

H2b: The induced goals mediate the effect of market trends on contributions towards a generic advertising campaign.

Differential Effectiveness of Solicitation Appeals

A challenge that generic advertising campaign organizers face is one of choosing an appropriate solicitation appeal, given specific market conditions (or trends). In general, solicitation appeals that intend to promote a specific behavior are referred as goal frames in the literature. Goal frames are typically used to establish relationships between behaviors and goal attainment (Kruglanski et al. 2002; Levin et al. 1998). Such frames have been used to enhance persuasion and to examine judgment and decision making as a function of message frame (Meyers-Levy and Maheswaran 2004). Although considerable research has examined role of appeal or message framing on persuasion processes, the findings are inconsistent (e.g., Block and Keller 1995; Maheswaran and Meyers-Levy 1990). A closer look at the literature suggests that message frames are manipulated in different ways. Message frames usually have two components – suggested action (or behavior) and associated consequence, creating the possibility that one or both components may be manipulated. In other words, based on the action-consequence combination, a given message can be manipulated in at least four different ways (Levin et al. 1998).

Further, a review of the extant literature suggests that the terminology used in describing message frames varies across studies. For example, goal frames have been described in at least four different ways: positive and negative frames, gain and loss frames, approach and avoidance frames, and promotion and prevention focused frames (e.g., Higgins 2000; Lee and Aaker 2004; Levin et al. 1998). Positive and negative frames are defined based on actions such that positively framed messages stress the

importance of a suggested action to attain positive consequences or not attain negative consequences, whereas negatively framed messages stress that not doing the suggested action will lead to not attaining positive consequences or attaining negative consequences (Levin et al. 1998; Meyers-Levy and Maheswaran 2004). These frames have also been labeled gain and loss frames (Lee and Aaker 2004) as well as approach and avoidance frames (Levin et al. 1998), respectively. In contrast, promotion and prevention focused message frames are based on consequences (Higgins 2000). A promotion focused message highlights the attainment and non-attainment of positive consequences while a prevention focused message highlights the avoidance and non-avoidance of negative consequences (Lee and Aaker 2004; Rothman and Salovey 1997).

TABLE 3 – Dimensions of Message Frames

	Promotion focused	Prevention focused	
Positive/ Gain/ Approach frame	Do action, attain positive consequence	Do action, don't attain negative consequence	<i>Positive Action (PA)</i>
Negative/ Loss/ Avoidance frame	Don't do action, don't attain positive consequence	Don't do action, attain negative consequence	<i>Negative Action (NA)</i>
	<i>Positive Consequence (PC)</i>	<i>Negative Consequence (NC)</i>	

Table 3 summarizes the terminology used in the extant literature and clearly points out that based on the action-consequence combination, solicitation appeals can be manipulated in four ways: positive action - positive consequence (PF-PC), positive action – negative consequence (PA-NC), negative action – positive consequence (NA-PC) and negative action – negative consequence (NA-NC) frames. Note that the action component of the frame corresponds to the mean and the consequence component corresponds to the goal in terms of the goal systems framework.

From the perspective of the persuader, the key characteristic of solicitation appeals is that all frames focus on the same goal (e.g., enhance voluntary contributions) and intend to promote behavior leading to the desired goal (e.g., higher contribution; Levin et al. 1998). However, the effectiveness of these appeals varies based on how the appeal is framed (Krishnamurthy, Carter, and Blair 2001; Rothman and Salovey 1997). Some studies have shown greater effectiveness with positive frames (Maheswaran and Meyers-Levy 1990; Meyers-Levy and Maheswaran 2004) whereas others have demonstrated that negative frames are more effective (e.g., Block and Keller 1995). In a recent article, Lee and Aaker (2004) compared all four frames and showed that the effectiveness of these frames varies based on their compatibility with regulatory focus. Specifically, they showed that positively framed messages are more effective when the content of the message itself is promotion focused and negatively framed messages are more effective when the content of the message is prevention focused. It is noteworthy that in majority of the previous research, participants did not come in with prior goals (or wanting a set consequence) and thus message played the role of priming a goal (consequence) that would persuade participants to take an action.

A critical difference in our study is that the market trends already induce a goal (consequence) that participants would like to attain and the opportunity to contribute towards a generic advertising campaign constitutes the functionally associated mean (action) through which to attain that goal (Kruglanski et al. 2002), albeit with differential strength across the two market trends. Based on the idea that the stronger the association between a goal and its corresponding mean, the greater the amount of effort invested in the mean, one way to increase contribution is to strengthen or reinforce the goal-mean

association. The strength of induced goal-mean association can be increased by using an appropriate solicitation appeal. Thus, based on goal systems theory, we predict that the solicitation message that will be most effective in increasing voluntary contributions is one in which the action-consequence components match or are congruent with the existing mean-goal functional association. In our context, the solicitation appeals are not intended to prime (or encourage adoption of) a goal but to reinforce the existing mean-goal association.

Given that the effectiveness of the solicitation appeals, will depend on the match of the action-consequence structure of the appeals with the mean-goal association in the market trend-induced goal system, different appeals are likely to be more effective in increasing and declining market trend conditions. For example, if the trend induced goal is “attain A” and “doing X” is a means in the goal system, then the solicitation appeal framed as “doing X leads to attaining A” will be the most effective in getting participants to do X. Based on our argument that an increasing market trend is likely to induce a “gain profit” goal, a solicitation appeal with the positive action-positive consequence combination is likely to be the most effective of the four possible combinations. In contrast, since a declining market trend is likely to induce a “prevent a decline in profit” goal, a solicitation appeal with the positive action-negative consequence combination is likely to be the most effective in increasing voluntary contributions to a generic advertising campaign.

H3a: Solicitation appeals influence voluntary contributions differently based on the market trend such that positive action-negative consequence appeal is likely to be more effective than other three appeals in declining trend condition.

H3b: Solicitation appeals influence voluntary contributions differently based on the market trend such that positive action-positive consequence appeal is likely to be more effective than the other three appeals in an increasing trend condition.

