**ABSTRACT** 

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The focus of this dissertation is on communication processes in negotiations with unequal power distribution between parties. A model is tested proposing that culturally influenced power-distance values and power differences based on resource distribution both influence negotiators' perceptions of the difference in power between parties. This perception influences the choice of negotiation tactics. If the power gap is perceived to be small, both parties will employ more power tactics than if the gap is perceived to be large.

An experiment was conducted to test the model. Participants (294) were randomly assigned to one of two roles (manager versus subordinate) and one of two conditions (high resource-power-difference versus low resource-power-difference). Participants formed 147 dyads, completed questionnaires and role-played negotiations, which were recorded and coded for the use of power tactics. The analysis used a structural equation model to test the study's hypotheses; the model

had acceptable fit. Power distance and resource distribution were found to influence negotiators' perception of reward power and overall power difference between the parties. Negotiators varied their behavior depending on condition, lending support to power distance reduction theory (Mulder, 1973). However, perception of overall power difference did not directly predict use of power tactics. Limitations and directions for future research are discussed.

### THE INFLUENCE OF POWER ON NEGOTIATION PROCESSES

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

2013

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Thanks to Dr. Ed Fink, I know now that I have not only one family tree but a second one: The academic family tree. Graduation is a time to celebrate and give credit to the roots that have nourished the new branch.

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### **Chapter 1: The Influence of Power on Negotiation Processes**

The focus of this dissertation is on communication processes in negotiations with unequal power distribution between parties. A model is tested proposing that both culturally influenced power distance as well as power differences based on resource distribution influence negotiators' perception of the difference in power between parties. This perception influences the choice of negotiation tactics. If the power gap is perceived to be small, both parties will employ more power tactics than if the gap is perceived to be large. Based on power distance reduction theory (Mulder, 1973), the party with less power will attempt to reduce the gap. Based on social comparison theory (Festinger, 1954), the higher power party will attempt to maintain the distance.

The following chapter explains briefly how this dissertation addresses gaps in the literature in explaining the interaction of situational and contextual influences on negotiation behavior, negotiators' behavior if the parties are from different levels of a hierarchy, and the conceptualization of sources of power and power strategies and tactics.

Unequal distribution of power between members is prevalent within human societies and groups of all sizes. Not surprisingly, issues related to power have been researched and described from various perspectives. Béteille (1977) defined power as the ability of some people to command obedience and compliance by virtue of the positions they hold in society. This definition reflects a sociological perspective because it highlights the roles that power plays among humans, how power determines distribution of resources among group members, and how it gives structure to role relationships (Lenski, 1966). Anthropologists, on the other hand, have focused on describing the various forms of unequal relationship structures that human societies have produced,

including mythologies that provide justification for domination of some and subordination of others (Balandier, 1970) and the current shapes of societal stratification such as classes, rank hierarchies, and castes (Bohannan, 1965).

Psychologists have examined how human thinking and behavior both create and are influenced by power differences between group members (e.g., Cartwright & Zander, 1968; French & Raven, 1968; Lippitt, Polansky, Redl, & Rosen, 1968). Research on power's influence on negotiation has been conducted mostly by psychologists, and therefore, has focused largely on how perceptions of power relationships influence how negotiators plan for and conduct negotiations. This approach has offered insight into how mostly situational variables influence power processes, but the accuracy of predictions is often hampered by a lack of attention to how situational variables interact with contextual and structural variables, such as roles or hierarchy (Lawler, 1992). This dissertation develops and tests a model that integrates both situational and structural elements to allow for more accurate predictions of negotiation behavior.

Negotiation research addresses power related issues from two perspectives. One perspective conceptualizes power as a function of unequal distribution of alternatives away from the table or BATNAs (i.e., Best Alternative to a Negotiated Agreement) held by negotiators (Lewicki, Saunders, & Barry, 2006). For example, job candidates who have better alternative offers from other companies can afford to reject a position if a particular company is not willing to fulfill their demands. In this case, better alternatives away from the table give the negotiator power in a negotiation.

Another perspective on power in negotiation has considered power within the context of cultural values (e.g., Earley & Erez, 1997; Tinsley & Brett, 2001). Depending

on the cultural background of individuals concerned, differences in power distribution may not only be perceived differently by those individuals but may also lead to different kinds of behavior. For example, the difference in power between the same set of superiors and subordinates may be perceived to be larger in one culture but smaller in another. Power imbalances, or high power distance, may be accepted by people in one culture whereas in another culture people may be more concerned with establishing equality. Consequently, negotiators from high power distance cultures, who are more accepting of power imbalances, may be less likely to employ negotiation strategies to balance those differences than negotiators from low power distance cultures, who are less accepting of power imbalances.

So far no research has brought together these two perspectives on power in negotiation to consider how cultural values related to power and power differences based on resource distribution—with resources creating alternatives (see Chapter 2)—interact to explain negotiation processes. Although these two aspects can be separated in laboratory experiments, in real-world negotiations situation-related power variables, such as alternatives, and contextual ones, such as culture-related variables, both will influence each other and the course of the negotiation. This dissertation will address this gap by testing both cultural values related to power (i.e., power distance; Hofstede, 2001) and power differences based on resource distribution (Foa, Converse, Törnblom, & Foa, 1993) as explanations for how negotiators perceive power differences overall and the behaviors that result from these perceptions.

Another characteristic of most negotiation research is that it treats negotiators as equals (e.g., Adair et al., 2004; Donohue & Ramesh, 1992; Pinkley, Neale, & Bennett,

1994; Tinsley, 2001). Three reasons for this approach can be proposed. First, researchers may hold power constant to study other variables in the negotiation. Second, most research in business contexts focuses on contract negotiations between representatives of different but relatively equal companies. Thus, representatives are assumed to be equal, with both sides having something they need from the other party as well as something to offer. Finally, this approach could be a function of most negotiation research being conducted in the United States, which promotes egalitarian values and assumes equality between parties (Tinsley, 2004). However, such assumptions do not always apply, even in negotiations between different companies, because companies may be part of a hierarchical structure that gives one company more power and influence than the other (Lai, 1999).

Little research examines negotiations between parties who are at different levels in the same hierarchical structure, such as superiors and subordinates within one company (Kipnis, Schmidt, & Wilkinson, 1980; Yukl & Falbe, 1990; Yukl & Tracey, 1992). In situations such as these, much of the research assuming equality between parties may not apply. For example, negotiators may use tactics to keep power relationships in balance between equals, but their behavior may differ if a certain amount of imbalance is determined by an existing hierarchical structure. Similarly, power strategies may influence negotiation processes and outcomes in certain ways between equals (Donohue & Ramesh, 1992), but they may affect negotiations in different ways between unequal parties because the power difference between parties changes each party's expectations about the other party's behavior and the acceptability of using power strategies.

Because organizations consist of multiple factions with varying interests, negotiations within organizational hierarchies are as common as negotiations between equals. With power differences between parties built into the situation, the question of how these differences influence negotiation becomes particularly important. This project contributes to filling the gap of knowledge about this type of negotiation by focusing on negotiation processes within hierarchies. Mulder, Veen, Roddenburg, and Tielens's (1973) power distance reduction theory, which predicts people's behavior in unbalanced power relationships, and Festinger's (1954) social comparison theory, which predicts how people evaluate themselves in comparison with similar and dissimilar others, will be adapted and tested in the context of negotiation. Overall, this research addresses the following question: When parties in a negotiation are at lower versus higher power positions, how does the gap in power influence parties' perceptions of the other party and parties' behavior in the negotiation?

Finally, a good model needs to build on precise definitions of the concepts involved that make theoretical sense for the context in which they are used. Some problems have been found related to the definitions of two concepts: sources of power and power strategies. Sources of power are frequently conceptualized using French and Raven's (1968) typology. This typology is neither consistent nor comprehensive in its conceptualization of sources of power. The current project instead proposes that power is based on resources as defined in Foa et al.'s (1993) resource theory and resource theory's typology of resources is used as a basis for measuring resource-based power in negotiation (see Chapter 2 for further explanation).

Difficulties with choosing one clear conceptualization of power strategies may

be related to their use in two bodies of research: negotiation research and conflict management research. The relationship between these two areas is reasonable because negotiation is not only one of the main tools for resolving conflict but is also a potential source for new conflict. Nevertheless, the difference between the two areas of research should be kept clear because the different perspectives of the two areas also imply different definitions of power and power strategies (see Chapter 2). According to Lewicki et al. (2006), there are two reasons to negotiate: to create something new that neither party could do on his or her own, or to resolve a problem or dispute between parties. The second reason clearly relates the areas of negotiation and conflict research, but the first one does not. A negotiation becomes conflictual when a claim or demand by one party is denied by the other (Ury, Brett, & Goldberg, 1988). This rejection may not be necessary in a negotiation focusing on creating something new neither party could achieve on its own.

The distinction between negotiation and conflict management becomes particularly relevant when theoretical work, such as Ury et al.'s (1988) framework of strategies for conflict resolution, is transferred from one area to the other. Ury et al. proposed that people involved in a dispute can use three different strategies to find a solution: strategies focusing on interests, on rights, and on power (IRP). The authors define exercising power narrowly as "imposing costs on the other side or threatening to do so" (p. 7). This perspective on power use covers only the most aggressive and contentious end of the spectrum of power strategies. Although this conceptualization may be appropriate in conflict situations, it does not fit with the more widely applicable conceptualizations of power in negotiation as a function of unequal distribution of

resources or as influenced by cultural values of the negotiating parties. For example, although having various resources may give one party more power than the other party, mentioning them in a negotiation does not necessarily have to be a threat but could first of all be an act of sharing necessary information with the other party. This dissertation expands Ury et al.'s interests-rights-power framework with regard to the conceptualization of power strategies. A power strategy is defined as a negotiation plan involving the use of power tactics. Power tactics are defined as messages designed to further negotiators' goal achievement through the strategic use of available resources.

Based on Hofstede's (2001) power distance dimension, Foa et al.'s (1993) resource theory, Mulder et al.'s (1973) power distance reduction theory, Festinger's (1954) social comparison theory, as well as an adaptation of Ury et al.'s (1988) power strategy for conflict resolution, this dissertation proposes a model of the influence of power differences on the negotiation process. More specifically, the model proposes that situational variables (i.e., resources relevant to the negotiation) and contextual variables (i.e., culturally influenced values regarding power differences) predict negotiators' perception of the resource distribution and overall power balance—a perception which in turn predicts negotiators' use of power tactics.

Chapter 2 explains the theoretical basis for the model proposed, focusing on power in social relationships and, specifically, power in negotiation, including resource-and context-based sources of power, and the use of power in negotiation. In addition, a model to evaluate the set of hypotheses is presented followed by a rationale for each hypothesis.

## **Chapter 2: Power, Negotiation and Culture**

This chapter first discusses research on power in social relationships, including sources of power, the role of resources and perception, as well as how power imbalance influences relational transactions. Second, research on the role of power in negotiation is considered, including sources of power that are particularly relevant to negotiation as well as the influence of power on the negotiation process. The chapter concludes by providing a model and the relevant hypotheses to be tested in this dissertation.

### **Power in Social Relationships**

According to Emerson (1962), power is not the attribute of one actor but the property of a social relationship. One person cannot be powerful or powerless by him- or herself, but power sets people in relation to each other and defines positions and roles within a social structure. In addition, power does not have an absolute value but is a matter of perception (Thibaut & Kelley, 1959). The power of one person or group, and the lack of power of another, only becomes real when such power is perceived by those who then behave based on those perceptions. The following sections discuss some of the major conceptualizations of how people perceive power and how people behave based on these perceptions.

**Defining power.** French and Raven (1968) defined social power as the potential ability of one person to influence another person in regard to psychological state or behavior. Social power is distinct from social influence, which is conceptualized as a kinetic force allowing one person to actually set another person's mind or body in motion in a designated direction. In short, social power is potential influence. This distinction may be helpful on a conceptual level and has been used by a number of researchers (e.g.,

De Dreu, Beersma, Steinel, & Van Kleef, 2007; Fiske & Berdahl, 2007). From a practical perspective, however, the line between social power and social influence cannot be drawn so clearly. For example, if people act according to what they believe a powerful other wants without that person's active involvement, simply because of their knowledge of the powerful persons' potential ability, is power or influence at work? On the other hand, if a person is unsuccessful at influencing others, does the person lack power or influence? Considering the grey area between power and influence, it is not surprising that researchers have used the terms with various shades of meaning and have, at times, used them interchangeably (see Fiske & Berdahl, 2007). This project is concerned both with negotiators' potential to influence others as well as the actions they use to accomplish this influence. In the interest of consistent terminology, potential influence will be called power, and attempts to use that power will be called power tactics.

Bases of power. Because power is the property of social relationships, sources of power describe a specific aspect of the relationship between people. They identify how people are connected. French and Raven (1968) suggested a framework that included five sources of power: Reward power, coercive power, legitimate power, referent power, and expert power. Reward power is the result of a person being perceived by others as able to dispense rewards, including making positively evaluated things happen (e.g., granting a raise) and shielding others from negatively evaluated things (e.g., preventing others from being fired). Coercive power is the result of a person being perceived as having the ability to punish others if they do not comply. Like reward power, coercive power is a function of the perceived ability of a person to redistribute valuable resources. In the case of coercive power, the other person is perceived to be able to dispossess somebody of

positively evaluated things or inflict on others negatively evaluated outcomes.

Legitimate power is the result of one person having been assigned the right to influence others and those others being obligated to accept that influence. This type of power can be based on cultural values that assign privileges to groups with certain characteristics (e.g., old age or a preferred sex) or that prescribe appropriate roles for individuals in hierarchical relationships, such as an employer and employee. The range of legitimate power is usually specified together with its base; in other words, information about how far into other people's lives the influence based on legitimate power extends is connected to the basis of that power. Legitimate-power-based influence may cover anything from a small range, such as the ability of home-owners to forbid trespassing on their property, to a wide range covering most areas of an individual's life, such as the power of higher castes to prescribe behavior for lower castes in some cultures.

Based on French and Raven's conceptualization, referent power is different from the other bases of power in that it is the result of others identifying with a person or group and gaining satisfaction from conforming to that person or group regardless of the response of that person or group (French & Raven, 1968). In other words, referent power does not require any action by its holders. According to French and Raven (1968), it is based solely on an individual identifying with or admiring an attractive person or group and consequently adopting beliefs or behaviors of the attractive other (see Hinkin & Schriesheim's critique below).

Finally, expert power is the result of an individuals' evaluation of another person's knowledge. The higher the person's level of knowledge is perceived to be in comparison with the other's knowledge, or with an absolute standard of knowledge (such

as the highest level of degree completed in a field), the more expert power that person has.

Since its first publication, French and Raven's (1968) sources of power have been widely cited and used in research to distinguish forms of social power. However, the framework lacks conceptual consistency. For example, the source of reward power is defined in terms of the power holder's ability, whereas referent power is not defined in terms of ability but in terms of the level of identification of others with the power holder. This lack of consistency has contributed to difficulties in developing measures of the five sources of power that have useful psychometric properties. To increase conceptual consistency, Hinkin and Schriesheim (1989) have suggested redefining all of French and Raven's sources of power in terms of the ability of the power holder. For example, legitimate power becomes "the ability to administer to another feelings of obligation and responsibility," and referent power becomes "the ability to administer to another feelings of personal acceptance and approval" (p. 562). The following discussion uses Hinkin and Schriesheim's revised definitions of French and Raven's sources of power.

In addition to issues of conceptual consistency, French and Raven's (1968) framework also lacks the systematic organization and comprehensiveness that a typology requires. French and Raven did not explain why those five sources were included but other possibilities were excluded. A conceptually consistent and comprehensive framework is necessary, though, for the development of high quality predictive theory. An alternative approach to conceptualizing bases of power is to define them as a function of resources. As Tinsley (2004) suggested, power is based on the number and quality of alternatives a party has, and alternatives are a function of that party's resources.

Therefore, the amount and type of resources a party has should predict that party's level of power within the negotiation.

Resources and power. Foa et al. (1993), in their resource theory, presented a typology of resources that people exchange in economic and non-economic interactions. They defined resources as "anything transacted in an interpersonal situation" (Foa et al., p. 2) and distinguished between six classes of resources on two dimensions (which are explained below): love, status, information, money, goods, and services. Love is defined as "an expression of affectionate regard, warmth, or comfort." Status is "an expression of evaluative judgment which conveys high or low prestige, regard, or esteem." Information includes "advice, opinions, instruction, or enlightenment." Money is "any coin, currency, or token which has some standard unit of value." Goods are "tangible products, objects, or materials," and services involve "activities on the body or belonging of a person which often constitute labor for another" (p. 2).

These resources can be distinguished based on their location on two dimensions: concreteness versus symbolism and particularism versus universalism (see Figure 1). A resource is concrete if what is being exchanged is a tangible activity or product. A symbolic resource, on the other hand, is usually exchanged verbally or paralinguistically. For example, goods and services are more concrete, whereas status and information are more symbolic. Resources differ on the particularistic-to-universalistic dimension as a function of how dependent the value of a resource is on receiving it from a specific other. Money, for example, is the most universalistic resource because it can be exchanged largely independently of the relationship between the two parties. Love, on the other hand, is a particularistic resource because it matters who the recipients receive it from.