Study 1 – Voluntary Contributions and Market Trends

Study 1 tests hypotheses 1, 2a and 2b. It explores the differential effect of market trends on voluntary contributions and goal generation. Further it examines the extent to which the induced goals mediate the influence of market trends on voluntary contributions.

Method

Participants and Procedures. Fifty one undergraduate seniors enrolled in a business course were randomly assigned to one of two trend conditions (positive or negative). All participants were required to read the same background scenario describing the decision task in which they were to play the role of a manager of a store located in Quaint downtown. They read that Quaint Downtown Merchants Association was planning a generic advertising campaign which was going to be funded through voluntary

contributions. They were provided with information about the overall downtown market customer and profit trend and their individual store customer and profit trend for the past five quarters. Tables 4a and 4b were shown to the participants in the negative and positive conditions respectively. Note that the profit in the previous quarter was kept constant across the negative and positive trend conditions. Further, the growth rate in the positive trend condition was matched by the rate of decline in the negative trend condition. The instructions clearly explained how their final profits were calculated and they were provided with a separate payoff sheet. They were told that all participants had the same payoff sheet and that if nobody contributed, their final profits for that quarter will be the same as this past quarter irrespective of when the contribution ceased. This information was included in the payoff sheet. Table 5 contains the payoff sheet. Participants were told that their task was to decide on their level of contribution towards the advertising campaign considering all the information they were provided.

TABLE 4a – Customer Traffic and Store Profit for Negative Trend

Quarter	Total Customer Traffic	Customer Traffic to Your Store	Your Profit (in dollars)
2004 - Q4	190000	47500	\$190,000
2005 - Q1	180000	45000	\$180,000
2005 - Q2	165000	41250	\$165,000
2005 - Q3	140000	35000	\$140,000
2005 - Q4	115000	28750	\$115,000

TABLE 4b – Customer Traffic and Store Profit for Positive Trend

Quarter	Total Customer Traffic	Customer Traffic to Your Store	Your Profit (in dollars)
2004 - Q4	40000	10000	\$40,000
2005 - Q1	50000	12500	\$50,000
2005 - Q2	65000	16250	\$65,000
2005 - Q3	90000	22500	\$90,000
2005 - Q4	115000	28750	\$115,000

Dependent Measures. After reading the scenario, participants were first asked to decide on how much they would like to contribute towards the generic advertising campaign. They were given a choice of \$0, \$5000, \$10000, \$15000, and \$20000. Participant's induced goal or their primary motivation in deciding how much to contribute was measured by averaging responses to two seven-point items ($r = .86$): "Your primary motivation in deciding how much to contribute is" (1 = Primarily motivated to increase profit; 7 = Primarily motivated to avoid decrease in profit) and "How motivated are you to prevent a decrease in profit?" (1 = Not at all; 7 = A lot). Perceived risk was measured by averaging responses to three seven-point items (Cronbach's $\alpha = .86$): "How concerned were you that your store is at a risk of making less profit than last quarter" "To what extent did you feel that your store profit is at a risk of not increasing" and "To what extent did you feel that your store profit is at a risk of decreasing?" (1 = Not at all; 7 = A lot).

TABLE 5 – Payoff Sheet – Your Net Profits

	You contribute					
		\$0	\$5,000	\$10,000	\$15,000	\$20,000
Total Contribution of other 3 stores	\$0	\$115,000	\$114,250	\$113,500	\$112,750	\$112,000
	\$5,000	\$119,250	\$118,500	\$117,750	\$117,000	\$116,250
	\$10,000	\$123,500	\$122,750	\$122,000	\$121,250	\$120,500
	\$15,000	\$127,750	\$127,000	\$126,250	\$125,500	\$124,750
	\$20,000	\$132,000	\$131,250	\$130,500	\$129,750	\$129,000
	\$25,000	\$136,250	\$135,500	\$134,750	\$134,000	\$133,250
	\$30,000	\$140,500	\$139,750	\$139,000	\$138,250	\$137,500
	\$35,000	\$144,750	\$144,000	\$143,250	\$142,500	\$141,750
	\$40,000	\$149,000	\$148,250	\$147,500	\$146,750	\$146,000
	\$45,000	\$153,250	\$152,500	\$151,750	\$151,000	\$150,250
	\$50,000	\$157,500	\$156,750	\$156,000	\$155,250	\$154,500
	\$55,000	\$161,750	\$161,000	\$160,250	\$159,500	\$158,750
	\$60,000	\$166,000	\$165,250	\$164,500	\$163,750	\$163,000

Results

Perceived Risk. Perceived risk was significantly higher in the negative trend condition relative to the positive trend condition (M 's = 5.33 and 3.17; $F(1, 49) = 32.13$, $p < .0001$). The subsequent results reported for voluntary contribution are thus based on an analysis that includes perceived risk as a covariate.

Voluntary Contribution. Analysis revealed that participants' contributions were significantly different across the trend conditions ($F(1, 48) = 4.09$, $p < .05$). The mean contribution was significantly higher in the negative trend condition relative to the positive trend condition (M 's = 10270.20 and 6318.99). Perceived risk was not significant as a covariate ($F(1, 48) < 1$, *ns*).

Induced Goal. Participants' primary motivation in contributing to the advertising campaign was significantly higher in the negative trend condition relative to the positive trend condition (M 's = 5.61 and 2.96; $F(1, 49) = 73.87$, $p < .001$). The results suggest that the different market trends clearly induce different goals as the primary goal in the positive trend condition was to increase profit, the primary goal in the negative trend condition was to prevent a decrease in profit.

Induced Goal as a Mediator. Hypothesis 2b predicted that the effect of market trend on voluntary contributions will be mediated by induced goals (or motivation). Baron and Kenny's (1986) procedure was used to test H2b. As mentioned earlier, market trends had a significant effect on voluntary contributions ($F(1, 48) = 4.09$, $p < .05$) and induced goals ($F(1, 49) = 73.87$, $p < .0001$). When induced goals was added to the model as an explanatory variable along with market trends, market trend was no longer

significant ($F(1, 47) = 1.70, p > .20$) but the effect of induced goals on voluntary contributions was significant ($F(1, 47) = 20.55, p < .0001$). Consistent with H2b, induced goals completely mediates the influence of market trends on voluntary contributions (Sobel $Z = -4.54, p < .0005$).²

Study 1 supports hypotheses 1, 2a, and 2b and demonstrates that a declining market trends induces a ‘preventing decline in profits’ goal whereas an increasing market trend induces an ‘increase profits’ goal, which in turn, influences the voluntary contributions for a generic advertising campaign.

Study 2 – Market Trends, Solicitation Appeals and Voluntary Contributions

The main objective of Study 2 was to examine which solicitation appeal would be most effective in increasing voluntary contributions in different market trend conditions. Specifically, Study 2 tests hypothesis 3. Prior to reporting the main study, a pretest was conducted to examine whether different market trends induce different goals.

TABLE 6 – Tag lines for Solicitation Appeals

Positive action-positive consequence (PA-PC)	If you contribute, you will gain profits
Negative action-positive consequence (NA-PC)	If you do not contribute, you will forgo gaining profits
Positive action-negative consequence (PA-NC)	If you contribute, you will prevent a decline in profits
Negative action-negative consequence (NA-NC)	If you do not contribute, you will miss out on preventing a decline in profits

² Sobel Z value calculated using regression parameters through out the paper

Unlike Study 1 where the induced goal may have been primed by the two items, an open-ended response was used to ensure a more spontaneous generation of a primary goal.

Further, the pretest examined that solicitation appeals differ in the degree to which they may be congruent or consistent with an induced goal. Consistent with the goal framing literature, we used four solicitation appeals that differed on means (action) as well as goals (consequences). The four solicitation appeals are shown in Table 6.

Method

Pretest. Forty-eight undergraduate students were randomly assigned to one of two trend conditions (positive or negative). Participants were informed that they will be engaged in a business decision task as a manager of a store in a downtown location. In particular, they would have to decide on the amount they would contribute to an advertising campaign that would benefit the entire downtown, including their store. Participants were then provided with information that showed them the profit and customer traffic trend for their store as well as the overall downtown for the last five quarters. Similar to Study 1, one half of the participants received information that the store profits and customer traffic for their store as well as downtown were increasing, while the other half received information where these numbers were decreasing. As in Study 1, the end states for the last quarter were identical across both conditions. The rate of increase in profits in the positive trend condition was the same as the rate of decrease in profits in the negative trend condition.

After considering all the information, participants were first asked to write the main goal that they, as a store manager, have for the next quarter. After the open-ended

response, participants were asked in the next page to choose one out of four messages that was most consistent with the goal they had just stated. The four messages were the four solicitation appeals shown in Table 6.

Two independent raters coded participants' responses into one of four categories: (1) increase store profits (2) prevent a decline in store profits (3) prevent decrease in own profits by increasing downtown customers (4) maintain status quo. The inter-rater reliability was high ($r = .91$) and disagreements were resolved by discussion. Analysis of the qualitative response suggests that in the negative trend condition, 75% (18/24) of the participants appeared to have a goal of preventing a decline in profits and only a handful indicated other goals (16.67% (4/24) of the participants had a goal to influence own as well as downtown profits, 4.17% (1/24) had a goal of increasing store profits, and 4.17% (1/24) had a goal of maintaining status quo). In contrast, in the positive trend condition, 87.5% (21/24) participants had a goal of increasing own profits and the rest (12.5%) had a goal of maintaining status quo. These data clearly suggest that the positive and negative market trends induce different goals ($\chi^2 = 41.18, p < .0001$). Importantly, the results of the open-ended response corroborate the findings of Study 1 which showed that positive market trend induces an "increase profits" goal while negative market trend induces "prevent a decline in profits" goal (see Table 7).

Table 7 also shows that participants' choice of message that was most consistent with their stated goal significantly varied across the two trend condition ($\chi^2 = 28.80, p < .0001$). In the negative trend condition, 66.7% (16/24) of the participants chose the PA-NA message as being the most consistent with their goal (16.67% (4/24) chose PA-PC, 8.3% (2/24) chose NA-PC, and 8.3% (2/24) of the participants chose NA-NC). In

contrast, in the positive trend, 66.7% (16/24) of the participants chose the PA-PC message and 33.3% (8/24) chose NA-PC as being the most consistent with their goals.

TABLE 7 – Effect of Market Trends on Induced Goals and Message Choice

	Trend	
	Negative	Positive
Stated goal		
Increase own profits	1 (4.17%)	21 (87.5%)
Prevent a decline in profits	18 (75%)	0
Influence own & downtown profits	4 (16.67%)	0
Maintain status quo	1 (4.17%)	3 (12.5%)
Total	24 (100%)	24 (100%)
Message consistent with goal		
PA-PC (Contribute & gain profits)	4 (16.67%)	16 (66.7%)
NA-PC (Do not contribute & forgo gaining profits)	2 (8.3%)	8 (33.3%)
PA-NC (Contribute & prevent a decline in profits)	16 (66.7%)	0
NA-NC (Do not contribute & prevent a decline in profits)	2 (8.3%)	0
Total	24 (100%)	24 (100%)

The pre-test thus confirms that the positive market trend induces a goal of gaining profits while the negative market trend induces the goal of preventing a decline in profits. Unlike Study 1, the pretest used a relatively unconstrained, spontaneous method to examine whether different market trends induce different goals. Further, the pretest demonstrates that solicitation appeals differ in the extent to which they are perceived to be congruent with different goals. Hypothesis 3 predicts that because of the difference in the congruence (or match) with goals, different solicitation appeals are likely to be differentially effective in increasing voluntary contributions towards a generic advertising campaign. Specifically, we test that the PA-NC solicitation appeal is likely to be the most effective in the negative trend condition whereas the PA-PC condition will be the most effective in the positive trend condition.