According to Foa et al. (1993), people usually prefer to exchange resources that are closer to each other on these dimensions rather than more distant. For example, an exchange of money for goods would be preferable to an exchange of money for status. Studies, as reported by Turner, Foa, and Foa (1971), supported both the validity of the resource categories as well as the two-dimensional structure proposed. With the dimensions concreteness-to-symbolism and particularism-to-universalism comprehensively defining the resource space, Foa et al.'s typology is useful for developing a model using resource distribution as a predictor of negotiation behavior. Therefore, this typology of resources will be used in this dissertation for examining resources as a source of power.

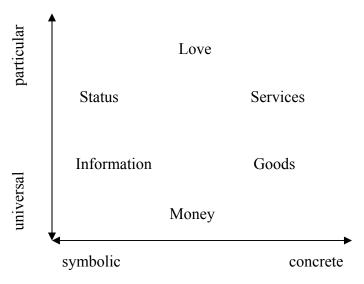


Figure 1. Foa et al.'s (1993) six resources plotted on two dimensions.

**Resources as bases of power.** Foa et al.'s (1993) typology not only has the advantage of systematically representing the cognitive resource space, it also subsumes most ideas central to French and Raven's (1968) framework. Based on Hinkin and Schriesheim's (1989) definitions, expert power is the ability to provide information,

knowledge, or expertise; this source is related to having information as a resource. Referent power is the ability to give another person feelings of being personally accepted and approved of; this resource is related to having love as a resource. Although having legitimate power and status as a resource are not equivalent, both are based on making an evaluative judgment of the other's position in relation to oneself. Finally, reward and coercive power are both based on a party's ability to redistribute valued commodities in a way that is advantageous (for reward power) or disadvantageous (for coercive power) for another party. These rewards or punishments are related to all of the resources included in Foa et al.'s (1993) typology. Therefore, reward power could be redefined as the perceived ability of a person to dispense love, status, money, goods, services, or information valued by another person, whereas coercive power could be defined as the perceived ability of a person to withhold or take away love, status, money, goods, services, or information valued by another person. For the purpose of this project, this definition of reward power and coercive power will be used.

Power and perception. Alternatives and resources are frequently discussed as bases of power (e.g., Kim & Fragale, 2005; Kim, Pinkley, & Fragale, 2005), but these discussions overlook an important assumption: The best alternative or resource only becomes useful as a basis for power when the other party knows that the alternative or resource exists and perceives it as relevant and useful within the particular context of its use. In other words, the value of a resource for a person as a source of power is defined by the perception others have of that resource. Fink et al. (2003) showed that people's behavior will influence the perception others have of their power independently of any knowledge about existing resources. They found that influencers were perceived as more

powerful simply because they were agents, whereas targets of influence attempts were perceived as less powerful. Thibaut and Kelley (1989) suggested that what matters most in making influence attempts work is how well perceptions of a person's power are managed; the perceptions stand independently of the objective resource distribution between the parties. For this dissertation, reward power is defined in terms of resources, keeping in mind that what makes a resource a source of power is the perception by the other party that the person has the resource and that the resource is of value. Therefore, each party's perception of the other party's power will be included in the tested model.

**Power use.** As noted above, power is not an attribute of an actor but is a property of the social relationship between interdependent actors (Emerson, 1962). The power of one party resides in the dependence of the other. In a balanced relationship, the parties have similar levels of power that are based in similar levels of dependence on each other. Parties with high but similar levels of power are unlikely to use their power to harm the other party because of the likelihood of retaliation.

Thibaut and Kelley (1986) suggested that a power relationship has to be imbalanced to make power usable. Relationships are imbalanced if one party has more power than the other and is less dependent on the other. The difference in power between person one and person two equals the power advantage of the party with higher power.

\*Usable power\* means that this power advantage can translate into actual behavior, such as using power tactics. Therefore, the model tested in this dissertation uses the difference in power that the parties in the negotiation perceive between themselves and the other party as a measure of each party's perceived usable power.

An imbalanced relationship can become balanced by increasing the power of the

lower power party or increasing the dependence of the higher power party on the lower power party (Emerson, 1962). This change can happen in four ways. First, the lower power party can reduce its interest in what the higher power party has to offer. Second, the lower power party can find alternative sources for the resources the higher power party has to offer. Third, the higher power party can increase its interest in the resources held by the lower power party. Finally, the higher power party can lose alternative sources for the resources it needs that the lower power party has to offer. Kim, Pinkley, and Fragale (2005) have suggested that if parties perceive themselves as having not enough power to employ power tactics (i.e., *power-use tactics*), these lower power parties may use *power-change tactics* to balance relationships. These power-change tactics can involve any action with the goal of achieving a change in the power balance as described for the four options above. Two questions arise from these options: (1) how do people choose between balancing options, and (2) in what situations do people try to balance power relationships? The following section addresses these questions.

Power in process. This dissertation addresses how people's use of power tactics depends on their perception of the difference in power between themselves and another party. Few theories have been proposed that test how people behave within imbalanced power relationships (Bruins et al., 1993). One of the few theories offered is power distance reduction theory (Mulder et al., 1973). Mulder and his colleagues proposed that people in hierarchical systems will attempt to reduce the power distance between themselves and the person above them. The smaller the power distance is between people and those above them, the stronger will be their tendency to reduce that distance. This theory was tested by creating a fictitious organization in which high school students were

placed at different levels below an imaginary supervisor. The students were given the choice to take over the position of the supervisor. Results showed that, independent of how competent participants perceived themselves to be, those placed closer in the hierarchy to the supervisor were more likely to choose to take over the supervisor's job than those further down in the hierarchy. This theory is used in this project to predict the behavior of the lower power party.

The theory has since been tested in various contexts including ones that involve the influence of gender and culture (Bruins et al., 1993), the bureaucratic rule (Bruins & Wilke, 1993), structural and nonstructural parameters of power systems (Ng, 1977), and social values (Poppe, 2003). Poppe suggested that, although lower power parties may try to reduce the power gap between themselves and those above, having more power should make people strive less for additional power. This proposition contrasts with the power distance reduction theory, which proposes that having power leads to wanting more power, and is more in line with social comparison theory (Festinger, 1954).

Social comparison theory proposes that people evaluate themselves in comparison to others. According to Rijsman (1974, 1983), the drive to compare oneself to others results both in pressure for uniformity and pressure toward positive distinctiveness.

Pressure toward positive distinctiveness is pressure to perform better than a comparison other. Uniformity pressure is pressure to perform equally well with the comparison other; this pressure should result in people trying to move upward if they perceive themselves as inferior in comparison to the other and trying to move downward if they perceive themselves as superior. In general, people strive to move upward (i.e., positive distinctiveness), but this drive is missing if people perceive themselves to be greatly

superior compared to the other (Festinger, 1954).

Applying social comparison theory to power relationships, in imbalanced power relationships, the behavior of higher power parties will depend on how large their power advantage is. If the advantage is small, the higher power party should strive to increase it. If the advantage is large, the higher power party should not strive to increase it and may even allow it to decrease. Poppe (2003) found some support for these expected behaviors in an experiment in which participants were asked to re-distribute influence points between themselves and two invisible others. Participants with many influence points attempted to increase their advantage in comparison to those who were only slightly below them, but they did not worry about those who were far below. The current project will test whether this tendency will translate to higher power parties' use of power tactics in face-to-face interactions. Although higher power parties, like lower power parties, are expected to strive to increase their own level of power, higher power parties will not do so if the distance between them and the lower power party is perceived to be large already.

#### **Power in Negotiation**

Negotiation has been defined as "a process whereby two or more parties who hold or believe they hold incompatible goals engage in a give-and-take interaction to reach a mutually acceptable solution" (Wilson & Putnam, 1990, p. 75). The parties involved are interdependent (Putnam & Jones, 1982) because each party has something the other wants or needs. This interdependence makes negotiation situations both cooperative and competitive. Negotiators compete for the solution most favorable to their side while they must maintain at least sufficient cooperation with the other party to reach a solution.

These characteristics of negotiation imply that negotiations by definition take place in situations where parties who depend on each other to a certain degree have to interact. Because dependence is the opposite of power (Emerson, 1962), questions about the influence of power on the negotiation process are central to negotiation research. The following sections discuss bases of power in negotiation and the role power plays in the negotiation process.

Bases of power in negotiation. Power in negotiation can come from two different sources: context and situation. Context-related bases of power, such as societal or organizational hierarchies, cultural values, or belonging to a specific gender, are more stable and harder, or even impossible, to change. Situation-related bases of power, such as resources, are more dynamic and likely to change. Negotiation research on power has focused mostly on one of two bases of power: (1) resources or alternatives, and (2) status characteristics and related context variables. The sections below show how each of these bases of power relates to the role of power in negotiation.

Resources in negotiation. The most frequently discussed basis of power in negotiation research is resources (e.g., Kim & Fragale, 2005; Kim, Pinkley, & Fragale, 2005). Resources become a basis of power to the degree that other parties are in need of those resources. Having resources can also create alternatives for negotiators (for example, if those resources are attractive to more than one other party), which is equivalent to having power (Tinsley, 2004). An imbalance in the distribution of relevant resources between negotiators signifies an imbalance in power because one party is more dependent on the other party to fulfill its needs than vice versa.

According to Lewicki et al. (2006), resources particularly relevant to negotiation

are information, money (e.g., salaries, budget allocations, grants, and discretionary funds), supplies (e.g., raw materials, components and parts, machines, tools, and technology), human capital (e.g., available labor supply, and staff that can provide critical services), time (e.g., free time, the ability to meet a deadline or control a deadline for others), and interpersonal support (e.g., verbal praise and encouragement). This list of resources is covered well by Foa et al.'s (1993) typology of resources. The categories of information and money are the same as in Foa et al.'s typology; the category of supplies relates to goods in Foa et al.'s typology; human capital is an aspect of services; time covers items that would fall either under services or status; and interpersonal support relates to Foa et al.'s category of love. In addition, Foa et al.'s category of status covers a range of invisible resources not covered in Lewicki's list. Overall, Foa et al.'s typology not only subsumes Lewicki's list but fills some gaps as well, making it a good basis for measuring resources in the negotiation context.

Context and power. The contextual features of a negotiation, including, for example, the negotiators' cultural backgrounds, are the source of the values and beliefs that negotiators use to interpret what situational features, such as resources, mean and what behavior is appropriate based on them. Three contextual features particularly relevant to power relationships are diffuse status characteristics, organizational hierarchy, and culture.

Diffuse status characteristics. Diffuse status characteristics are the characteristics people use to evaluate others, which may be associated with different opportunities in life, special privileges, rights, and lifestyles (Berger, Cohen, & Zelditch, 1966). Examples include age, gender, ethnic background, social class, and education. These are individual

difference variables for which some states (e.g., being male versus being female) may be evaluated more positively than others.

In the absence of other bases of power, these status characteristics influence the power and prestige attributed to different members of a group. Kolb (1992), for example, argued that women have less voice in negotiations than men and may be perceived as less influential and of lower status (Eagly, 1983). Related to these evaluations are expectations about abilities and behaviors. Women are expected to be more deferential and empathetic toward others than men, so their role as negotiator may conflict with gender role expectations (Tinsley, Cheldelin, Schneider, & Amanatullah, 2009). Kray and Babcock (2006) discussed normative expectations for women such as being more communally oriented. Violating such expectations can lead to being perceived as less likable (Rudman, 1998) as well as less competent (Carli, LaFleur, & Loeber, 1995) and less persuasive (Burgoon, Dillard, & Doran, 1983).

Perceptions based on diffuse status characteristics can cause two challenges for negotiators that have status characteristics that tend to be negatively evaluated. First, because status is a resource, as identified by Foa et al. (1993), allocation of a lower status is the same as having fewer options and less power in the negotiation. Second, normative expectations about behaviors related to lower status may impede negotiators' efforts to overcome the initial disadvantage due to allocation of lower status over the course of the negotiation. The term *status allocation* is used to summarize the allocation of status based on diffuse status characteristics.

Status allocation that arises from diffuse status characteristics shows how negotiators' perceptions can influence another party's resources. This perception is based

on contextual influences rather than situational ones, but it enters directly into the evaluation of both the other party's resources and level of power in the negotiation.

Focusing on the influence of only situational or contextual variables, as negotiation research often does, can miss the interaction between situation and context. The model tested in this dissertation includes both situational and contextual variables to show how together they influence negotiators' behavior.

Hierarchy. Research has provided ample support for the advantages of balanced power relationships between parties when companies bargain over contracts (Donohue & Ramesh, 1992). If power is equally distributed, negotiators are more likely to reach agreements (Lawler & Yoon, 1995), achieve better outcomes (Kressel, 1985; Straus, 1979), and use more problem-solving in mediation sessions (McGillicuddy, Welton, & Pruitt, 1987). The achievement of higher joint gains in negotiations between parties with equal power and equal levels of dependence seems to be a result, in part, of both sides refraining from contentious or unyielding behavior. With balanced power and dependence, it is possible for the parties to focus on cooperating to achieve the best possible results for both sides.

However, a power advantage can also yield benefits to the advantaged party. For example, parties with more power set higher reservation and aspiration prices than parties with less power (Pinkley, Neale, & Bennett, 1994). Setting higher expectations in turn leads to better outcomes for those negotiators (Komorita & Leung, 1985). High-power negotiators are also more likely to make first offers (Neale & Fragale, 2006), and parties making first offers are more likely to focus on their aspiration price rather than the reservation price, whereas parties receiving a first offer are more likely to focus on their

reservation price (Galinsky & Mussweiler, 2001). Making the first offer, therefore, allows the higher power party to anchor the negotiation around his or her aspirations, which leads to a double advantage: The aspiration price is set higher based on that party's power advantage, and the negotiation becomes anchored to that price. Therefore, negotiators with more power generally achieve higher individual gains than negotiators with less power (Neale & Fragale).

Based on a survey among managers, Kipnis, Schmidt, and Wilkinson (1980) found that different influence tactics were used by managers depending on whether the target person was a superior, subordinate or equal. The higher the target person was above the manager, the more likely the manager was to use rationality tactics, such as providing justifications, explaining reasons, or presenting information that supported the manager's request. Assertive tactics and sanctions were more likely to be used with subordinates (see also Yukl & Falbe, 1990; Yukl & Tracey, 1992).

These studies show that managerial behavior differs depending on their position in the hierarchy, but they do not answer any of the following questions: Why did managers choose the tactics they chose? Was the choice based on the relative position of the other person? Was the choice related to the resources associated with the other's position? Or do position and resources interact, and how? And how does this choice of tactics play out in the give-and-take of a negotiation interaction?

This dissertation uses a hierarchical relationship between negotiators to address these questions. Specifically, the model tests whether resource distribution can increase or decrease the difference in power between superiors and subordinates even when one's position in the hierarchy gives a person an initial advantage or disadvantage in regard to

power. Each party's perception of the power difference influences the choice of negotiation tactics; this perception is a function of both the parties' position in the hierarchy and the distribution of resources between the parties.

Culture. Culture has been defined as "a historically transmitted pattern of meaning embodied in symbols, a system of inherited conceptions expressed in symbolic forms by means of which men communicate, perpetuate, and develop their knowledge about and attitude toward life" (Geertz, 1973, p. 89). Members of a culture base their norms for appropriate behavior on a set of shared values, norms, and attitudes (Hofstede, 2001). Culture-based values and norms can influence negotiation behavior in more than one way: They may serve as a guide toward decision-making and choice of behavior in the negotiation itself, but they may also influence what issues are negotiable and which ones are not, how priorities are arranged, what purpose the negotiation serves, and what outcomes are considered possible. Kopelmann (2009) has highlighted the importance of considering culture as a contextual variable that may influence a negotiation process. The model proposed in this dissertation, therefore, tests how cultural values influence negotiation behavior both by influencing negotiators' evaluation of the resource distribution and their perception of the overall power difference between parties.

Power distance is one of the four dimensions tested in Hofstede's (2001) research. This construct addresses how people within a culture perceive and accept hierarchical relationships and power differences within society. Because this dimension addresses perceptions of power differences, it is relevant to the current study. The definition of power distance has two aspects. First, power distance is the difference between how much a superior can influence the behavior of a subordinate and how much the

subordinate can influence the behavior of the superior. Second, power distance concerns the degree to which this difference in power is acceptable to the parties concerned. How acceptable these power differences are differs across cultures. Members of high power distance cultures are more accepting and tolerant of larger power differences between superiors and subordinates, whereas members of low power distance cultures are less accepting of these differences. Within an organizational hierarchy, power distance is likely to influence the thoughts and actions of both superiors and subordinates.

Depending on their power distance levels, they may consider different behaviors appropriate for working with each other, and they may have different ideas about each other's respective roles and what distribution of resources is fair or just.

Employees high in power distance have been shown to be higher in task orientation and to assign a larger share of responsibility for task accomplishment to superiors (Bochner & Hesketh, 1994). They also prefer less social distance between superiors and subordinates (Spencer-Oatey, 1997) but use more formal language and channels for communication (Bjørge, 2007; Richardson & Smith, 2007). Higher power distance employees allow superiors more leeway than subordinates in communication style (Bond, Wan, Leung, & Giacalone, 1985). They also react with lower performance and lower satisfaction with supervisors to empowerment (i.e., increased influence on work processes; Eylon & Au, 1999; Robert, Probst, Drasgow, & Lawler, 2000) and increased say in decision making processes (Brockner et al., 2001), but they perform better than low power distance people if work goals are assigned by superiors (Erez & Earley, 1987; Sue-Chan & Ong, 2002).

Power distance also has been found to affect the influence of diversity among

employees on how innovative teams are. High power distance teams are more innovative with less diversity, whereas low power distance teams are more innovative with more diversity (Van der Vegt, Van de Vliert, & Huang, 2005). Power distance influences employees' preference for procedural or distributive justice, with low power distance employees preferring procedural and high power distance employees preferring distributive justice (Begley, Lee, Fang, & Li, 2002; Lee, Pillutla, & Law, 2000; Yang, Mossholder, & Peng, 2007). Power distance also influences the relative priority assigned to ethical behavior versus compliance with superiors in that high power distance employees may value compliance more highly than ethical behavior (Christie, Kwon, Stoeberl, & Baumhart, 2003). Given this central role power distance plays in organizational life, power distance levels can be expected to influence how superiors and subordinates negotiate with each other. Therefore, power distance is included in the proposed model.

Negotiators, across cultural backgrounds, tend to use negotiation strategies that fit with their respective values (Adair et al., 2004; Tinsley, 1998, 2001). Managers from hierarchical societies are more concerned with authority and are more likely to involve higher management in conflict resolution than managers from egalitarian societies (Tinsley & Brett, 2001). Lower power distance managers are more likely to use problem solving for conflict management with their superiors than are high power distance managers, indicating that high power distance managers may be reluctant to openly confront their superiors about conflict issues (Van Oudenhoven, Mechelse, & De Dreu, 1998). Similarly, executives from more hierarchically organized societies have been found to react more negatively to conflict—especially when it is a personal conflict—by

avoiding it, discontinuing the negotiation, or withdrawing from the conflict (Ohbuchi, Sato, & Tedeschi, 1999; Tse, Francis, & Walls, 1994).

These studies provide insight into the role of power distance in negotiations within organizational hierarchies, but they do not predict the effects of power distance on negotiation. The current study proposes that power distance affects negotiators' evaluation of the resource distribution as well as their perception of the power difference between themselves and the other party, which in turn affects negotiators' likelihood of using power tactics in the negotiation.

**Power in the negotiation process.** Given the advantages of having power, increasing one's level of power can be a goal pursued in its own right within a negotiation. Wilson and Putnam (1990) conceptualized power as one of two types of relational goals, along with trust, that negotiators frequently pursue. Relational goals focus on shaping the relationship between two parties. Such goals can be pursued on their own or as a mean to improving chances of reaching other goals. Negotiators may strive to maintain a favorable power balance in relation to the other party by using strategies to either gain power or avert power loss. One framework that describes strategies and tactics used to influence the power balance is Ury et al.'s (1988) interests, rights, and power (IRP) framework. This approach grew out of research on dispute resolution, which differs somewhat from negotiation because dispute resolution focuses on resolving conflicts whereas negotiations may also be used to create new pursuits that neither party could accomplish by itself (Lewicki et al., 2006). Nevertheless, as the area of negotiation subsumes the area of dispute resolution, the range of strategies used in dispute resolution is applicable to negotiation as well.

Ury et al. (1988) argued that disputants tend to focus on one of three factors related to the dispute: interests, rights, or power. Interests are the needs, desires, concerns, and fears of the parties. When interests are the focus in the dispute, they may be reconciled through negotiation or mediation. When rights are the focus, an "independent standard with perceived legitimacy or fairness" (p. 7) is needed to decide which party is right. When power is the focus, one or both parties try to coerce the other to behave according to their wishes. Given the collective cost of using interests, rights, or power, Ury et al. recommended using interest-based negotiation as much as possible, because a focus on interests has the smallest transaction costs, leads to the highest level of mutual satisfaction with outcomes, has the least negative effect on the relationship, and produces the most enduring solutions. Focusing on power and rights involves higher transaction costs, such as strikes, wars and litigation. If parties focus on rights or power, satisfaction with the outcome may be high for one party but is likely to be much lower for the losing side. Dissatisfaction with the outcome will negatively influence the relationship between the parties and will make a recurrence of the same conflict more likely because the losing side may return to improve their outcome.

Research on interests, rights, and power strategies has mostly used Ury et al.'s (1988) conceptualization of those three strategies and has assumed that having an interest focus is related to cooperative behavior and that having a rights and power focus is related to contentious behavior (Brett, Shapiro, & Lytle, 1998; Lytle, Brett, & Shapiro, 1999). However, research findings have not necessarily supported Ury et al.'s recommendation to stay away from rights and power strategies. Brett et al. (1998) found, for example, that combining the use of power or rights with interests or with other

statements considered non-contentious was as effective in refocusing a negotiation away from a conflict as using only statements considered non-contentious. In addition, this combined use of tactics allowed negotiators to avoid appearing weak, which was a risk when they did not reciprocate rights or power statements.

Research suggests that the recommendations for strategy use in Ury et al.'s (1988) framework are based on culture-specific assumptions. Adair et al. (2004) found that negotiators from different cultural backgrounds used power strategies differently and produced higher or lower joint gains using those strategies depending on their culture's values and norms related to power. To assume that a focus on interests is best in all negotiations and that focusing on rights or power must be contentious seems to be a value judgment that is culturally-based. Tinsley (2004) pointed out that U.S. researchers emphasize interest-based negotiation because of the fit between assumptions about this type of negotiation and predominant U.S. values, such as "individualism, egalitarianism, and direct communication" (p. 197). Interest-based negotiation assumes that the interests of all parties are equally legitimate, that "the individual interests of parties in conflict are more important than, for example, collective interests or preestablished regulations" (pp. 197-198), and that all parties feel free to express their wishes and pursue their goals without penalty.

Assuming that cultural values influence preferences for negotiation strategies,

Tinsley (2004) has proposed that rights strategies would be preferred when members of a
culture value explicit contracting and egalitarianism, and when they consider abstract,
generalized principles more important than their own particular interests. Power
strategies would be preferred by people from societies that are more stratified and

hierarchical and when members value quick resolution of conflicts to minimize social disruption. Tinsley (1998, 2001) found support for this proposition: Negotiators from Germanic cultures were more likely to use rights strategies and Japanese negotiators more likely to use power strategies. Based on these findings, Tinsley (2004) presented a revised cost-benefit analysis that includes both advantages and disadvantages for all three types of strategies as well as situations favorable for using each of these strategies.

Based on Tinsley's findings, defining the tactics used in the context of power strategies (i.e., power tactics) only in terms of using coercion and being contentious is too limiting. Furthermore, this definition does not fit conceptually with the idea that power is a function of negotiators' resources. If power is a function of resources, then power tactics also should be defined in terms of resources. This dissertation defines power tactics as messages designed to further negotiators' goal achievement through the strategic use of available resources.

The following section presents a model of the influence of resource-based power differences and power distance on choice of negotiation tactics. A more detailed rationale for each relationship is presented with the hypothesis proposed for each path.

# **Model and Hypotheses**

Based on the discussion above, the following model is proposed.

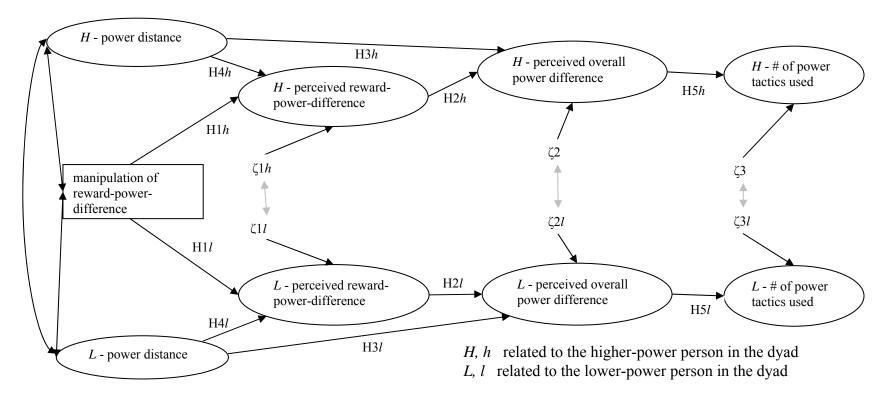


Figure 2. A model of power processes in negotiation.

*Note.* Variables in the model that represent the same concept but are measured for the high-power person and the low-power person, respectively, will be called *corresponding variables*. Equation errors associated with corresponding endogenous variables are allowed to covary. These covariances reflect the possibility that the variance not accounted for by the predictors of corresponding variables may have similar causes. If those covariances are insignificant, they can be removed from the model. A nonitalicized H is used to designate a hypothesis.

A negotiating party's reward power is a function of its resources that are relevant to the current negotiation; restated, the sum of a party's relevant resources is that party's reward power. Based on information about both parties' resources, negotiators estimate the difference in resources available to themselves and to the other party. This estimate of the difference in resources between the two parties is the perceived difference in reward power between the negotiating parties.

H1h & H1l: For both high- and low-power parties, an increase in the difference in available relevant resources between the two parties causes an increase in the perceived difference in reward power (i.e., perceived reward-power difference) between the parties.

Two variables contribute to how negotiators perceive the overall difference in power between themselves and the other party (i.e., perceived overall power difference): perceived difference in reward power and power distance. Perceived reward-power difference constitutes how much one party believes he or she must depend on the other party for the fulfillment of his or her needs. Power distance affects how much more powerful the superior is perceived to be than the subordinate. If power distance is low, the perceived power difference between superior and subordinate will be smaller than if power distance is high.

H2h & H2l: For both high- and low-power parties, an increase in perceived reward-power difference leads to an increase in perceived overall power difference.

H3h & H3l: For both high- and low-power parties, higher power distance leads to greater perceived overall power difference.

Diffuse status characteristics not only influence a negotiation process directly (e.g., through the perception of the power difference in the situation) but also indirectly by influencing the evaluation of resources relevant to the negotiation. As a contextual variable, power distance functions like diffuse status characteristics in setting the stage for a negotiation. Therefore, the following hypothesis is proposed:

H4h & H4l: For both high- and low-power parties, higher power distance leads to higher perceived difference in reward power.

Based on power distance reduction theory (Mulder et al., 1973), the closer the low and high-power parties are in overall power, the more the low-power parties will attempt to close the power gap between themselves and the high-power parties. According to social comparison theory (Festinger, 1954), the high-power party will attempt to keep the distance in overall power especially if the difference in power to the low-power party is small. Because power tactics are tools to change an unfavorable power balance, the following hypothesis is proposed:

H5h & H5l: For both high- and low-power parties, a decrease in perceived overall power difference causes the number of power tactics used to increase.

#### **Chapter 3: Method**

This chapter first presents the overall study design. Then, each pilot study is discussed including its purpose, procedures, results, and conclusions drawn from the results. Finally, the sample and procedure for the main study and test of the model are reported.

# **Overall Study Design**

To test the model proposed, an experiment was conducted with a 2 x 2 between-subjects design. Participants were randomly assigned to one of two levels in the hierarchy of the same company (i.e., party low in the hierarchy vs. party high in the hierarchy). In addition, the level of resources available to the participants was manipulated by assigning each participant either a larger or smaller amount of resources. Because this model tests how power differences in hierarchies influence negotiation processes, participants completed a dyadic negotiation simulation as follows: Participants assigned to be high in the hierarchy and high in resources were paired with participants assigned to be low in the hierarchy and low in resources to create a condition with a large difference in reward power. Participants assigned to be high in the hierarchy but low in resources were paired with participants assigned to be low in the hierarchy but high in resources to create a condition with a small difference in reward power.

Pilot tests were conducted to test both existing and new material. First, a measure of power distance had to be chosen from among existing measures. Second, a negotiation scenario and manipulations of resource distribution had to be developed and tested.

Third, measures of perceived reward-power difference and perceived overall power difference had to be developed and tested. As discussed above, reward power is

conceptualized as the perceived ability of a person to dispense love, status, money, goods, services, or information valued by another person, or in other words, any of Foa et al.'s (1993) six resources. Manipulating the six different types of resources could have different effects on participants' evaluation of their own power in comparison to the other party's power. To test whether that was the case, scenarios manipulating each of the six resources first were developed separately and pilot tested (see Pilot Study 2) before one scenario was chosen for the final study. Finally, a procedure for the final study had to be developed including methods for recording and coding negotiation interactions.

#### **General Research Procedures**

Approval from the University of Maryland Institutional Research Board (IRB) was given at each stage of the study (i.e., each pilot study and the main study). Study procedures, data collection material, and consent forms were approved by the IRB. In both pilot studies and the main study, participants received, read, signed, and returned consent forms before receiving any material or information related to data collection. Consent forms were kept separately from questionnaires and other data to protect participants' confidentiality.

Magnitude scales were used for all measured variables. In all cases, participants were asked to compare their own position in regard to each questionnaire item to a given yardstick (e.g., moderate level of agreement = 100). Participants were free to choose any nonnegative number to express their views. Questionnaire instructions included explanations and examples demonstrating how to use magnitude scales.

All data sets were winsorized (Tukey, 1962). Winsorizing is defined as "replacing the values of certain of the most extreme observations in a sample by the nearest

unaffected values" (p. 18). The purpose of winsorizing is to counteract the disproportionately strong influence of extreme observations, or outliers, on the data set. For example, if five participants respond to a specific item with 100, 200, 150, 180, and 1,000, the last respondent has a much stronger influence on the sample mean and other statistics than the others. Ignoring outliers can lead to results not reflecting the majority of data points, as extreme values distort, for example, means and regression lines. Therefore, all data sets were winsorized as follows: Box plots for each item in a scale were inspected and extreme observations evaluated. A cutoff for winsorizing was chosen based on two criteria: (1) the number of observations with a given score in the sample, and (2) the extremity of scores.

Based on these two criteria, three types of situations were found: (1) Data points for a given variable stayed mostly within the whiskers or close to the end of the whiskers of the boxplot, but a few data points were much larger (e.g., if data are mostly between 0 and 800 and one respondent wrote 10,000). In this case, the value of the highest data point close to the whiskers was chosen as cutoff for winsorizing. In the example given here, that value would be 800. (2) Data points for an item stayed within the whiskers of the boxplot or only had a few outliers close to the end of the whiskers. Such an item would not have been winsorized on its own. However, cutoff values were always chosen for all scale items as a set. Therefore, (3) if the procedure for situation 1 described above would have led to different cutoffs for different items in a scale, the highest value suggested by individual inspection for any one item in a scale was chosen for all items in that scale. For example, if the inspection described in point 1 suggested 800 as a cutoff for one item and 600 and 700 for two other items in the same scale, then 800 was chosen

as the cutoff for all three items. As a result, winsorizing meant the replacement of 0 data points for some items and up to 6 data points for others.

Parametric statistical tests, such as correlations and analysis of variance, assume that residuals are approximately normal in the population (Hanushek & Jackson, 1977), and some analyses, such as structural equation modeling, may assume that the population data are multivariate normal (Hayduk, 1987). If the population data or the relevant population residuals did not appear to be normally distributed based on skewness and kurtosis values of the sample data, the sample data were transformed as follows: A number of transformations were tried and resulting levels of skewness and kurtosis compared. The goal was to get both skewness and kurtosis as close to zero as possible, but accomplishing both goals was usually not possible. Therefore, the priority was to get skewness values within  $\pm 1.5$  while choosing the transformation with the lowest kurtosis accomplishing that goal. As scale items were summed to form scale scores (see explanation below), the same transformation was used for all items in a scale. If the same transformation did not work well for all items, the best possible compromise was chosen based on the rules discussed above and the skewness and kurtosis values of the resulting scale were considered above separate items. All data were transformed using single-bend transformations (Fink, 2009). Constants were added before transformations only for the purpose of eliminating negative values created in the process of analysis (see below). Unless otherwise indicated, all statistical analyses reported below used winsorized and transformed data.

To create scale scores, several options are available, including taking the first component of a principal component analysis or summing items. Wainer (1976) showed

that summing items, or—in other words—applying equal weights to all items, is more robust when items tested with one sample are used with a new sample. This advantage is due to equal weights avoiding problems with overfitting the measurement model and with the influence of outliers. Therefore, items were summed to create scale scores.

For all statistical tests, a significance level of  $p \le .05$  (2 tailed) was used as decision rule for acceptance or rejection of the hypotheses tested.

For all pilot studies, rooms for conducting the studies were scheduled through the University of Maryland, College Park classroom scheduling service. All rooms were regular classrooms that were not in use at the specific time the study was conducted and that fit the size requirements for the pilot study in regard to number of available seats.