Participants and Procedure. One hundred and forty-eight undergraduate business students participated in a 2 (trend: negative, positive) x 4 (solicitation appeal: PA-PC, NA-PC, PA-NC, NA-NC) between subjects design. The study was done in groups of four. Each group was then randomly assigned to one of eight conditions. All participants were required to read the same background scenario describing the decision task in which they were to play the role of a manager of a store located in Quaint downtown. They read that Quaint Downtown Merchants Association was planning a generic advertising campaign which was going to be funded through voluntary contributions. They were provided with information about the overall downtown market customer and profit trend and their individual store customer and profit trend for the past five quarters. Tables 4a and 4b were shown to the participants in the negative and positive conditions respectively. Note that the profit in the previous quarter was kept constant across the negative and positive trend conditions. Further, the growth rate in the positive trend condition was matched by the rate of decline in the negative trend condition. The instructions clearly explained how their final profits were calculated and they were provided with a separate payoff sheet. They were told that all participants had the same payoff sheet and that if nobody contributed, their final profits for that quarter will be the same as this past quarter irrespective of when the contribution ceased. This information was included in the payoff sheet (Table 5).

The instructions emphasized that each participant had to simultaneously and privately decide on how much to contribute towards the generic advertising campaign. Participants could contribute \$0, \$5000, \$10000, \$15000 or \$20000. The experimenter would then record their contribution decisions and write them on the board in random

order (without identifying the contributor) for all participants' knowledge. Participants would then calculate the contribution of the other three stores and using the payoff sheet find their final profit. Participants made a total of three contribution decisions and they were explicitly told that their decision from one round to the other is totally independent of each other. To motivate participants to carefully consider their decisions, they were told that they would be paid in cash an amount equivalent to their store's cumulative profit based on the conversion rate \$1 Cash = \$100,000 cumulative store profit.

Prior to the actual task as well as the manipulations, a practice round was conducted to familiarize participants with the structure and nature of the task. In order to prevent carry-over from the practice round to the main task, participants were instructed to contribute \$5000. After the conclusion of the practice round, the experimenter made sure that the participants understood the task and all the information they were provided.

The market trend and solicitation appeals were manipulated after the practice task. As in Study 1, market trend was manipulated by providing information about the overall downtown market customer and profit trend and their individual store customer and profit trend for the past five quarters. Tables 4a and 4b were provided to the participants in the negative and positive conditions, respectively. The end state in the previous quarter was held constant across the two trend conditions. The growth rate in the positive trend was matched by the rate of decline in the negative trend condition.

They were also provided with an envelope from the Quaint Downtown Association. This envelope contained a letter that was identical across all the conditions except for the solicitation appeal (Appendix 1 shows the four solicitation appeals).

Participants were then asked to make a decision on how much to contribute considering all the information they had been provided. After three rounds of decision making, participants were required to respond to a questionnaire. Participants were then paid based on their performance. On average, participants earned \$6.

Dependent Measures. The main dependent variable was voluntary contribution made over the three rounds. Induced goal was measured using a seven-point scale item - “My goal was to make sure the profit does not become worse” (1 = Strongly disagree; 7 = Strongly agree). In order to control (or rule out) alternative explanations, several seven-point measures were collected. To account for a need for joint action explanation, an average of two items measured need for generic advertising “I believe there is a need for the ad campaign now” and “In my opinion, there is absolutely no need for an advertising campaign” ($r = .92$; 1 = Strongly disagree; 7 = Strongly agree).

To account for self-efficacy and advertising efficacy explanations, an average of two items measured self-efficacy “My decision would greatly affect downtown store sales” and “My decision would affect the welfare of other members” ($r = .70$; 1 = Strongly disagree; 7 = Strongly agree) and an average two items measured generic advertisement efficacy “I believe the advertising campaign will have very little effect on downtown store sales” and “Given the customer traffic, the advertising campaign will have no effect on downtown store sales” ($r = .86$; 1 = Strongly disagree; 7 = Strongly agree).

Participants’ orientation towards each other “I felt that other members were like my” (1 = Partners; 7 = Competitors) and the intention to free ride “My main goal was to contribute as little as I could and still benefit from others’ contributions” were also

measured (1 = Strongly disagree; 7 = Strongly agree). Other measures including manipulation checks were also collected.

Results

Manipulation Check. Manipulation checks confirmed that 100% (72/72) of the participants in the negative trend condition and 98.7% (75/76) in the positive trend condition identified the trends as negative and positive, respectively ($\chi^2 = 148.00, p < .0001$) indicating that the market trend manipulations worked as intended.

Control Variables. Analysis of the need for generic advertising revealed a main effect of trend ($F(1, 139) = 17.55, p < .0001$) such that participants felt that the need was higher in the negative trend relative to the positive trend (M 's = 6.02 and 5.20). Analysis of self-efficacy also revealed a main effect of trend ($F(1, 139) = 29.62, p < .0001$) such that the means were significantly higher in the negative trend condition as compared to the positive trend condition (M 's = 5.57 and 4.70) indicating that participants in the negative trend condition believed that their actions will have a greater effect on downtown sales as compared to those in the positive trend condition. Similarly, analysis of advertising efficacy also revealed a main effect of trend ($F(1, 139) = 16.75, p < .0001$) such that the means were significantly lower in the negative trend condition as compared to the positive trend condition (M 's = 1.94 and 2.78). These results indicate that participants in the negative trend condition felt that an advertising campaign is likely to have a greater effect on sales when the trend is negative versus positive.

Analysis of participants' orientation towards each other and intention to free-ride also revealed a main effect of trend. Participants' perceived each other to be more like

partners in the negative trend relative to the positive trend condition ($M's = 4.15$ and 4.88 , $F(1, 140) = 8.74$, $p < .004$). Intention to free ride was also significantly lower in the negative trend condition as compared to that in the positive trend condition ($M's = 4.67$ and 5.28 , $F(1, 140) = 4.41$, $p < .04$) indicating that participants in the negative trend have lower intentions to free ride relative to those in the positive trend condition.

Voluntary Contribution. The main dependent variable was contribution over three rounds by each participant. Note that participants were nested within a group and the groups were nested within a unique combination of market trend and solicitation appeal. For this two-level nested design with repeated measures, we analyzed the data using a mixed linear model with contribution over the three rounds as a function of market trend and solicitation appeal, with round being repeated for each participant nested within group, which in turn, was nested within a unique market trend and solicitation appeal combination. Need for advertising campaign, advertising campaign efficacy, self efficacy, orientation towards others and intention to free-ride were included as covariates.