## **Pilot Study 1**

The purpose of this study was to pilot test measures of power distance. Hofstede (2001) originally conceptualized power distance as a culture-level variable. However, a number of measures have been developed since Hofstede's work that measure power distance on the individual level (e.g., Dorfman & Howell, 1988; Earley & Erez, 1997; Maznevski, DiStefano, Gomez, Noorderhaven, & Wu, 2002). The current project treats power distance as an individual-level variable.

Three measures of power distance (Dorfman & Howell, 1988; Earley & Erez, 1997; Maznevski et al., 2002) that had reasonable reliabilities in prior research were evaluated. The instruments by Dorman and Howell and Maznevski et al. had not been included in sources reporting on their use. Therefore, Drs. Dorman and Maznevski were contacted and the measurement instruments as well as permission to use them were obtained directly from the authors (M. Maznevski, personal communication, March 8,

2009; P. Dorfman, personal communication, March 29, 2009). For items from these three measures, the same wording was used as in the original items, but magnitude scales were used for quantitative responses instead of the original Likert-type quantitative responses.

Also evaluated was Spencer-Oatey's (1997) measure of superordination. Because the author has used the terms power distance and superordination interchangeably, the instrument was included to measure power distance. Because Spencer-Oatey's study focused on the relationship between postgraduate students and their tutors, whereas this study focuses on relationships in organizational hierarchies, items were adapted to fit the different context (see Appendix A). All of these measures were pilot-tested to explore their component structure as well as to establish their prospective reliability for the sample population used in this study.<sup>1</sup>

Participants and procedure. Participants were 268 undergraduate students at the University of Maryland who received extra credit for their participation. Among the 268 participants, 186 were female, and 27 freshmen, 79 sophomores, 83 juniors, and 77 seniors. The mean age of the sample was 20.14, with a median of 20 and a range of 18 to 49.

Participants received thorough explanations on how to use magnitude scales and then filled out a paper-and-pencil questionnaire that included the four power distance scales (see Appendices A and C for items used) as well as demographic questions.<sup>2</sup>

Participants took between 30 minutes and one hour to complete the questionnaire. Upon

<sup>&</sup>lt;sup>1</sup> Permission to include the scale items in this dissertation was sought for all scales and obtained for Spencer-Oatey's (1997) scale and Earley and Erez's (1997) scale. No permission was granted to include items from Dorman and Howell's (1988) scale and Maznevski et al.'s (2002) scale. Therefore, the Appendices A and C only include the items for which permission to reprint was obtained. The other two scales can be obtained directly from the authors.

<sup>&</sup>lt;sup>2</sup> Participants also completed 17 items measuring individualism and collectivism (Maznevski et al., 2002), a 56-item value scale (Schwartz, 1992), and a 112-item scale of leadership values (The GLOBE Foundation, 2006). These measures were unrelated to the current study.

completion, they were thanked for their participation and left the room.

**Results.** Based on the rules discussed above, all scores above 1,000 were winsorized to avoid undue influence of outliers. To prepare data to meet the assumptions of the linear model, all items were transformed to the power of 5/12 (see Appendix B for details of data preparation including skewness and kurtosis values of the original data as well as skewness and kurtosis values after winsorizing and transforming).

Evaluation of Dorfman and Howell's (1988), Earley and Erez's (1997), and Maznevski et al.'s scale. Reliability analyses conducted after transformation of items produced a Cronbach's alpha of .68 for Dorfman and Howell's scale. For Earley and Erez's scale, Cronbach's alpha was .74, and for Maznevski et al.'s scale, .69. However, principal component analyses (PCA) showed that only Dorfman and Howell's scale had items that created only one dimension with an eigenvalue greater than 1.00. This component explained 38.44% of the variance in the data set. Earley and Erez's (1997) scale produced two components with eigenvalues > 1.00, explaining 39.73% and 15.16%, respectively. Maznevski et al.'s (2002) scale also produced two components with eigenvalues > 1.00 that explained 37.17% and 15.23% of the variance, respectively.

Evaluation of Spencer-Oatey's (1997) scale. The structure of Spencer-Oatey's instrument required that participants' evaluations of a lower power person's power be subtracted from participants' evaluation of a higher power person's power. As a result, values could be negative. The distribution of power distance items required, for a single-bend transformation, an exponent < 1.00. This transformation is undefined for negative values; therefore a constant of 200 was added to all items.

A principal component analysis showed that four out of ten items did not load

well with the rest. These four items were similar in that they measured different aspects of communicating disagreement with one's superior or subordinate, whereas the remaining items focused on giving directions, advice, and correcting or reprimanding the other. Therefore, removing these four items made theoretical and statistical sense.

The remaining six items were transformed to the power of 5/12 to help meet the normality assumption for analyses to follow (see Appendix C for details of data preparation including skewness and kurtosis values of the original data as well as skewness and kurtosis values after winsorizing and transforming). A new PCA showed one component with an eigenvalue > 1.00 explaining 58.84% of the variance. The scale had a Cronbach's alpha of .86. Both in reliability and variance explained by the first principal component, this scale was far superior to Dorfman and Howell's (1988), Earley and Erez's (1997), and Maznevski et al.'s (2002) scales, and was, therefore, chosen to be used in this dissertation.

Nevertheless, practical experience with participants and their questions during data collection indicated that a better layout for the questionnaire instructions would be helpful to avoid confusion among participants and, therefore, possibly increase reliability of responses. Therefore, instructions were revised to decrease the number of words while highlighting the most important points through central placement, bolding, and use of text-boxes (see Appendix D). The revised scale was tested with a new sample.

For the retesting of the power distance instrument, participants were 46 undergraduate students at the University of Maryland. Students received extra credit for their participation. Among the participants were 29 females; the sample included 21 freshmen, 5 sophomores, 13 juniors, and 7 seniors. The mean age of the sample was

19.96, with a median of 20 and a range of 18 to 33.

Participants received thorough explanations on how to use magnitude scales, both orally and as part of the instructions on the questionnaire, and then filled out a paper-and-pencil questionnaire that included the revised version of Spencer-Oatey's (1997) power distance scale.<sup>3</sup> Upon completion, they were thanked for their participation and left the room.

To control the influence of outliers, all values above 500 were winsorized. Values for employee-focused items were subtracted from the corresponding values for manager-focused items. Then, the value 50 was added to all items to avoid negative values before transformation. Items were transformed to the power of 5/12 to help meet the normality assumption for analyses to follow (see Appendix E for details of data preparation including skewness and kurtosis values of the original data as well as skewness and kurtosis values after winsorizing and transforming).

A PCA of the revised scale produced one component with an eigenvalue greater than 1.00 explaining 72.60% of the variance in the data set. The scale had a Cronbach's alpha of .92. Participants did not report (nor did their answers reflect) difficulty filling out the revised version of the scale. Considering the advantages of a higher reliability and greater explanatory power, the revised version of this scale was chosen to be used in this dissertation.

### Pilot Study 2

Pilot Study 2 served several purposes. The scenarios that were developed (see Appendices F and G) were tested for how realistic they seemed to respondents and how

<sup>&</sup>lt;sup>3</sup> Participants also read a negotiation scenario and completed measures of realism, power difference, perceived reward power difference, perceived overall power difference, and face concerns (Ting-Toomey & Oetzel, 2001).

well they manipulated participants' perception of reward power. Further, the measure of perceived reward-power difference developed for this study (see Appendices I and K) and the measure of perceived overall power difference (adapted from Nesler, Aguinis, Quigley, Lee, & Tedeschi, 1999; see Appendices T and V) were tested for component structure and reliability. Perceived reward-power difference is defined as the difference between the sum of all relevant resources negotiators perceive they have and the sum of all relevant resources they perceive the other party has. Perceived overall power difference is defined as the difference between the influence negotiators perceive the other party has over them and the influence they perceive to have over the other party.

Participants and procedure. An initial sample of 416 participants read one of 14 versions of the negotiation scenario (see explanation below), and filled out a measure of realism, a long and short version of the perceived reward-power difference scale, a long and short version of the perceived overall power difference scale, as well as questions about demographics. Participation took 30 to 45 minutes. Participants were undergraduate students at the University of Maryland who received extra credit for their participation. Among the 416 were 260 females, with 39 freshmen, 128 sophomores, 136 juniors, and 111 seniors. Participants ranged in age from 18 to 49, with a mean of 20.14 and a median of 20.

After this initial data collection, various aspects of the materials used were revised, and additional data were collected that incorporated these revisions. These additional data sets are discussed below. In the following sections, the development of materials and the results of data analyses are first discussed for the scenarios followed by the perceived reward-power difference scale, the manipulation of reward power, and the

perceived overall power difference scale.

Scenario development and testing. Because this study focuses on negotiation in intra-organizational hierarchies, the scenario (see Appendices F and G) was developed for two roles, a manager and a sales representative, in a company with some financial difficulties. The scenario describes how management is trying to improve the situation in spite of a hiring freeze by expanding into new markets and requiring employees to increase their work load. The scenario also includes background information on the sales representative's personal goals. The declared negotiation goal for the manager is to get employees to increase their workload and agree to other unpopular measures. The negotiation goal for the employee is to reach an agreement with the manager that does not interfere with the employee's personal goals, which include not increasing workload, restrictions on type of work, and requests for vacation.

Hypothesis 1 (see above) proposes that an increase in the difference in available relevant resources between negotiating parties causes an increase in the perceived difference in reward power between the parties. To test this hypothesis, the scenarios had to manipulate the distribution of Foa et al.'s (1993) six resources between the parties. Therefore, each role was combined with each of six resource manipulations (see Appendices F and G) resulting in 12 different manipulated versions of the scenario to be tested. In addition, one unmanipulated version for each role was tested. Manipulations were constructed by adding a couple of sentences to the negotiation instructions. For example, to manipulate the employee's perception of the distribution of the resource *information*, the following sentences were added at the end of the scenario: "While talking to Mr./Ms. Mueller, you have to keep in mind, however, that much of your work

depends on the free flow of information from Mr./Ms. Mueller to you. So, you do not want to upset him/her too much." For the manager, the manipulation of the same resource read as follows: "You doubt that Mr./Ms. Johnson will risk challenging you too much, though, because much of his/her work depends on the free flow of information from you to him/her."

Between 27 and 36 participants read each version of the scenario. Participants then completed measures of scenario realism, personal relevance of the scenario, and a measure of participants' experience with similar negotiation situations (see Appendix H for all items for the three scales). The measure of personal relevance was included as an indicator of how close to their own lives participants perceived the scenario to be. Perceiving the scenario as relevant to their lives should make it easier for them to imagine themselves in the situation described. The measure of personal experience was included because some differences in negotiation behavior have been found between experienced and novice negotiators (Loewenstein & Thompson, 2006). For example, novice negotiators are more likely to assume that parties' preferences are completely opposite, an assumption also known as the fixed-pie assumption (Bazerman & Neale, 1983; Thompson & Hastie, 1990). Although participants are college students, they may or may not have prior experience with negotiation based on work history and course work. Their experience or lack of experience may influence their negotiation behavior. Therefore, this measure is included to establish a potentially relevant feature of the character of the sample.

As discussed above, magnitude scales were used for all three scales and respondents were asked to report their level of agreement with each item's content, with

an answer of 100 corresponding to *moderate agreement*. Participants were instructed to choose a number below or above 100 depending on how much less or more they agreed with the statement given; any nonnegative number was an acceptable answer. To avoid undue influence of outliers, scores above 500 were winsorized and all items were transformed to help meet the normality assumption for analyses to follow (see Appendix H for details of data preparation including skewness and kurtosis values of the original data as well as skewness and kurtosis values after winsorizing and transforming).

Scenario realism. To test how realistic the scenario seemed to the participants, they completed a three-item realism scale that included items such as, "The situation described in the scenario may happen in real life." A principal component analysis of the scale produced one component with an eigenvalue greater than 1.00, which explained 88.32% of the variance in the data set. Cronbach's alpha was .93.

To evaluate participants' mean response to questions about scenario realism, the winsorized but untransformed data were used to compute a scale score by dividing the sum of scores on the three items by three. Participants' mean response to the three items was 147.16 with a standard deviation of 79.30, meaning that participants perceived the scenario as more than half a standard deviation above moderately realistic.

*Personal relevance.* To test whether participants perceived the situation described in the scenario to be relevant to their own lives, they completed a three-item scale that included items such as, "It is possible that I will encounter the situation in the scenario in real life." and "I can easily imagine being in this situation." A principal component analysis of the scale produced one component with an eigenvalue greater than 1.00, which explained 78.78% of the variance in the data set. Cronbach's alpha was .86.

To evaluate participants' mean response to questions about personal relevance of the scenario, the winsorized but untransformed data were used to compute a scale score by dividing the sum of scores on the three items by three. Participants' mean response to the three items was 115.21 with a standard deviation of 75.57, meaning that participants perceived the scenario as about a fifth of a standard deviation above moderately relevant to their lives.

**Negotiation experience.** To test whether participants perceived themselves to be experienced in handling situations like the one described in the scenario, they completed a three-item scale that included items such as, "I have a lot of experience negotiating in situations like the one described in the scenario." A principal component analysis of the scale produced one component with an eigenvalue greater than 1.00, which explained 74.97% of the variance in the data set. Cronbach's alpha was .83.

To evaluate participants' mean response to questions about negotiation experience, the winsorized but untransformed data were used to compute a scale score by dividing the sum of scores on the three items by three. Participants' mean response to the three items was 61.18 with a standard deviation of 39.78, meaning that they perceived themselves as about one standard deviation below moderately experienced negotiating situations as described in the scenario. Together, the three tests discussed above show that participants perceived the scenario as realistic, and although they did not feel that they had much experience with the situation, they felt it likely that they would find themselves in a similar situation sometime in their lives and did not have difficulty imagining themselves in the situation.

Testing the perceived reward-power difference scale. To measure participants'

perceptions of the distribution of resources between the parties, a 46-item scale (see Appendix I) was developed as follows. For each of Foa et al.'s (1993) six resources (i.e., love, services, goods, money, information, and status), items were written that expressed how one person possessing that resource can influence another person. For example, an item for the category *money* is "My superior can influence the allocation of funds to my work," and for the category information, "My superior can provide me with valuable information." As discussed above, some categories of resource-based power are closely related to Hinkin and Schriesheim's revised version of French and Raven's (1959) sources of power. Therefore, eight items were used from Hinkin and Schriesheim's (1989) measure of social power. Specifically, two items measuring expert power in the original scale were used to measure availability of the resource *information*, three items measuring reward power in the original scale were used to measure availability of the resource *money*, and three items measuring referent power in the original scale were used to measure the resource *love* (see Appendix I). In addition, one more item measuring love, three items measuring service, four items measuring goods, one more item measuring *money*, two more items measuring *information*, and four items measuring status were created, forming a scale with 23 items in all. Then, two versions of each item were created, one expressing influence of a manager on a sales representative (see scenario) and one vice versa. For example, two corresponding items are "The manager can make the sales representative feel personally valued," and "The sales representative can make the manager feel personally valued."

The sample for Pilot Study 2 described above (N = 416) responded to the perceived reward-power difference scales for the purpose of analyzing the dimensional

structure and reliability of all six subscales. To avoid undue influence of outliers on results, scores above 800 were winsorized. The data set was then transformed to the power of 1/3 to help meet the normality assumption for analyses to follow (see Appendix J for details of data preparation including skewness and kurtosis values of the original data as well as skewness and kurtosis values after winsorizing and transforming).

Results. Principal component analyses for the six subscales produced one component each that had an eigenvalue greater than 1.00, both for the manager and sales representative version of the scenario. For the manager role, the variance explained by the first principal components of the six subscales was between 67.03% and 75.36% and Cronbach's alpha ranged from .79 to .87. For the sales representative role, the variance explained by the first principal components of the six subscales was between 53.19% and 62.53% with Cronbach's alpha between .56 and .80 (see Table 1 for variances explained by the first principal components and alphas for all the subscales).

Revisions. Based on these results, a few revisions were made to the scale. First, the reliability for the sales representative version of the subscale service was much lower than the other subscales. Based on participant feedback, the item "The sales representative can make sure that the equipment the manager needs for work is regularly updated" was identified as being too specific to fit the scenario well and not applying equally well to its sales representative and manager versions. Participants reported not understanding why it could be a sales representative's job to update equipment. The item was changed to read, "The sales representative can provide services that make the manager's work run more smoothly." The corresponding item for managers was changed in the same way.

Table 1

Reliabilities and Variance Explained by First Principal Components for Perceived

Reward-Power Difference (PRPD)\_Subscales in Pilot Study 2 (N = 416): Long Form

Items About	Resource	Proportion of variance explained by 1 <sup>st</sup> component	Cronbach's alpha	# of items
Managers	Love	70.64%	.86	4
	Service	70.63%	.79	3
	Goods	72.32%	.87	4
	Money	72.19%	.87	4
	Information	73.06%	.88	4
	Status	67.03%	.84	4
Sales representatives	Love	59.34%	.78	4
	Service	53.19%	.57	3
	Goods	58.42%	.77	4
	Money	57.76%	.76	4
	Information	59.32%	.77	4
	Status	62.00%	.80	4

Based on participant feedback, a small change was made to the item "The manager can increase the sales representative's pay level." Some participants felt that pay levels were probably outside a manager's control. Therefore, the item was changed to "The manager can influence whether the sales representative gets an increase in pay," and the corresponding sales representative item was changed in the same way.

Finally, principal component analysis showed that for the subscale measuring the resource *information*, the variance explained by the first principal component increased if the item "The manager can share with the sales representative his/her considerable experience and/or training," and the corresponding sales representative item were dropped. For the manager subscale, the variance explained by the first principal component increased from 73.06% (Cronbach's alpha = .88) to 75.36% with a Cronbach's alpha of .84; for the sales representative subscale, the variance explained by the first principal component increased from 59.32% (Cronbach's alpha = .77) to 62.53% with a Cronbach's alpha of .70. Therefore, the item was dropped from both scales. A new data set was collected to test the revised version of the scale (see below).

# Testing the short version of the perceived reward-power differences scale.

The goal in measuring perceived reward-power difference was not to know exactly how much of a resource the manager and the sales representative have, but how large the difference in reward power is between the two. Therefore, the values obtained from the scale discussed above for the sales representative would be subtracted from the values obtained for the manager to find out the perceived difference between the two. This procedure introduced some unreliability that could be avoided if the difference could be measured directly. Therefore, a second version of the scale (see Appendix K) was developed that included the same items but collapsed the corresponding items for managers and sales representatives into one. This merging of items was accomplished by asking respondents to think of the ability of the manager to do something as the yardstick and rate the sales representative's ability in comparison to that yardstick. For example, participants were asked to evaluate the ability of the sales representative to "make the

other feel personally valued" in comparison to the manager, whose ability to "make the other feel personally valued" was set to be 100. Participants were asked to respond with a number higher than 100 if they perceived the ability of the sales representative to be higher than the ability of the manager and respond with a number lower than 100 if they perceived the ability of the sales representative to be lower than the ability of the manager. This set-up reduced the number of items from 46 to 23. Fewer items is an advantage in data collection because it saves time, increases the likelihood of participants reading and completing all items thoroughly, and, therefore, also is likely to increase reliability of the data collected.

Participants had completed this short version of the scale as part of the initial data collection for Pilot Study 2 (N = 416), but this data set turned out not to be usable because participants had not understood the instructions: The median for all but two items was 100. As the number 100 was set to be the ability of the manager and participants were asked to rate the sales representative's ability in comparison to the manager, a median of 100 means that half or more of the participants perceived the sales representative to have either the same or more resources than the manager. This result is unlikely because the same set of participants had made clear distinctions between resources of managers and sales representatives using the long version of the scale and had attributed more resources to the manager (see below). Therefore, the conclusion was drawn that participants had not understood the instructions for the short version of the scale. Based on feedback from participants, the specific issue seemed to be that students automatically thought of themselves more in terms of the employee (i.e., the sales representative) than the manager and, therefore, found it difficult to think from the

perspective of the manager.

Because some participants did follow instructions and some did not, and because it is not possible to infer who misunderstood the instructions and who did not, the data had to be recollected. Therefore, to test this new version of the perceived reward power distance scale, an additional sample of 40 participants was used, of which 29 were female, with 13 freshmen, 8 sophomores, 15 juniors, and 4 seniors. The age of participants ranged from 18 to 31 with a mean age of 19.88 and a median of 20. Participants were students at the University of Maryland who received extra credit for their participation. They read the scenario and completed the short and long version of the perceived reward-power difference scale as well as questions about demographics. Participation took about 30 minutes. To avoid the same problem as with the initial sample, participants received extensive oral explanations of the instructions in addition to the instructions included on the questionnaire. The researcher first explained the instructions they received in writing with the questionnaire. Then, she gave participants example statements to evaluate using the instructions discussed until participants seemed comfortable applying them.

To avoid outliers unduly influencing the results, all scores above 200 were winsorized. To help meet the normality assumption for analyses to follow, all items were then transformed to the power of 5/6 (see Appendix L for details of data preparation including skewness and kurtosis values of the original data as well as skewness and kurtosis values after winsorizing and transforming).

Principal component analyses for the six short-form subscales resulted in one component with an eigenvalue greater than 1.00 for each subscale. The variance

explained by the components was between 54.21% and 83.31% with Cronbach's alpha between .57 and .93 (see Table 2 for variances explained by the first principal component and reliabilities for all subscales).

The following section compares the results of the new short form of the scale (i.e., with only one set of items for each of the six subscales) with the results for the long form of the scale (i.e., with separate sets of items for the manager and sales representative versions of each subscale; see Table 1). The short-form subscales for money and status improved in reliability and in the proportion of variance explained by the first principal component, both in comparison with the manager and the sales representative versions of the long form of the scale. The short-form subscales for love, service, and goods improved over the sales representative versions of the long form of the scale. However,

Table 2 Reliabilities and Variance Explained by First Principal Components for PRPD Subscales in Pilot Study 2 (N = 40): Short Form

Scale	Proportion of variance explained by 1 <sup>st</sup> component	Cronbach's alpha	# of items
Love	64.31%	.81	4
Service	58.13%	.63	3
Goods	66.98%	.83	4
Money	78.55%	.91	4
Information	54.21%	.57	4
Status	83.31%	.93	4

the first principal components of the short-form subscales for love, service, and goods explained less variance and subscales had a lower reliability than the manager version of the long form of the scale. Finally, the first principal component of the short-form subscale for information explained a lower proportion of the variance and the subscale was less reliable than the long form of the scale. Nevertheless, as the three items all had face validity and no clear reason for the lower reliability and proportion of variance explained could be detected, the items were retained at this point pending an additional test of the scale in its revised version (see below).

Three subscales (i.e., love, service, and goods) performed equally well, two subscales (i.e., money and status) better, and only one subscale (i.e., information) was less reliable than the long version of the perceived reward power distance scale. Considering the advantage of a scale only half the length of the long version resulted in the short version of the scale being chosen to be used in the final study. However, feedback from participants indicated that some participants still had problems with the instructions asking them to use the manager's ability as the yardstick (i.e., manager's ability = 100). Therefore, the questionnaire instructions were revised to use the sales representative's ability as the yardstick (i.e., ability of the sales representative = 100) and ask participants to rate the ability of the manager in comparison.

**Testing PRPD scale revisions.** An additional sample (N = 77) was used to test the results of the revisions to the scale discussed above. Participants were students at the University of Maryland who took part in the study for extra credit. Fifty-two of the participants were female, with 35 freshmen, 8 sophomores, 22 juniors, and 12 seniors. Participants' age ranged from 18 to 26 with a mean of 19.81 and a median of 19. They

were randomly assigned to read either the manager or sales representative version of the scenario, and they then completed the long and short versions of the perceived reward power distance scale as well as the long and short version of the perceived overall power difference scale. The scale instructions were revised to assign the standard value of 100 to the sales representative's ability and ask participants to rate the manager's abilities in comparison to that standard (see Appendix M).

To avoid outliers unduly influencing results, all data above 400 were winsorized. All items were then transformed to the power of 5/12 to help meet the normality assumption for analyses to follow (see Appendix N for details of data preparation including skewness and kurtosis values of the original data as well as skewness and kurtosis values after winsorizing and transforming).

Inspection of the untransformed data suggested that participants no longer had problems with the instructions. For example, participants were expected to evaluate the resource differential as higher for resources such as money (M = 168.04, SD = 66.12 for the average response on all items) or goods (M = 152.31, SD = 54.99) than for service (M = 135.31, SD = 39.81) or love (M = 127.01, SD = 35.98), and that was now the case.

Principal component analyses were conducted and reliabilities calculated for all subscales (see Table 3) to gather additional information about the scale in general as well as to check the results of revisions made to the *money* and *service* subscales. The subscale measuring information as a resource did better in this sample. The first principal component for the three information items accounted for 64.59% of their variance.

Cronbach's alpha was .72, confirming the decision to keep this subscale as is. Results for the subscale measuring *money* as a resource improved slightly, indicating that the scale

Table 3

Reliabilities and Variance Explained by First Principal Components for PRPD Subscales in Pilot Study 2 (N = 77): Revised Short Form

Scale	Proportion of variance explained by 1 <sup>st</sup> component	Cronbach's alpha	# of items
Love	49.92%	.64	4
Service	61.79%	.69	3
Goods	75.55%	.89	4
Money	81.94%	.92	4
Information	64.59%	.72	3
Status	70.95%	.85	4

did not suffer from the small change in wording of one of the items. Finally, the three items of the subscale measuring *service* now loaded similarly well on their component (.80, .76, and .80, respectively), indicating that the item change had improved the structure of the scale. Overall, the results of this test supported use of the perceived reward power distance scale in its short revised version, and that version was used for data collection in the final study.

Testing the manipulations. As discussed above, scenarios were written and manipulations were included to create four different conditions: a manager with more versus less resource power and a sales representative with more versus less resource power. Manipulations were used to accomplish two goals: First, participants needed to perceive the difference in available resources in general between managers and sales representatives with managers having more resources based on their position in the

hierarchy. Second, participants needed to differentiate between managers with more versus fewer resources and sales representatives with more versus fewer resources depending on the manipulations added to the scenario.

The first test of the manipulations used the initial sample (N = 416) discussed above. As discussed above, all data above 800 were winsorized and items were transformed to the power of 1/3 to help meet the normality assumption for analyses to follow (see Appendix J for details of data preparation including skewness and kurtosis values of the original data as well as skewness and kurtosis values after winsorizing and transforming). To create scale scores for each of the six resources, items for each resource were summed separately for the manager and sales representative items, resulting in 12 scale scores.

Perception of managers' versus sales representatives' resources. Paired sample t tests were conducted to test participants' perception of resources of managers and sales representatives, respectively. Results showed that participants clearly distinguished between the resources they perceived managers to have and those they perceived sales representatives to have, with managers receiving higher scores in all six resource categories (see Table 4).

The *t* tests reported below (see Table 4) analyzed all participants together, whether they had been assigned to the role of manager or sales representative. If the role of a participant were to influence the perception of the resource distribution, this difference would be hidden by analyzing participants from both roles together. To establish that participants assigned to either role shared the perception that managers had more of the six resources than sales representatives, the same analysis was conducted

Table 4

Paired Samples t Tests Comparing All Participants' Perceptions of Managers' and Sales

Representatives' Resources in Pilot Study 2 (N = 416)

	Means	SDs			p
Pair	(Mgr; SR)	(Mgr; SR)	df	t	(2 tailed)
Love	25.61; 22.24	4.30; 4.45	412	15.51	< .01
Service	18.79; 14.34	3.12; 4.00	411	21.20	< .01
Goods	24.93; 17.66	4.23; 5.91	412	22.67	< .01
Money	25.69; 17.87	4.94; 6.25	410	21.45	< .01
Information	19.19; 16.67	3.55; 3.55	412	13.50	< .01
Status	24.66; 20.74	4.52; 4.79	413	14.70	< .01

separately for all participants in the manager role (N = 206) and all participants in the sales representative role (N = 208). Results showed that participants in either role perceived the difference in resources between managers and sales representatives to be significant for all six resources. Participants in both roles rated the difference in resources as largest for money and goods and smallest for information and love, with service and status in between (see Tables 5 and 6).

Perception of high-resource and low-resource managers and high-resource and low-resource sales representative. Next, the manipulation of resources had to be tested. Manipulations were designed to increase the difference in a specific resource between managers and sales representatives. Therefore, a comparison of responses to scenarios in

Table 5

Paired Sample t Tests of Managers' Perceptions of Managers' Versus Sales

Representatives' Resources, Pilot Study 2 (N = 416)

	Means	SDs			p
Pair	(Mgr; SR)	(Mgr; SR)	df	t	(2 tailed)
Love	25.84; 22.51	4.52; 4.32	205	10.64	< .01
Service	18.80; 14.32	3.09; 4.07	204	15.44	< .01
Goods	24.96; 17.93	3.93; 5.71	205	16.21	< .01
Money	25.08; 17.90	4.86; 6.13	203	14.34	< .01
Information	19.28; 16.75	3.51; 3.45	204	10.84	< .01
Status	24.46; 21.03	4.43; 4.52	205	9.49	< .01

which resources were manipulated to responses to the unmanipulated scenario—or control condition—should show that participants perceive a larger difference in available resources for the specific resources in their manipulated conditions than in the control case. To create a measure of mean difference for each resource, the transformed scale values for each of the six sales representative subscales were subtracted from the corresponding transformed scale values for managers' resources. The t tests comparing each manipulated condition for managers and sales representatives with the control condition produced no significant results. Only three tests showed results that were in the right direction (i.e., with higher mean differences for the manipulated than for the control condition): the tests for money (M = 7.88, SD = 6.33 vs. M = 10.17, SD = 7.09) and information (M = 2.44, SD = 3.43 vs. M = 3.24, SD = 5.44) for the sales representative

Table 6

Paired Sample t Tests of Sales Representatives' Perceptions of Managers' Versus Sales

Representatives' Resources, Pilot Study 2 (N = 416)

	Means	SDs			p
Pair	(Mgr; SR)	(Mgr; SR)	df	t	(2 tailed)
Love	25.38; 21.97	4.07; 4.57	206	11.28	< .01
Service	18.77; 14.36	3.16; 3.95	206	14.53	< .01
Goods	24.90; 17.40	4.52; 6.11	206	15.89	< .01
Money	26.29; 17.85	4.95; 6.37	206	16.03	< .01
Information	19.09; 16.60	3.60; 3.65	207	8.61	< .01
Status	24.86; 20.44	4.60; 5.03	207	11.30	< .01

role and the test for status for the manager role (M = 3.37, SD = 4.44 vs. M = 5.12, SD = 7.10). But, again, none of these differences were significant. Therefore, the manipulation of resources needed to be revised.

Revising the manipulations of resources. The results reported above indicate that the manipulation of resource distribution needed revision to create clear differences in participants' perception of reward-power difference. One weakness of the original manipulation was that it was included in the last paragraph of the scenario. In the version of the scenario used for the sample discussed above, participants were asked to read the information and underline what they considered to be key points to remember. Inspection of participants' scenario sheets showed that most participants had either not considered the manipulation information as very important (i.e., no underlining in that paragraph) or

had not read that far.

Another weakness of the initial scenario was that only the position of the manager was manipulated and only in one direction (i.e., to make him or her more powerful). Finally, each manipulation only addressed one resource although the overall goal was to influence the perception of perceived reward power, which is related to all six resources. Therefore, the following revisions were made to the scenario (see Appendices O–R): High and low power descriptions were developed for both the manager and sales representative. One set of scenarios combined the high-power description of the manager with the low power description of the sales representative to create a condition with high perceived reward-power difference. Another set of scenarios combined the low power description of the manager with the high-power description of the sales representative to create a condition with low perceived reward-power difference. Rather than just manipulating one resource, the three resources most successful in the initial test (i.e., money, information, and status) were manipulated together by combining the manipulations used in the first test and attaching them to the high reward-power difference condition scenarios for sales representatives and managers. (Three resources were chosen rather than all six to avoid long texts that would again have the danger of not being read.) The high and low power descriptions of managers and sales representatives discussed above focused on the same three resources. The manipulating aspects were included early in the scenario and included the description of one's own role, the description of the other party's role, as well as the manipulating sentence used in the old version of the manipulation. Finally, the lay-out of the scenario was improved through strategic use of textboxes, bolding, capitalization, and spacing to increase readability.

Test of the revised manipulations. To test the revised scenario, an additional sample (N = 77) was used.<sup>4</sup> Participants were students at the University of Maryland who took part in the study for extra credit. Fifty-two of the participants were female, with 35 freshmen, 8 sophomores, 22 juniors, and 12 seniors. Participants' age ranged from 18 to 26, with a mean of 19.81 and a median of 19. They were randomly assigned to read either the manager (63) or sales representative (14) version of the scenario in either the high reward-power difference (38) or low reward-power difference (39) condition.<sup>5</sup> Participants completed the short and long versions of the perceived reward-power-distance scale.

To allow for a direct comparison with the first sample, results for the long version of the PRPD scale are discussed first. To avoid undue influence of outliers, scores above 400 were winsorized. Items were then transformed to the power of ½ to help meet the normality assumption for analyses to follow (see Appendix S for details of data preparation including skewness and kurtosis values of the original data as well as skewness and kurtosis values after winsorizing and transforming).

Principal component analyses for the six subscales produced one component with eigenvalue greater than 1.00 for each subscale, explaining between 54.37% and 81.89% of the variance in the data set. Cronbach's alpha for the resource subscales for both roles was between .57 and .93 (see Table 7).

To test whether the perceived reward-power difference in the high reward-power

<sup>&</sup>lt;sup>4</sup> This is the same sample used to test revisions of the perceived reward power difference scale discussed above.

<sup>&</sup>lt;sup>5</sup> Additional data for the sales representative version of the scenario was collected but lost in the process of data entry. The unequal distribution of participants between the two roles is not important for the purpose of these tests, though, because the goal is to test all participants' perception of the manipulation of high versus low reward power difference.