The analysis revealed a significant effect of market trend ($F(1, 281) = 15.33$, $p < .0001$) and solicitation appeal ($F(3, 281) = 7.29$, $p < .0001$). These main effects are however qualified by a significant interaction between market trend and solicitation appeal ($F(3, 281) = 12.32$, $p < .0001$). Participant's orientation towards others ($F(1, 281) = 3.73$, $p < .05$), self efficacy ($F(1, 281) = 4.87$, $p < .03$) and need for advertising campaign ($F(1, 281) = 10.18$, $p < .002$) were significant covariates.

In the negative trend condition, voluntary contribution was significantly higher when the PA-NC solicitation appeal was used relative to the other three appeals together ($M_{PA-NC} = 14413$ and $M_{COMBINED} = 9182.45$; $F(1, 281) = 24.81$, $p < .0001$). Planned pair-

TABLE 8 – Effect of Market Trends and Solicitation Appeals on Dependent Measures

Negative Trend				
	PA-NC	NA-NC	PA-PC	NA-PC
N	16	20	20	16
Contribution	14413 (6503.02)	6630.30 (6497.86)	9093.06 (6388.56)	11824 (6473.78)
Induced goal	6.12 (0.45)	5.55 (0.40)	5.60 (0.40)	5.88 (0.45)
Need for generic advertising campaign	2.15 (0.29)	2.13 (0.26)	2.03 (0.26)	1.63 (0.29)
Advertising efficacy	2.09 (0.31)	2.15 (0.28)	1.93 (0.28)	1.59 (0.31)
Self efficacy	5.81 (0.24)	5.68 (0.21)	5.18 (0.21)	5.63 (0.24)
Orientation towards others	4.62 (0.37)	3.85 (0.33)	3.95 (0.33)	4.19 (0.37)
Intention to free-ride	4.50 (0.43)	4.95 (0.39)	4.75 (0.39)	4.50 (0.43)
Positive Trend				
N	16	20	24	16
Contribution	6900.28 (6492.97)	7127.40 (6742.63)	10471 (6307.87)	6641.78 (6607.70)
Primary motivation	4.00 (0.45)	3.75 (0.40)	5.21 (0.37)	4.81 (0.45)
Need for generic advertising campaign	3.19 (0.29)	2.65 (0.26)	2.42 (0.24)	2.96 (0.30)
Advertising efficacy	3.22 (0.31)	2.75 (0.28)	2.27 (0.25)	2.90 (0.32)
Self efficacy	4.72 (0.24)	4.30 (0.21)	5.08 (0.20)	4.70 (0.25)
Orientation towards others	4.63 (0.37)	5.05 (0.33)	4.88 (0.31)	5.00 (0.37)
Intention to free-ride	5.50 (0.43)	5.70 (0.39)	5.04 (0.35)	4.88 (0.43)

wise contrasts confirm that the contribution was higher in the PA-NC appeal condition

($M = 14413$) as compared to the NA-NC condition ($M = 6630.30$; $F(1, 281) = 40.08, p <$

.0001), PA-PC ($M = 9093.06$; $F(1, 281) = 18.03$, $p < .0001$), and NA-PC ($M = 11824$; $F(1, 281) = 3.97$, $p < .04$) conditions.

In contrast, in the positive trend condition, voluntary contribution was significantly higher when the PA-PC appeal was used relative to the other three appeals together ($M_{PA-PC} = 10471$ and $M_{COMBINED} = 6889.82$; $F(1, 281) = 15.15$, $p < .0001$). Planned pair-wise contrasts confirm that contribution was higher in the PA-PC appeal condition ($M = 10471$) as compared to the PA-NC ($M = 6900.28$; $F(1, 281) = 8.90$, $p < .003$), NA-NC ($M = 7127.40$; $F(1, 281) = 8.67$, $p < .004$), and NA-PC ($M = 6641.78$; $F(1, 281) = 10.13$, $p < .002$). These results provide strong support for H3.

Induced Goal. Analysis of induced goal revealed only a main effect of trend ($F(1, 140) = 20.05$, $p < .0001$) such that participants agreed more with the statement that their goal was to make sure that their profit does not become worse in the negative trend than in the positive trend conditions (M 's = 5.79 and 4.44).

Induced Goal as a Mediator. Baron and Kenny's (1986) procedure was used to test whether induced goal mediates the effect of trend on voluntary contributions (see also Iacobucci 2001). As mentioned earlier, market trends had a significant effect on voluntary contributions ($F(1, 281) = 15.33$, $p < .0001$) and induced goals ($F(1, 140) = 20.05$, $p < .0001$). When induced goals was added to the model as an explanatory variable along with the other covariates and the manipulated factors, the significance of market trend reduced ($F(1, 280) = 4.31$, $p < .04$) but the effect of induced goals on voluntary contributions was significant ($F(1, 280) = 28.40$, $p < .0001$). Thus, induced goals partially mediate the influence of market trends on voluntary contributions.

Study 2 supports hypotheses 3a and 3b and shows that effectiveness of the solicitation appeals vary based on the market trend. While contribute and increase profit appeal is the most effective in the positive trend condition, contribute and prevent a decline in profit appeal is most effective in the negative trend condition.

These results are consistent with the general argument that greater the congruence of message frames with the existing goals or primed goals with pre-existing goals, greater is its effectiveness (e.g., Lee and Aaker 2004, Labroo and Lee 2006). However, the results are different in terms of what frames are more effective when are different. Maheswaran and Meyers-Levy (1999) used frames that distinguished between the positive and negative action but did not distinguish between positive and negative consequence. In fact their stimuli included both positive and negative consequence for each action valence. While Lee and Aaker (2004) did distinguish between the four consequences, they only considered one action (i.e. positive). In their stimuli, the action is always implicit and constant at positive valence and the consequences are manipulated so that the message frame as a whole belongs to one of the four (gain-promotion, loss-promotion, gain-prevention, loss-prevention) categories. In our case, we manipulate both the action and the consequence component of the message frame across both the valence and hence are able to identify and establish the congruence relationship across both the components leading to different results.