Table 7

Reliabilities and Variance Explained by First Principal Components for PRPD Subscales in Pilot Study 2 (N = 77): Long Form

	ex	on of variance applained component	Cronb	Cronbach's alpha		
Resource	Items about managers	Items about sales representatives	Items about managers	Items about sales representatives	# of items <sup>6</sup>	
Love	69.97%	69.57%	.85	.85	4	
Service	81.42%	59.12%	.87	.65	3	
Goods	62.08%	77.73%	.79	.90	4	
Money	76.30%	79.10%	.89	.91	4	
Information	64.86%	54.37%	.71	.57	3	
Status	81.89%	78.46%	.93	.91	4	

difference condition was significantly different from the perceived reward-power difference in the low reward-power difference condition, one scale measuring perceived reward-power difference was needed. As discussed above, reward power was defined as the perceived ability of a person to dispense love, status, money, goods, services, or information valued by another person. Therefore, perceived reward power is the sum of all resources a person is perceived to have. Perceived reward-power difference is the difference between the sum of all resources one party is perceived to have and the sum of all resources the other party is perceived to have. Therefore, the scale measuring

<sup>&</sup>lt;sup>6</sup> The number of items for each subscale listed in this column was used once in its formulation about managers and once in its formulation about sales representatives.

perceived reward-power difference was created as follows:

The transformed items for each resource subscale were summed to create one subscale score. As the six subscale scores together were used as measure of perceived reward power, reliability analyses were conducted for the manager and sales representative set of six subscales. The six resource subscales for items about managers had a Cronbach's alpha of .93. Subscales for items about sales representatives had a Cronbach's alpha of .91. These results indicate that the measure of perceived reward power using the six subscales was highly reliable. All six subscales were summed for managers and for sales representatives separately, and the resulting sales representative scale scores subtracted from the manager scale scores to create one scale of perceived reward-power difference (PRPD).

A t test comparing PRPD in the high reward-power difference condition (M = 87.09, SD = 73.74) with PRPD in the low reward-power difference condition (M = 60.11, SD = 62.36) was not significant, t(72) = -1.70, p = .09 (2 tailed). As discussed above, the long version of the PRPD scale was less reliable than measuring the difference in perceived reward power with the short version of the scale. Therefore, the short version of the scale should be a better tool to evaluate whether or not perceived reward-power difference was successfully manipulated. Result for the short PRPD scale are reported next.

As reported above for the short PRPD scale, values above 400 were also winsorized to avoid undue influence of outliers and items were transformed to the power of 5/12 to help meet the normality assumption for analyses to follow (see Appendix N for details of data preparation including skewness and kurtosis values of the original data as

well as skewness and kurtosis values after winsorizing and transforming). Component structure and reliabilities for the PRPD scale are reported above (see Table 3). Eight questionnaires were excluded from analysis because the respondents did not seem to answer the questions appropriately (e.g., all answers 100 or 1, 2, 3, 4, 5, 4, 3, 2, 1).

To test whether PRPD in the high reward-power difference condition was significantly different from the low reward-power difference condition, one measure of PRPD had to be created. First, six perceived reward-power difference subscales were created by summing the transformed items measuring each of the resources. As the six subscale scores together were used as measure of perceived reward power, a reliability analysis was conducted. Cronbach's alpha for those six subscales, each subscale treated as an item, was .91. Then, all six subscale scores were summed to create one scale for perceived reward-power difference.

A t test comparing PRPD in the high reward-power difference condition (M = 180.19, SD = 22.36) with PRPD in the low reward-power difference condition (M = 165.30, SD = 17.50) was significant, t(67) = -3.07, p < .01.<sup>7</sup> The revised version of the negotiation scenario, therefore, was judged to successfully create the conditions needed and was chosen to be used in the final study.

Testing the perceived overall power difference scale for component structure and reliability. To measure perceived overall power difference (POPD), Nesler et al.'s (1999) measure of global social power was adapted by rewriting items to fit the specific context of the scenario, by adding one item, and then by including each item focusing once on managers and once on sales representatives (see Appendix T). To test the 10-item scale's reliability and component structure, scale items were included in the initial

<sup>&</sup>lt;sup>7</sup> Means reported here reflect that items were transformed and summed as reported in the text.

data collection described above (N = 416).

To avoid undue influence of outliers, all observations above 800 were winsorized. Data were then transformed to the power of 17/48 to help meet the normality assumption for analyses to follow (see Appendix U for details of data preparation including skewness and kurtosis values of the original data as well as skewness and kurtosis values after winsorizing and transforming).

Principal component analyses produced one component with an eigenvalue greater than 1.00 for both the 5-item set focusing on managers (56.37% of variance explained) and the 5-item set focusing on sales representatives (47.20% of variance explained). Cronbach's alpha for the manager items was .80, and for the sales representative items Cronbach's alpha was .71.

To create one scale of perceived overall power difference, the responses for sales representatives would have to be subtracted from the responses for managers. As discussed above, this procedure introduces unreliability, which may be avoided by measuring the difference in overall power directly. Therefore, a second version of the scale was created (see Appendix V) asking participants to evaluate managers and sales representatives in comparison to each other, using the sales representative as the standard.

To compare the long and short versions of the POPD scale, items were included in the same data collection used to test the revised PRPD scale (N = 77). To avoid undue influence of outliers, observations above 400 for both the long and short version of the scale were winsorized. Data for both scales were transformed to the power of  $\frac{1}{2}$  to help meet the normality assumption for analyses to follow (see Appendices W and X for details of data preparation including skewness and kurtosis values of the original data as

well as skewness and kurtosis values after winsorizing and transforming).

Principal component analyses for the long form of the scale for the manager items and sales representative items, respectively, produced one component with eigenvalue greater than 1.00 each for the manager items (61.16% of variance explained) and for the sales representative items (53.35% of variance explained). Cronbach's alpha for the manager items was .83, and for the sales representative items it was .78. The analyses showed that one item (i.e., "The manager [sales representative] can influence how the sales representative [manager] evaluates the work of others in his/her company") did not load well with the others and the item was dropped. Principal component analyses without that item produced one component with an eigenvalue greater than 1.00 for both the manager items (71.45% of variance explained) and the sales representative items (60.30% of variance explained). Cronbach's alpha for the manager items was .87, and it was .78 for the sales representative items.

For the short version of the POPD scale, principal component analyses of the four remaining items produced one component with an eigenvalue greater than 1.00, explaining 61.06% of the variance. Cronbach's alpha was .78. Comparing the short version of the POPD scale with the long version, the short version was less reliable than the manager version of the long scale and the first principal component explained less variance than the first principal component of the manager version. However, the short version was as reliable and the first principal component explained more variance than the sales representative version of the long scale. Considering the advantage of having fewer items for participants to respond to in the data collection, the short version of the POPD scale was chosen to be included in the final study.

# **Main Study**

Based on the results of the pilot studies discussed above, scales measuring power distance, perceived reward-power difference (PRPD), and perceived overall power difference (POPD) were selected, and a negotiation scenario was developed with manipulations creating a high and a low resource difference manager and a high and low resource difference sales representative. The purpose of the main study was to test the model proposed in Chapter 2.

Participants. Participants were students at the University of Maryland who received extra credit for their participation. Data were collected from 147 complete dyads (i.e., 294 participants). Additional data for 15 dyads had to be discarded either because of procedural mistakes (e.g., mixing conditions), technical difficulties (e.g., recording did not work), or because dyads were incomplete. Among the dyads, 76 were in the low resource difference condition and 71 in the high resource difference condition. Of the participants, 168 were female. The data set included 111 freshmen, 55 sophomores, 67 juniors, and 58 seniors, and 2 identified as *other* or had missing data. Thirty-seven participants identified as having ancestry in an African country, 34 in an Asian country, 188 in a European country (including Russia), 15 in Central or South America (plus Mexico), 11 in the Middle East (including Iran), five in other locations (including Haiti, Jamaica, and Native Americans from the U.S.), and data for 4 respondents were missing.<sup>8</sup>

Participants' ages ranged from 18 to 26 with a mean of 19.81. The median age was 20 for participants in the manager roles and 19 for participants in the sales

<sup>&</sup>lt;sup>8</sup> In the questionnaire, participants were not given categories to choose from for their ethnic background but were free to write out their affiliation however precisely or generally they chose. As a result, participants' responses did not fit the usual (census) categories. Responses were summarized here focusing on ancestry because this schema seemed most consistently applicable to participants' responses.

representative roles.

**Procedure.** Participants signed up online for a one-hour timeslot. Upon arrival, each participant was checked-in individually and first read, signed, and returned a consent form. Each person then received the study materials and explanations of the overall procedure, purpose of the study, and how to use magnitude scales. Participants were assigned to dyads based on order of arrival, and each dyad was randomly assigned to either the high or low resource difference condition. The assignment of participants to conditions happened before their arrival by preparing questionnaires and other material in the order given through random assignment. Random assignment was achieved using a random integer generator online (Haahr, 1998).

As the cover page for all participant packages looked the same, those conducting the study were blind to the condition participants were in. Researchers conducting the study were the author of this dissertation as well as five undergraduate students at the University of Maryland who were taking independent study courses to gain research experience. Led by the author of this dissertation, all researchers participated in training to ensure consistent delivery of explanations to participants and of other aspects of the experimental procedure. In the course of this training, communications with participants for all stages of the experiment (check-in, explanation of material, placement in the negotiation room, and check-out) were discussed. Reasons for their content and the need for consistency were explained and researchers took turns role-playing the experimental situation until all were confident that they could deliver messages as instructed.

Within each dyad, participants were randomly assigned to either the manager or sales representative role. Participants completed the measure of power distance (see

Appendix K), read the negotiation scenario (see Appendices O-R), and completed measures of perceived reward-power difference (see Appendix M) and perceived overall power difference (see Appendix V). Participants prepared for their negotiation based on the scenario with the help of a preparation sheet asking them to set specific goals for each of the issues discussed in the scenario (see Appendices Y and Z). Members of the same dyad completed their preparation in separate rooms adjacent to the Department of Communication media center where the negotiation interactions took place. Participants were given as much time to prepare as they needed. Once both members of a dyad finished their preparation, they were lead into a room set up as an office, with a large comfortable chair for the manager, a desk with a gold-colored name plate for the manager, and a more modest chair for the sales representative. The manager was always brought into his or her office first. This procedure and set-up were chosen to help participants step into their roles. In addition, they were encouraged through oral instructions by the investigators to play their roles as realistically as possible. The negotiation room was equipped with a one-way mirror, cameras, and microphones, which allowed for the audio and video recording of each negotiation.

Once the participant in the sales representative role entered the negotiation room, most participants immediately stepped into their roles and greeted each other as Mr./Ms. Mueller (the manager) and Mr./Ms. Johnson (the sales representative). Usually the participant in the manager role asked the participant in the sales representative role to take a seat and explain why he or she requested the meeting. The sales representative then started to lay out his or her concerns to which the manager responded, getting the give-and-take of the negotiation started. Some participants had more difficulty stepping into

their roles. These participants tended to sit down first and then ask the other participant what they were supposed to do. If the other participant responded with an explanation, the dyad would start negotiating after that. In rare cases, both members of a dyad were unsure what to do. In those cases, they went back to reading the instructions first and then began the negotiation with a delay. Among participants who did not immediately step into their roles, some also looked around to see where the cameras were. Although they had been told before that they would be recorded, seeing the actual cameras seemed to induce them to take the experiment seriously and complete their negotiations based on the instructions given. Negotiations took between seven and 45 minutes, with most negotiations taking around 15 minutes. At 45 minutes, negotiations were cut off by the researchers.

After the negotiation, participants were usually led back outside the negotiation room to make room for the next dyad waiting to complete its negotiation. They were assigned space to sit together, reported the outcome of their negotiation in their own words on a sheet provided to them, and answered demographic questions. They were then thanked for their participation, and they left the room.

Incomplete dyads or those involving procedural mistakes or technical problems (see above) were sorted out before data analysis. The removal of these dyads resulted in a usable sample of 147 dyads.

**Coding.** A coding scheme (see Appendix AA) was developed based on Foa et al.'s (1993) resource typology and on Kim, Pinkley, and Fragale's (2005) differentiation

<sup>&</sup>lt;sup>9</sup> At this point, participants also completed a four item measure of satisfaction with the outcome (Campbell, Graham, Jolibert, & Meissner, 1988) as well as a 19-item face concern scale (Ting-Toomey & Oetzel, 2001). Neither of these measures was used in the current study.

between power-use and power-change tactics. In the context of this study, power-use tactics (as opposed to power-change tactics discussed below) are those that make use of a party's resources to increase or decrease the difference in power between oneself and the other party in one's own favor. This change can be achieved by either increasing one's own or decreasing the other's resource power. For example, a power-use tactic for money as a resource could either focus on the reward power side ("If you increase sales by 20%, I can promise you a bonus at the end of the year") or the coercive power side ("If you do not want to support the company by increasing sales, I don't think you will be with us much longer"). Power-change tactics, or balancing tactics, also make use of resources; however, they are aimed at improving the power balance in one's favor by either increasing the other's or decreasing one's own resource power in specific areas to further goal achievement in other areas. For example, a manager may volunteer a lack of money as a resource to get subordinates to comply with an increased workload ("I wish we could just hire more people, but we have not been doing so well financially recently, so we need all employees to work more") or may offer praise to coax subordinates into compliance ("You are our best sales representative; we really value your outstanding contributions to this company, so we think you are perfect to lead other employees by example and take on these new responsibilities").

Four pilot negotiations were conducted using research assistants as negotiators.

The research assistants did not know the coding scheme. The purpose of these pilot negotiations was to confirm that the tactics used fall into the categories proposed in the coding scheme. Although the tactics used did not represent all categories proposed by the coding scheme in those pilot negotiations, no tactic was used that did not fall into one of

the proposed categories, and between manager and subordinate roles, all six resources were used as well as all four directions of power use and balancing.

After data collection, recordings were coded by two independent coders based on the coding scheme described above and a hand-out with coding instructions (see Appendix AA). Odders first coded two negotiations together, talked through differences in evaluation, and agreed on decision rules. Each act of using a resource to further goal achievement was coded as a separate power tactic (i.e., if the same sentence listed more than one different resource in favor of a party's point, each of the resources was coded separately). However, resource use was only coded as a tactic if it was connected directly to a specific goal. For example, consider the following statement:

I love working for this company (love, up self) and appreciate that you care about our well-being (love, up other). Therefore, I'd like to support the company by working 10 more hours per week (service, up self).

This statement was not coded as an act because love and service resources are offered but are not used to further the party's goals. However, consider the following statement:

I love working for this company [love; up self] and appreciate that you care about our well-being [love, up other]. Therefore, I would like to support the company [service, up self], but what you are asking is too much. My schedule is already full (service, up self) and the only reason I could add anything to it would be if you would be willing to approve my vacation in the fall.

This statement would be coded as four acts as the subordinate is offering love and some service under the condition that the service that is expected is not too much and that

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<sup>&</sup>lt;sup>10</sup> Apart from the tactics directly relevant to testing the model in this study, coders also coded *rights tactics*, defined as the use of an "independent standard with perceived legitimacy or fairness" (Ury et al., 1988, p. 7) to further goal achievement.

goods (the vacation) are received in return (see Appendices AB and AC for complete coding of two negotiations, one for the low reward-power difference and one for the high reward-power difference condition).

Coders separately coded the same 10 negotiation interactions. Guetzkow's U was calculated as a measure of unitizing reliability and showed 8% disagreement between coders in how they coded acts of resource use in these 10 negotiations. Differences were discussed and resolved, and a second set of 11 negotiation interactions were coded separately. Guetzkow's U was calculated again and showed 2% disagreement between coders about the number of power tactics used per negotiator. To test intercoder reliability, Cohen's kappa was calculated for a subset of these negotiations about the agreement on coding of tactics into specific resource categories. The subset included 34 uses of power tactics; Cohen's kappa was .93. Overall, coders had more difficulty agreeing on the exact count of tactics than on the type of resource and power use versus power balancing coding. However, a Guetzkow's U of 2% is considered low (Folger, Hewes, & Poole, 1984) and a Cohen's kappa of .93 is considered very good (Altman, 1990). Therefore, the remaining data set was split between coders to be coded separately. Once coding was completed, the number of power tactics (both power use and power balancing) by each negotiator was calculated and used in the test of hypotheses and model as number of power tactics used by the higher power person (i.e., the manager) and number of power tactics used by the lower power person (i.e., the subordinate).

### **Summary of Chapter 3**

The pilot studies reported in this chapter served to create the material needed to test the model proposed in Chapter 2. First, power distance scales were tested and an

adapted version of Spencer-Oatey's (1997) measure of power distance was chosen for this study (see Appendix D). Second, negotiation scenarios were developed that were successful at manipulating participants' perception of reward-power difference (see Appendices O–R). Third, a measure of perceived reward-power difference was developed and tested and its revised short form chosen for the main study (see Appendix M). Fourth, a measure of perceived overall power difference was adapted from Nesler et al. (1999), tested, and its short version chosen to be used for the main study (see Appendix V). Finally, data for the main study was collected using the measures and scenarios discussed above, and negotiation interactions were recorded and coded (see Appendix AA for the coding scheme). With all data gathered to test the model proposed in Chapter 2, Chapter 4 presents the results of the model test and other findings.