Study 3 – Goals, Solicitation Appeals and Voluntary Contributions

Study 2 demonstrates that different market trends induce different goals and solicitation appeals that are most congruent with the induced goal are most effective in increasing voluntary contributions. However, Study 2 also demonstrates that market trends may differ in ways other than the induced goal. In order to control for other differences in market trends, Study 3 explicitly manipulates the goals to examine hypothesis 3. Study 3 is thus designed to test that the idea of market trends inducing different goals, which in turn, influence voluntary contributions is one mechanism that underlies the differential effectiveness of solicitation appeals in different market trends.

Method

Participants and Procedure. One hundred and forty undergraduate business students participated in a 2 (goal: gain profits, prevent decline in profits) by 4 (appeal: PA-PC, PA-NC, NA-PC, NA-NC) between subjects study. Participants were told that they would be participating in two unrelated studies. In reality, the first study used word pattern recognition and scrambled sentences tasks to manipulate goals. Eighteen groups were randomly assigned to the gain profit condition and the phrase “gain profits” was repeated across the tasks and seventeen were given the envelope in which the phrase “prevent decline in profits” was repeated across the tasks. Specifically, the word pattern recognition task required participants to read a paragraph and circle the phrase “gain profits” (“prevent decline in profits”) and the second task required the participants to unscramble 15 sentences. Appendix 2 details the tasks for both conditions. Once participants completed this study, they were asked to respond to some measures and all the materials were collected prior to the second task.

The second task was identical to that used in Study 2 except that participants were not provided information about trend. As in Study 2, participants were paid in cash based on performance and on average, participants earned about \$6.00.

Dependent Measures. The main dependent variable was voluntary contributions made over three rounds. Other measures such as need for generic advertising campaign ($r = .92$), self efficacy ($r = .70$) and intention to free-ride were measured exactly as in Study 2. In order to check whether the goal manipulation was successful, induced goal was measured by asking participants to choose one of four primary motivations in the task (1 = increase profits, 2 = prevent a decline in profits, 3 = not miss out on increasing profits, 4 = not miss out on preventing a decline in profits).

Results

Manipulation Check. Analysis of the induced goal revealed a significant effect of goal manipulation ($\chi^2 = 88.31, p < .0001$). Specifically, 91.2% (62/68) of the participants in the “prevent decline in profits” manipulation stated that their primary goal in the task was to prevent a decline profits, whereas 70.8% (51/72) of the participants who had received the “gain profits” manipulation stated that their primary goal in the task was to gain profits. The goal manipulation thus worked as intended.

Control Variables. A 2x2 analysis of variance revealed that goal, appeal or their interaction had no significant effect on participants’ opinions on need for generic advertising ($F_{\text{goal}}(1, 132) < 1, ns$; $F_{\text{appeal}}(3, 132) < 1, ns$; $F_{\text{interaction}}(3, 132) = 1.15, p > .30$), self efficacy ($F_{\text{goal}}(1, 132) < 1, ns$; $F_{\text{appeal}}(3, 132) < 1, ns$; $F_{\text{interaction}}(3, 132) < 1, ns$) and

participants' intention to free-ride ($F_{\text{goal}}(1, 132) = 2.34, p > .13$; $F_{\text{appeal}}(3, 132) < 1, ns$; $F_{\text{interaction}}(3, 132) = 1.07, p > .37$).

Voluntary Contribution. As in study 2, the data was analyzed using a mixed model with contribution over the three rounds as a function of goal and solicitation appeals, with round being repeated for each participant nested within group, which in turn, was nested within a unique goal by appeal combination.

TABLE 9 – Effect of Goals and Solicitation Appeals on Dependent Measures

	PA-NC	NA-NC	PA-PC	NA-PC
Prevent a decline in profits				
N	20	16	16	16
Contribution	13659 (6979.97)	6383.41 (6979.96)	8897.98 (6979.96)	8623.76 (6979.96)
Need for generic advertising campaign	2.48 (0.31)	2.83 (.35)	2.92 (0.35)	2.56 (0.35)
Self efficacy	5.53 (0.24)	5.13 (0.27)	4.94 (0.27)	5.38 (0.27)
Intention to free-ride	5.00 (0.51)	4.00 (0.57)	4.25 (0.57)	3.50 (0.57)
Gain profits				
N	20	16	20	16
Contribution	6946.19 (6979.97)	2456.46 (6979.97)	13678 (6979.96)	7528.65 (6979.96)
Need for generic advertising campaign	2.57 (0.31)	3.06 (0.35)	2.15 (0.31)	2.92 (0.35)
Self efficacy	5.43 (0.24)	5.06 (0.27)	5.53 (0.24)	5.16 (0.27)
Intention to free-ride	4.60 (0.51)	5.44 (0.57)	4.65 (0.51)	4.44 (0.51)

Analysis of contribution over the three rounds as a function of goal and solicitation appeals revealed a main effect of goal ($F(1, 272) = 6.44, p < .01$) and

solicitation appeal ($F(3, 272) = 19.28, p < .0001$). The main effects are however qualified by a significant interaction between goal and solicitation appeal ($F(3, 272) = 13.68, p < .0001$).

In the prevent decline in profits condition, voluntary contribution was significantly higher in the when the PA-NC appeal was used relative to three other appeals together ($M_{PA-NC} = 13659$ and $M_{COMBINED} = 7968.38; F(1, 272) = 28.15, p < .0001$). Planned pair-wise contrasts confirm that contribution was significantly higher in the PA-NC appeal condition ($M = 13659$) as compared to the NA-NC ($M = 6383.41; F(1, 272) = 28.97, p < .0001$), PA-PC ($M = 8897.98; F(1, 272) = 12.41, p < .0005$), and NA-PC ($M = 8623.76; F(1, 272) = 3.88, p < .0002$) appeal conditions.

In contrast, in the gain profits condition, voluntary contribution was significantly higher when the PA-PC appeal was used relative to the three other appeals together ($M_{PA-PC} = 13678$ and $M_{COMBINED} = 5643.77; F(1, 272) = 57.24, p < .0001$). Planned pair-wise contrasts confirm that the contribution was significantly higher in the PA-PC appeal condition ($M = 13678$) as compared to the PA-NC ($M = 6946.19; F(1, 272) = 27.91, p < .0001$), NA-NC ($M = 2456.46; F(1, 272) = 68.93, p < .0001$), and NA-PC ($M = 7528.65; F(1, 272) = 20.70, p < .0001$) appeal conditions.

Study 3 replicates the results of Study 2 and further supports hypotheses 3a and 3b. Specifically, the results confirm that appeals that reinforce the existing mean-goal association lead to higher voluntary contributions as compared to those that do not.

General Discussion

The primary purpose of this research was to explore the effect of situational factors such as market trends on voluntary contributions for generic advertising. Additionally, we also aimed at identifying effective solicitation appeals by which such contributions could be further increased. The findings highlight the role of trend-generated goals on voluntary contributions for generic advertising campaigns. The results are consistent with the ideas that in a social dilemma situation, decision makers' goals influence the way a situation is characterized, which in turn influences the decisions taken (Weber et al. 2004) and that the extent of effort associated with a given mean is directly proportional to the strength of its association with the attainment goal (Kruglanski et al. 2002).

The finding that PA-NC and PA-PC appeals are most effective in increasing the voluntary contributions in the declining and increasing trends respectively, suggest that when participants have pre-existing goals having a functional association with means to achieve those goals, the messages that are congruent with this mean-goal association are more effective. This argument is further substantiated by the finding that most of the participants in the declining trend condition had a goal to prevent a decline in profits and found “contribute and prevent a decline in profits” message most consistent with their goal, whereas most of the participants in the increasing trend condition had a goal of gaining profits and found “contribute and gain profits” message most consistent with their goal.

Additionally, in study 3, participants desired different outcomes – in one condition they desired to increase profits and in another condition they desired to prevent a decline in profits. The results suggest that in the increasing profits condition, PA-PC

appeal was most effective; and in the preventing a decline in profits condition, PA-NC appeal was most effective. This result is also consistent with the idea that positive frames are more effective (compared to negative frames) when the framed end state (i.e. consequences) is desirable (compared to undesirable) (Lee and Aaker 2004).

Together, the results highlight several theoretical and managerial implications. First, the findings point to the influence of situational or environmental factors on decision making in the case of public goods as evidenced by the different levels of voluntary contributions to generic advertising campaigns when the profit trend was increasing versus declining. While much of the research on social dilemmas and public goods problems have focused on the factors of the problem itself that influence the solutions, our result suggests that it is important to account for the situation in which these problems are embedded.

Secondly, the results point to the importance of individual goals in the decision making process. Our results demonstrate that goals generated due to the different market trends are at the heart of the market trend's influence on voluntary contributions to generic advertising. These goals influence the characterization of the public good problem, which in turn leads to differences in voluntary contributions. In their review of extant social dilemma research, Weber et al. (2002) report that different participants viewed the payoff matrix provided by the experimenter differently and the level of their cooperation varied in accordance to their view of the matrix. While they do not explore the reasons for this different view, it is possible that the participants may have had different goals before viewing the problem and this goal could have influenced their characterization of the situation leading to differences in the result.

Third, our results highlight the role of solicitation appeals in enhancing the voluntary contributions to generic advertising campaigns. For campaign organizers our results suggest that it is unwise to use the same solicitation appeals when seeking voluntary contributions. The effectiveness of the appeals will vary based on the prevailing market situation and the goals that they may prime. Our results make specific recommendations for the appeals to be used emphasizing the congruity of the action-consequence pairing in the appeal to the existing mean-goal association.

Taken together, the results of this study highlight the role of goals in decision making and show that appropriate change in the goals or the motivations of the individuals before they approach the social dilemma problem can enhance cooperation.

Appendices

Appendix 1: Solicitation Appeals (Used in Study 2 & Study 3)

PA-PC

CONTRIBUTE & GAIN PROFITS

Dear Association Member,

We are writing to seek your help with funding for the Quaint Downtown Merchants Association advertising campaign.

As you are aware, your contributions help in funding the advertising campaign that is intended to promote the downtown stores as a whole and increase customer traffic to the area.

This campaign benefits each of our members. The more money we can raise the more effective we can be in promoting our downtown stores and increasing our sales.

In light of all the facts, we need your support more than ever.

*If, **YOU CONTRIBUTE, YOU CAN GAIN PROFITS.***

Sincerely,

Quaint Downtown Merchants Association Officers

CONTRIBUTE & PREVENT A DECLINE IN PROFITS

Dear Association Member,

*We are writing to seek your help with funding for the Quaint
Downtown Merchants Association advertising campaign.*

*As you are aware, your contributions help in funding the advertising
campaign that is intended to promote the downtown stores as a
whole and increase customer traffic to the area.*

*This campaign benefits each of our members. The more money we
can raise the more effective we can be in promoting our downtown
stores and increasing our sales.*

In light of all the facts, we need your support more than ever.

**If, YOU CONTRIBUTE, YOU CAN PREVENT A DECLINE IN
PROFITS**

Sincerely,

Quaint Downtown Merchants Association Officers

**IF YOU DO NOT CONTRIBUTE,
YOU WILL FORGO GAINING
PROFITS**

Dear Association Member,

*We are writing to seek your help with funding for the Quaint
Downtown Merchants Association advertising campaign.*

*As you are aware, your contributions help in funding the advertising
campaign that is intended to promote the downtown stores as a
whole and increase customer traffic to the area.*

*This campaign benefits each of our members. The more money we
can raise the more effective we can be in promoting our downtown
stores and increasing our sales.*

In light of all the facts, we need your support more than ever.