### **Chapter 4: Results**

This chapter first discusses measurement and data preparation for the variables included in the model presented in Chapter 2. Then the model is tested and hypotheses and overall model fit are discussed. Finally, some additional exploration of the use of power tactics is included.

# **Measurement and Data Preparation**

The variables power distance, perceived reward-power difference, and perceived overall power difference were measured for both superiors and subordinates as described in Chapter 3. As discussed in Chapter 3, all data were winsorized (Tukey, 1962) to counteract the influence of extreme observations (see Appendix AD for details of data preparation including skewness and kurtosis values of the original data as well as skewness and kurtosis values after winsorizing and transforming). The same cutoff was always chosen for all items in the same scale (see Chapter 3).

Data were then transformed to help meet the normality assumption for analyses to follow (see Appendix AD). All items were initially positively skewed. While correcting skewness, some items increased in kurtosis. Whenever that was the case, analyses like principal component analyses and reliability tests were conducted for several transformations. As the results did not differ significantly, the transformation with the smallest possible kurtosis for a scale-level skewness smaller than  $\pm 1$  was chosen for further analyses.

For the scale measuring power distance, subtracting the responses concerning subordinates from the responses concerning managers (see Chapter 3) resulted in some negative values. The distribution of power distance items required, for a single-bend

transformation, an exponent < 1.00. This transformation is undefined for negative values; therefore a constant of 120 was added to all items. Items were then transformed as described above.

Principal component analyses and reliability tests were conducted for each scale

as well as for the six subscales for perceived reward power distance. Each principal component analysis produced only one component with an eigenvalue larger than 1.00. The variance explained by the first principal components of the six scales measuring the concepts to be included in the model was between 61.32% and 85.13% (see Table 8). Cronbach's alpha for those scales was between .84 and .95. Appendix AE includes a correlation matrix for the six scales plus the two coded variables used in the main study. Table 8

Reliabilities and Variance Explained by First Principal Components for All Scales Used in the Main Study

	Proportion of variance explained		
Scale	by 1 <sup>st</sup> component	Cronbach's alpha	# of items
MPD	69.95%	.91	6
SPD	69.22%	.91	6
MPRPD	66.73%	.87	22
SPRPD	85.13%	.95	22
MPOPD	61.42%	.84	5
SPOPD	75.24%	.92	5

*Note*. M: manager; S: subordinate; PD: power distance; PRPD: perceived reward-power difference; POPD: perceived overall power difference.

The variance explained by the first principal components of the six subscales of perceived reward-power difference was between 76.38% and 86.89% for subordinates and between 52.15% and 85.15% for managers (see Table 9). Cronbach's alpha for those subscales was between .84 and .94 for subordinates and between .52 and .94 for managers, making the subscale measuring service in the manager sample the weakest in the set. However, as this subscale was only one of six subscales entering into the measurement of perceived reward-power difference and the reliability for the six subscales together was good, the manager service scale was accepted as is. As discussed in Chapter 3, scale scores were constructed by summing all items in the scale for power distance and perceived overall power difference and by summing scores on all six subscales for perceived reward-power difference.

# Scenario Realism, Relevance, and Negotiation Experience Among Participants

To measure how realistic the scenario was to participants, how relevant the situation seemed to their lives, and how much experience they had had with the situation described in the scenario, participants completed the same 3-item scales described in Chapter 3. Principal component analyses produced only one component with an eigenvalue greater than 1.00 for each scale for both participants in the manager and sales representative roles. The first component of the scale measuring scenario realism explained 99.79% of the variance in the data set for managers with a Cronbach's alpha of .99, and 96.53% for sales representatives with a Cronbach's alpha of .98. The first component of the scale measuring personal relevance explained 88.89% of the variance in the data set for managers with a Cronbach's alpha of .94, and 85.41% for sales representatives with a Cronbach's alpha of .91. The first component of the scale

Table 9

Explained Variance and Reliabilities for PRPD Subscales in the Main Study

Proportion of variance						
explained						
	by 1 <sup>st</sup> c	component	Cronba	Cronbach's alpha		
Resource	Manager	Subordinate	Manager	Subordinate	items	
Love	67.02%	77.03%	.83	.89	4	
Service	52.15%	76.38%	.52	.84	3	
Goods	63.07%	82.51%	.80	.93	4	
Money	85.15%	85.35%	.94	.94	4	
Information	65.44%	81.16%	.73	.88	3	
Status	61.69%	86.89%	.79	.93	4	

measuring negotiator experience explained 79.86% of the variance in the data set for managers with a Cronbach's alpha of .74 and 85.41% for sales representatives with a Cronbach's alpha of .73.

To evaluate participants' mean responses to the three scales, scale scores were computed by summing all winsorized but untransformed items in the scale and dividing the sum by the number of items. Based on questionnaire instructions, *moderate* agreement with items about scenario realism, relevance, and negotiator experience was set to 100. Therefore, responses above 100 mean higher than moderate agreement with items whereas responses below 100 mean less than moderate agreement with items.

Participants' mean response to the items about scenario realism was 155.43 for managers (SD = 124.73) and 143.02 for sales representatives (SD = 87.51). For the items about personal relevance, participants' mean response was 116.81 for managers (SD = 87.51).

98.13) and 120.50 for sales representatives (SD = 77.82). For items about experience with similar negotiation situations, participants' mean response was 60.64 for managers (SD = 33.43) and 67.16 for sales representatives (SD = 49.12). These results are comparable to the results of the pilot test and indicate, again, that participants perceived the scenario as realistic. Although they did not feel that they had much experience with the situation, they felt it likely that they would find themselves in a similar situation sometime in their lives and did not have difficulty imagining themselves in the situation.

#### **Model Test**

The model proposed in Chapter 2 was analyzed using maximum likelihood estimates in LISREL 8.80 (see Appendix AF for the syntax). Each scale was entered as a single indicator for its latent variable. Including all measured items as indicators in the model and testing the model in a two-step process–first the measurement model, then the theoretical model including all indicators—is reasonable (Anderson & Gerbing, 1988). Estimating paths for the measurement model and theoretical model simultaneously requires a sample size larger than used for this study (Hancock, 2006). Therefore, an adapted two-step process was used. Each scale was evaluated first using principal component analysis and reliability analysis. Measurement model parameters were estimated implicitly by using the sum of items to create scale scores. The theoretical model was then estimated using the scale scores created in step one.

Using this two-step process, relationships between latent variables are attenuated in comparison to a model including all indicators. To disattenuate the relationship, error variances for power distance scales (manager and subordinate) as well as perceived reward-power difference for managers, perceived overall power difference for managers,

and number of power tactics used by managers and subordinates were set to  $var(\varepsilon_i) = (1 - \alpha)*var(y_i)$ . In this formula,  $\varepsilon_i$  is the error of measurement of  $y_i$ ,  $\alpha$  is the reliability of the scale  $(y_i)$  achieved in the pilot study (except for number of power tactics), and  $var(y_i)$  is the variance of the scale in the main study (Bollen, 1989). For number of power tactics, the  $\alpha$  from the main study was used.

For perceived overall power difference and perceived reward-power difference for subordinates, disattenuating led to unrealistic estimates for the equation's explained variance. Therefore, the error variance was set to zero for the first and to a smaller number (i.e., 15.73 instead of 57.73) for the latter. The errors in the equations for the dependent variables ( $\zeta$ s) were allowed to covary where indicated in the path model (see Figure 2, including the note on why some  $\zeta$ s were allowed to covary). Exogenous variables were allowed to covary. All paths except for those shown in the path model were fixed to zero.

With 25 parameters to be estimated and 45 nonredundant covariances available to estimate parameters, the model is overidentified according to the counting rule, with 20 degrees of freedom. Following Hoyle and Panter (1995),  $\chi^2$ , the non-normed fit index (*NNFI*), the comparative fit index (*CFI*), as well as the root mean-square error of approximation (*RMSEA*) are used for model evaluation. The model shows borderline acceptable fit overall,  $\chi^2(20, N = 147) = 41.08$ , p < .01; *NNFI* = .85; *CFI* = .92; and *RMSEA* = .09.

**Model revisions.** Covariances between  $\zeta$ s representing the same scale completed by participants in the manager and subordinate role can be dropped if not significant.

<sup>&</sup>lt;sup>11</sup> For more information about which equation errors were allowed to covary, see the section on model revisions below.

<sup>&</sup>lt;sup>12</sup> The counting rule is a necessary but not sufficient condition for identification.

Covariances between the  $\zeta$ s of perceived reward power distance (z = -0.95) and perceived overall power distance (z = -0.13) did not covary significantly. Dropping them did not result in significant changes in model fit or significance of paths. The covariance between the  $\zeta$ s of managers' and subordinates number of power tactics used was significant (z = 4.29), and the covariance was, therefore, retained. The slightly revised model shows a slightly improved but still borderline acceptable fit with  $\chi^2(22, N = 147) = 42.50, p < .01$ ; NNFI = .87; CFI = .92; and RMSEA = .08.

Hypotheses testing. Although the model fit is acceptable overall, not all paths support the hypotheses proposed (see Figure 3 for the unstandardized results of the path model). Hypothesis 1 proposed that, for high- and low-power parties, an increase in the difference in available relevant resources between the two parties causes an increase in the perceived difference in reward power between the parties. This hypothesis is a test of the manipulation of participants into a high and low reward power condition. A t test comparing perceived reward-power difference for managers in the high reward-power difference condition (M = 325.00, SD = 51.32) with the low reward-power difference condition (M = 303.00, SD = 37.71) was significant, t(145) = -2.98, p < .01. The same test for subordinates (M = 141.81, SD = 24.10 for the high reward-power difference condition; M = 133.95, SD = 15.80 for the low reward-power difference condition) was also significant, t(145) = -2.36, p = .02, indicating that the manipulation was successful. In the model, the path from the manipulation of reward-power difference to the perceived reward-power difference for managers was significant, with  $\gamma = 14.31$  (z = 4.29). The

<sup>&</sup>lt;sup>13</sup> As discussed in Chapter 3, unless otherwise indicated, all statistical analyses used winsorized and transformed data.

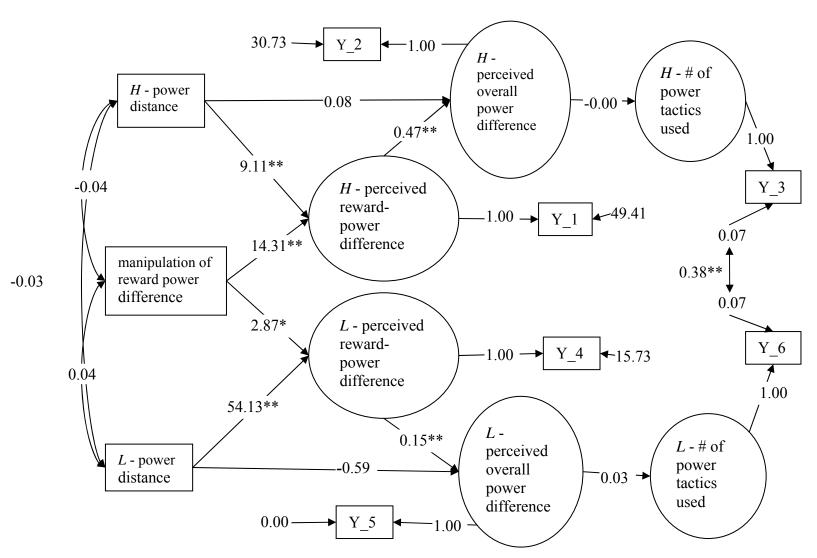


Figure 3. Model with unstandardized results.

same path for subordinates was significant as well, with  $\gamma = 2.87$  (z = 2.01), indicating that the manipulation was successful for both managers and subordinates and Hypothesis 1 was supported.

Hypothesis 2 proposed that for both high- and low-power parties, perceiving the difference in reward power to be high leads to also perceiving the difference in overall power to be high. Both paths related to this hypothesis were significant, with  $\beta = 0.47$  (z = 11.53) for managers and  $\beta = 0.15$  (z = 21.47) for subordinates. Hypothesis 2 was supported for both managers and subordinates in that their perception of the overall difference in power between themselves and the other party was influenced by their perception of the difference in reward power. If they perceived the difference in reward power to be high, they also perceived the difference in overall power to be high.

Hypothesis 3 proposed that for both high- and low-power parties, higher power distance leads to greater perceived overall power difference. The path related to this hypothesis for subordinates was not significant with  $\gamma = -0.59$  (z = -0.87), indicating that higher power distance in subordinates did not lead to a perception of higher overall power difference between themselves and their superiors. The path for high-power parties was not significant either ( $\gamma = 0.08$ , z = 0.12), indicating that for high-power parties, power distance also did not influence their perception of overall power difference. Hypothesis 3 was not supported.

Hypothesis 4 proposed that for high- and low-power parties, high power distance leads to a perception of higher difference in reward power. The paths related to this hypothesis were significant for both high-power parties ( $\gamma = 9.11$ , z = 6.86) and low-power parties ( $\gamma = 54.13$ , z = 7.61). Hypothesis 4 was supported, indicating that power

distance influences negotiators' perception and evaluation of resources for both negotiators higher and lower in an organizational hierarchy.

Finally, Hypothesis 5 proposed that for both high- and low-power parties, a decrease in perceived overall power difference leads to an increase in the number of power tactics used. The paths related to this hypothesis were not significant, neither for high-power parties ( $\beta = 0.00$ , z = 0.00) nor for low-power parties ( $\beta = 0.03$ , z = 0.89). Hypothesis 5 was not supported, indicating that the number of power tactics used is not predictable from negotiators' perception of overall power difference.

The  $R^2$  values for the dependent variables related to the high-power party are .49 for perception of reward-power difference, .75 for perception of overall power difference, and .01 for use of power tactics. The  $R^2$  values for the dependent variables related to the lower power party are .36 for perception of reward-power difference, .86 for perception of overall power difference, and .00 for use of power tactics. These results fit with the results obtained for individual hypotheses above: Hypotheses predicting influences on perception of reward-power difference (H1 and H4) were supported, hypotheses predicting perception of overall power difference (H2 and H3) were partially supported, but hypotheses predicting use of power tactics (H5) were not supported.

#### **Additional Analyses of Use of Power Tactics**

Additional analyses (i.e., analyses not covered by the model discussed above) were conducted to explore negotiators' use of power tactics. Foa et al.'s (1993) resource typology is a new basis for measuring resource-based power and coding power tactics. Therefore, the coded data were analyzed further to confirm that participants had used power tactics based on all types of resources. Furthermore, differences in types of

resources used across conditions and roles were explored.

Use of typology. As discussed in Chapter 3, power tactics were coded into a scheme defined by the six types of resources and four directions of power use (i.e., power-use tactics: upping oneself or downing the other; power balancing tactics: downing oneself or upping the other). An analysis of the frequency of use of the six resources in the manager and employee role showed that negotiators had, indeed, used all six resources. How much each resource was used showed some clear patterns. Among the tactics used by managers, 11.70% were service-focused power tactics, 25.21% were goods-focused power tactics, 26.06% were money-focused power tactics, 6.88% were information-focused power tactics, 21.95% were status-focused power tactics, and 8.20% were love-focused power tactics. The mean use of tactics for managers was highest for money (M = 1.47, Mdn = 1.00), followed by goods (M = 1.42, Mdn = 1.00), and status (M = 1.24, Mdn = 1.00), and lower for service (M = 0.66, Mdn = 0.00), love (M = 0.46, Mdn = 0.00), and information (M = 0.39, Mdn = 0.00).

Among the tactics used by employees, 69.51% were service-focused power tactics, 5.06% were goods-focused power tactics, 2.53% were money-focused power tactics, 5.53% were information-focused power tactics, 13.43% were status-focused power tactics, and 3.95% were love-focused power tactics. The mean use of tactics for employees was highest for service (M = 2.99, Mdn = 3.00), and much lower for goods (M = 0.22, Mdn = 0.00), money (M = 0.11, Mdn = 0.00), information (M = 0.24, Mdn = 0.00), status (M = 0.58, Mdn = 0.00) and love (M = 0.17, Mdn = 0.00). Managers used more power tactics overall than employees (829 vs. 633). These results also show that, although managers used money-focused, goods-focused, and status-focused power tactics

more often, they used a larger variety of tactics overall. Employees, on the other hand, concentrated heavily on using service-focused power tactics.