**If YOU DO NOT CONTRIBUTE, YOU WILL FORGO GAINING
PROFITS**

Sincerely,

Quaint Downtown Merchants Association Officers

***IF YOU DO NOT CONTRIBUTE,
YOU WILL MISS OUT ON
PREVENTING A DECLINE IN
PROFITS***

Dear Association Member,

*We are writing to seek your help with funding for the Quaint
Downtown Merchants Association advertising campaign.*

*As you are aware, your contributions help in funding the advertising
campaign that is intended to promote the downtown stores as a
whole and increase customer traffic to the area.*

*This campaign benefits each of our members. The more money we
can raise the more effective we can be in promoting our downtown
stores and increasing our sales.*

In light of all the facts, we need your support more than ever.

***If YOU DO NOT CONTRIBUTE, YOU WILL MISS OUT ON
PREVENTING A DECLINE IN PROFITS.***

Sincerely,

Quaint Downtown Merchants Association Officers

Appendix 2: Goal Priming Tasks (Used in Study 3)

“Gain Profits”

WORD/ PATTERN RECOGNITION STUDY

In this study we are pre-testing two tasks that we will use in a future study to investigate word/ pattern recognition and ad evaluation. Please complete them to the best of your ability.

Start time: _____ : _____

The following paragraph contain the phrase ‘gain profits’. Please read through the article and circle the phrase as you encounter it.

Apparel manufacturers focus on ways to gain profits in the upcoming season

Last week more than 250 small scale apparel manufacturers attended the recent meeting of Apparel Manufacturers Association in New York City. One of the items on the agenda was a roundtable discussion of ideas to gain profits for the association members. Mr. X, an apparel manufacturer from California, shared the idea that had enabled him to gain profits for his business. Based on a survey conducted by surrounding university students, Mr. X realized that there is a niche demand for apparels with quality handiwork amongst the consumers who shopped at stores that stocked his products. He could gain profits for his firm by just changing the supplied product mix. Since the store did not conduct any such research, he would not have gotten the information he did, if the students had not done the survey for him. So his idea was to tap into the surrounding universities for opportunities to work with students and use their insights to gain profits. Ms. A, an apparel manufacturer from Illinois suggested marketing the goods through own website as another means to increase profits. She started doing this only 5 months prior but is seeing great benefits to her firm’s bottom line from this endeavor. She suggested to definitely think of this option to gain profits. Several other roundtable participants shared

their experiences with activities aimed to gain profits and answered audience questions. The moderator wrapped up the 90 minute session with a note that while the session presented several alternatives to increase profits, each business should evaluate their own goals and then implement the alternatives.

Now you will be presented with 15 scrambled sentences. Your task is to **use all but one of the given words** in each line to make a complete, coherent sentence. Please write the sentence you have formed in the line below the scrambled sentence.

1. consultants profits mug presented new improve strategy to

2. increase red the aimed strategy profits new to

3. his increased pencil profits plan

4. to new the product salad gain profits in lead

5. profits the to new aims cup achieve higher plan

6. haven't bloomed flowers these fork

7. on he always focused higher sand attaining profits

8. sales water increase direct profits

9. always on focus gaining plate profits

10. profits can her idea lid gain help

11. can small lamp increase profits innovations

12. his was target to profits pen improve

13. profits customer table focus increase

14. is challenge achieve her chair this profitability to year

15. to increase is their aim profit sea

Finish time: ____:____

Please rate how difficult you found these tasks?

1	2	3	4	5	6	7
Not at all difficult						Very difficult

I found working through the task difficult.

1	2	3	4	5	6	7
Strongly disagree						Strongly agree

“Prevent Decline in Profits”

WORD/ PATTERN RECOGNITION STUDY

In this study we are pre-testing two tasks that we will use in a future study to investigate word/ pattern recognition and ad evaluation. Please complete them to the best of your ability.

Start time: ____:____

The following paragraphs contain the phrase ‘prevent decline in profits’. Please read through the article and circle the phrase as you encounter it.

Apparel manufacturers focus on ways to prevent decline in profits in the
upcoming season

Last week more than 250 small scale apparel manufacturers attended the recent meeting of Apparel Manufacturers Association in New York City. One of the items on the agenda was a roundtable discussion of ideas to prevent decline in profits for the association members. Mr. X, an apparel manufacturer from California, shared the idea that had enabled him to prevent decline in profits for his business. Based on a survey conducted by surrounding university students, Mr. X realized that there is a niche demand for apparels with quality handiwork amongst the consumers who shopped at stores that stocked his products. He could prevent decline in profits for his firm by just changing the supplied product mix. Since the store did not conduct any such research, he would not have gotten the information he did, if the students had not done the survey for him. So his idea was to tap into the surrounding universities for opportunities to work with students and use their insights to prevent decline in profits. Ms. A, an apparel manufacturer from Illinois suggested marketing the goods through own website as another means to prevent decline in profits. She started doing this only 5 months prior but is seeing great benefits to her firm’s bottom line from this endeavor. She suggested to definitely think of this option to prevent decline in profits. Several other roundtable participants shared their experiences with activities aimed to prevent decline in profits

and answered audience questions. The moderator wrapped up the 90 minute session with a note that while the session presented several alternatives to prevent decline in profits, each business should evaluate their own goals and then implement the alternatives.

Now you will be presented with 15 scrambled sentences. Your task is to **use all but one of the given words** in each line to make a complete, coherent sentence. Please write the sentence you have formed in the line below the scrambled sentence.

1. consultants profits mug presented new prevent strategy to decrease in

2. stop the declining red the aimed strategy profits new to in

3. in his avoided pencil profits plan a decline

4. new the product salad profits in decline stopped

5. profits the to new aims cup prevent in plan decrease

6. haven't bloomed flowers these fork

7. on he always focused a fall sand preventing in profits

8. in sales water avoid direct profits decrease

9. in always on focus avoiding a plate profits fall

10. profits can declining her idea lid stop help from

11. can small stop lamp profits decreasing innovations from

12. his was target to profits pen prevent in decrease

13. in profits customer table focus prevent a decline

14. falling is challenge stop her chair profits to from

15. profits to decrease is their aim prevent sea in

Finish time: ____:____

Please rate how difficult you found these tasks?

1	2	3	4	5	6	7
Not at all difficult						Very difficult

I found working through the task difficult.

1	2	3	4	5	6	7
Strongly disagree						Strongly agree

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Chapter 2

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