An analysis of the frequency of use of the four directions of power tactics showed that negotiators also had used all four directions, albeit not equally. Among power tactics used by managers, 64.66% focused on upping themselves, 8.81% focused on putting themselves down, 18.94% focused on upping the other party, and 7.60% focused on putting the other party down. The mean use of power tactics among managers was highest for upping oneself (M = 3.73, Mdn = 3.00), followed by upping the other (M =1.07, Mdn = 0.00), with tactics focusing on putting oneself down (M = 0.50, Mdn = 0.00) and putting the other down (M = 0.43, Mdn = 0.00) being used less. Among power tactics used by employees, 84.99% focused on upping themselves, 8.37% focused on putting themselves down, 2.21% focused on upping the other, and 4.11% focused on putting the other party down. The mean use of power tactics among employees was also highest for upping oneself (M = 3.84, Mdn = 3.00), with tactics focusing on upping the other (M =0.10, Mdn = 0.00), putting oneself down (M = 0.36, Mdn = 0.00), and putting the other down (M = 0.18, Mdn = 0.00) being used less. These results show that upping oneself was by far the most frequently used power tactic.

Comparing resource use of managers and employees. Paired samples t tests were conducted to compare the use of each resource between managers and employees (see Table 10)<sup>14</sup>. The difference in resource use between managers and employees was significant for all six resources, with service-focused power tactics being used more by

<sup>&</sup>lt;sup>14</sup> As discussed in Chapter 3, unless otherwise indicated, all statistical analyses used winsorized and transformed data.

Table 10

Paired Samples t Tests Comparing Managers' and Sales Representatives' Use of Resource-Based Power Tactics in the Main Study

	Means	SDs			p
Pair	(Mgr; SR)	(Mgr; SR)	df	t	(2 tailed)
Love	0.46; 0.17	1.03; 0.55	146	3.12	< .01
Service	0.66; 2.99	1.10; 2.14	146	-14.28	< .01
Goods	1.42; 0.22	1.34; 0.43	146	10.62	< .01
Money	1.47; 0.11	1.67; 0.41	146	9.73	< .01
Information	0.39; 0.24	0.74; 0.54	146	2.03	.04
Status	1.24; 0.58	1.71; 1.21	146	4.61	< .01

employees and goods, money, status, love, and information resource based power tactics being used more by managers.

Comparing resource use across conditions. Next, differences in use of power tactics between the high reward-power difference and low reward-power difference condition were tested. For subordinates, the difference in the number of power tactics used was significant, t(145) = 2.42, p = .02, with M = 2.06 and SD = 0.86 in the low reward-power difference condition and M = 1.75 and SD = 0.76 in the high reward-power difference condition. This result indicates that although perceived overall power difference did not predict the behavior of the low-power negotiators, low-power negotiators still behaved according to the overall expectation that less difference in reward power between the negotiators leads to an increase in use of power tactics.

For managers, the difference in the number of power tactics used between the high and low reward-power difference condition was not significant, t(145) = 1.51, p = 0.13. However, the means were in the expected direction (M = 1.91, SD = 0.86 in the low reward-power difference condition and M = 1.71, SD = 0.69 in the high reward-power difference condition), meaning that managers did use more power tactics if they perceived the resource distribution as more even than if they perceived themselves to have a lot more resources than their subordinate, although this difference was not significant.

Comparing types of resources used across conditions. The model tested above includes the number of resource-based power tactics negotiators used overall. However, negotiators may also adapt their use of the six different types of resource-based power tactics differently depending on the condition. Therefore, *t* tests were conducted to compare use of all six types of resource-based power tactics across conditions for managers and employees.

For managers, no significant difference was found between conditions for their use of service, goods, money, and information-focused power tactics. However, managers were significantly more likely to use status-focused and love-focused power tactics in the low reward-power difference condition than in the high reward-power difference condition (see Table 11). For employees, no significant difference was found for the use of goods, information, and money-focused power tactics. However, employees were significantly more likely to use service-focused power tactics in the low reward-power difference condition than in the high reward-power difference condition. Employees also used more status-focused and love-focused power tactics in the low

Table 11

Comparing the Use of Resource-Based Power Tactics Across Conditions in the Main
Study

	Means	SDs			p
Resource	(High; Low)	(High; Low)	df	t	(2 tailed)
Manager: Status	0.75; 1.70	1.24; 1.95	145	3.51	<.01
Manager: Love	0.21; 0.70	0.63; 1.26	145	2.94	< .01
Sales Representative: Service	2.62; 3.34	2.03; 2.19	145	2.07	.04
Sales Representative: Status	0.42; 0.72	0.86; 1.45	145	1.52	.13
Sales Representative: Love	0.10; 0.24	0.45; 0.63	145	1.52	.13

*Note.* Values for the high resource-power-difference condition are presented first. The labels *high* and *low* refer to the high resource-power-difference condition and the low resource-power-difference condition, respectively.

reward-power difference condition, but the difference was not significant for those two resources (see Table 11).

### Comparing use of power-balancing and power-use tactics across conditions.

Apart from the six types of resources power tactics can focus on, the coding scheme also differentiated between power-use tactics (i.e., upping oneself or putting the other party down) and power-balancing tactics (i.e., upping the other party or putting oneself down). In addition, negotiations were coded for the use of tactics focusing on rights (see Chapter 2). Negotiators with a lot of resources are expected to focus more on power-use tactics

whereas negotiators with fewer resources are expected to use more power-balancing tactics and rights-focused tactics.

Results of t tests comparing the use of power tactics in the high reward-power difference condition with the low reward-power difference condition showed that managers were more likely to use power-balancing tactics and rights-focused tactics in addition to power-use tactics when the difference in resource power was low (M = 2.25, SD = 3.68) than when it was high (M = 0.82, SD = 1.13). This difference was significant, t(145) = 3.15, p < .01. Separate t tests for the two types of power-use tactics were conducted and showed that power tactics focusing on upping the other differed most significantly [t(145) = 4.11, p < .01] between the low reward-power difference condition (M = 1.63, SD = 2.23) and the high reward-power difference condition (M = 0.46, SD = 0.89). Use of power tactics focusing on putting oneself down also differed across conditions (M = 0.64, SD = 1.30 for the low reward-power difference condition; M = 0.34, SD = 0.84 for the high reward-power difference condition), but this difference was only significant at the p = .10 level, t(145) = 1.68. The use of power tactics focusing on upping oneself and putting the other down did not differ across conditions for managers.

For subordinates, no significant difference between conditions was found in regard to the number of power-use and power-balancing tactics used overall, t(145) = 0.73, p = .46. Separate analyses of the four directions of power tactics, though, showed that subordinates were significantly [t(145) = 2.83, p < .1] more likely to use power tactics to up themselves in the low reward-power difference condition (M = 4.50, SD = 3.44) than in the high reward-power difference condition (M = 3.13, SD = 2.28).

Keeping in mind that the overall number of power tactics used did not differ

between conditions for managers, these findings about the types of power tactics managers used indicate that managers react to differences in the power relationship more by changing their negotiation style (i.e., the kind of power tactics that they use) than by changing the number of power tactics they use. Subordinates, on the other hand, use the same type of power tactics but increase the number of power tactics they use if the difference in power is small.

**Reciprocity.** Within the variable set included in the model, the strongest relationship of number of power tactics used by one negotiator is with the number of power tactics used by the other negotiator, r = .40, p < .01. This relationship suggests that the best predictor of one negotiator's behavior may be the other negotiator's behavior.

However, this reciprocity did not apply to all types of resource-based power tactics. Managers' and employees' use of service-focused and status-focused power tactics was significantly correlated, r = .40, p < .01, for service-focused power tactics, and r = .33, p < .01 for status-focused power tactics. Managers' and employees' use of goods-focused, money-focused, information-focused, and love-focused power tactics were not significantly correlated.

## **Summary of Chapter 4**

This chapter presented the results of the main study, including the test of the proposed model and hypotheses. The chapter also provided data analyses to establish the usefulness of using the proposed typology of resources and four directions of influence as basis for measuring resource-based power and coding power tactics. The model achieved borderline acceptable fit. Hypotheses 1, 2, and 4 (see Chapter 2) were supported, whereas Hypotheses 3 and 5 were not supported.

In regard to the use of power tactics, participants were found to use tactics focusing on all six resources and four directions of influence. Significant differences were found in what tactics were used depending on role and condition. These findings support the usefulness of the six resources as basis for measuring resource-based power and the usefulness of the six resources and four directions of influence as basis for coding power tactics.

### **Chapter 5: Discussion**

The model tested in this dissertation proposed that negotiators' power distance and their perception of the resource distribution predict their perception of the power relationship between parties and their use of power tactics. As discussed in Chapter 4, the model was tested using data collected from 147 negotiation interactions, and the results showed an acceptable fit of the model, lending some support to the theory that was proposed. However, not all hypotheses were supported.

This chapter first discusses how the findings address the questions and hypotheses posed in the first two chapters as well as how they relate to the theory that was discussed. Next, limitations of the study are discussed, and directions for future research are suggested.

### Resources, Power, and Negotiation Behavior

As discussed in Chapters 1 and 2, negotiation research tends to focus on either contextual or situational variables as predictors of the power relationship between parties. The model of the negotiation process proposed in this dissertation represents a theory that predicts negotiators' perception of the power relationship between the parties and their behavior in the negotiation from power distance (a contextual variable) and resource distribution (a situational variable). Specifically, power distance was predicted to function like diffuse status characteristics in that it influences both negotiators' perception of the resources at their disposal and their perception of the overall distribution of power between the parties. The model was generally supported. However, the relationships between the model's variables need to be discussed to create a clearer picture of the process at work.

Six resources and four directions of power tactics. In Chapters 2 and 3, Foa et al.'s (1993) typology of resources was introduced as the basis for measuring resource distribution, predicting power, and differentiating power tactics in negotiation. The typology was used as the foundation for developing manipulations, measurements, and the coding scheme. Results of the study were analyzed to check whether this use of the typology was appropriate, and findings were supportive. First, negotiators' perceptions of the resource distribution in the different conditions differed as predicted by Hypothesis 1. Scenarios assigned negotiators both to a position in the hierarchy and to a specific set of resources. Negotiators' perception of the difference in resources available to themselves and the other party (i.e., reward-power difference) differed significantly across conditions. This difference indicates that participants perceived the information about resource distribution contained in their role description and based their evaluation of the resource distribution on that information.

Second, this perception of the resource distribution influenced their perception of the overall power distribution between the parties (Hypothesis 2). For both high- and low-power parties, the perception of the resource distribution was a significant and strong predictor of negotiators' perception of the overall power difference between parties.

The same resource typology was combined with four types of power-use (two types) and power-balancing tactics (two types) to serve as a basis for coding negotiation behavior. The coding further supported the typology in that negotiators used all the six types of resources and used them differently depending on their role and level of power. For example, subordinates in general were most likely to use power-use tactics based on service-focused resources. Managers were more likely than subordinates to use tactics

focusing on goods, money and status.

Coding also supported the revised definition of power tactics as including not only contentious power tactics but as including all messages designed to further negotiators' goal achievement through the strategic use of available resources. Although managers used a larger variety of tactics than subordinates overall, both managers and subordinates used the same resources in four different ways: to show themselves as powerful owners of a valuable resource (called *upping themselves* in the coding scheme), to show up the other as lacking in a resource (called *putting the other down* in the coding scheme), to divert interest from a resource the other party wished for (by putting their own ability to provide that resource down; called *putting oneself down* in the coding scheme), or to increase interest in a plan the other party did not like (called *upping the* other in the coding scheme). Only the second one in this list fits the traditional definition of a contentious power tactic (Ury et al., 1988). Although both managers and subordinates used contentious tactics, such tactics were used least among the four types of power tactics overall. Contentious power tactics seemed to be used more often when the negotiation escalated into conflict. Overall, contentious power tactics made up only 6% of negotiators' resource use compared to 74% of power tactics focusing on upping oneself.

A theory of power processes in negotiation. The model proposed that negotiators' perception of the difference in reward power between themselves and the other party is based on the resources each party has available. Based on a comparison of means, both superiors and subordinates based their perception of differences in reward power significantly on the resources assigned to them in their experimental condition

(Hypothesis 1). Based on the more stringent test of the relationship provided by the structural equation model, this relationship was also significant for both managers and subordinates.

The model further proposed that negotiators' perception of the difference in reward power between themselves and the other party depends on their own power distance (Hypothesis 4). Results show that, for both superiors and subordinates, higher power distance resulted in greater difference in perceived resource distribution.

The model also proposed that negotiators' perception of the distribution of resources and their power distance predict their overall evaluation of the difference in power between themselves and the other party. For both negotiators in manager and subordinate roles, their perception of differences in resource distribution (i.e., perceived reward-power difference) was found to significantly influence their evaluation of the overall power relationship (Hypothesis 2). However, higher power distance did not cause the overall difference in power between parties to be perceived as larger (Hypothesis 3). Although the two variables are positively correlated, this relationship is due to the strength of the indirect relationship between power distance and perceived overall power difference through perceived reward-power difference.

These findings suggest that power distance influences negotiations mostly as a predictor of negotiators' evaluation of available resources. Although negotiators received the same information about resources available to them, those high in power distance perceived the difference in the resource distribution between high- and low-power parties as larger than negotiators low in power distance. This finding shows that power distance functions partly like a diffuse status characteristic. A diffuse status characteristic can lead

to negotiators being perceived from the start as either more or less powerful, or of higher or lower status, independently of situational variables (Eagly, 1983; Kolb, 1992). Diffuse status characteristics can also influence the later negotiation process by shaping perceptions and evaluations of the other party in a specific interaction (Burgoon et al., 1983; Carli et al., 1995; Rudman, 1998). Hypotheses 3 and 4 proposed that power distance has similar effects. Findings show that power distance does influence negotiations by setting the stage (i.e., shaping the perception of each negotiators' resources; Hypothesis 4) but not by directly influencing the perception of the overall power distribution (Hypothesis 3). The results overall show how the formation of negotiators' perception of the power relationship between parties needs to be understood based on both power distance and resource distribution.

Predicting the use of power tactics. The model tested here predicted negotiators' behavior based on their assignment to different reward power conditions and their subsequent perception of the difference in resources and power between themselves and the other party. Although the measured difference in perceived reward power and overall power did not predict use of power tactics (Hypothesis 5), negotiators' behavior differed between conditions. In the low reward-power difference condition (i.e., the condition in which subordinates were assigned more resources than subordinates in the high reward-power difference condition), subordinates used significantly more power tactics than in the high reward-power difference condition. This finding supports power distance reduction theory (Mulder et al., 1973): Negotiators in the subordinate position seemed to try harder to improve their power position when they were already in a better position (i.e., subordinates assigned more resources, creating less difference in resources to the

manager) than if the distance in power was larger (i.e., subordinates assigned fewer resources compared to a manager with a lot of resources).

The same was not the case for negotiators in manager roles. For managers, mean differences also indicated that managers used more power tactics in the low resource difference condition than in the high resource difference condition, but the difference was not significant. However, analyses of power tactics differentiated by the six resources they focused on and the four types of power tactics (i.e., power-use [that is, upping oneself and putting the other down vs. power-balancing [that is, upping the other or putting oneself down]) showed that negotiators in manager roles did adapt their behavior to conditions. Managers with fewer resources were significantly more likely to use statusbased and love-based power tactics as well as power-balancing tactics (i.e., upping the other or putting oneself down) than managers assigned more resources. As Emerson (1962) suggested, a power balance can be changed by changing the interest the other party has in a resource. Managers did just that by either trying to raise the subordinates' interest in complying with the managers' plans (e.g., through praise) or by volunteering factual information designed to lower the managers' own perceived ability to comply with the subordinates' plans (e.g., the company has financial difficulties and, therefore, cannot pay overtime).

Power-balancing tactics based on love and status resources—which managers with fewer resources tended to use— are closely related to ingratiation tactics such as other enhancement and opinion conformity (Jones & Wortman, 1973). Ingratiation tactics have been found to increase liking (Gordon, 1996). Blickle (2003) suggested that the increase in liking may lead to compliance gaining, either by creating good will in the target or by

activating reciprocity norms. If power-balancing tactics based on love and status resources also create liking, these tactics may be an efficient tool for managers lacking other resources to increase compliance in their subordinates.

Kim, Pinkley, and Fragale (2005) further suggested that parties perceiving themselves as not having enough power to use power-use tactics—here defined as upping oneself or putting the other down-will use power-change tactics-discussed above as balancing tactics—to balance the relationship. The findings here show that high-power parties (i.e., managers) who perceive a relative lack of power (i.e., through the assignment of fewer resources to support their authority in the low reward-power difference condition) are significantly more likely than low-power parties (i.e., subordinates) in either the high or low reward-power difference condition to turn to power-balancing tactics. This finding lends some support to power distance reduction theory (Mulder et al., 1973) because it seems that the high-power negotiators attempt to make up for their relative lack of more concrete resources (e.g., money, goods) through use of more symbolic resources (i.e., status, love; Foa et al., 1993). For example, managers in the high reward-power difference condition were most likely to offer their subordinates bonuses, raises, promotions, or vacations, whereas managers in the low reward-power difference condition were more likely to offer information, understanding, or praise. These results show that although the number of power tactics used across conditions did not change for negotiators in manager roles, their negotiation style did change. Managers' use of power tactics seemed to differ between high and low resource conditions more by the resources and directions of power (i.e., power-use versus powerbalancing) they chose as basis for their power tactics than by the number of tactics they

used.

Social comparison theory (Festinger, 1954) would seem to predict that pressure toward uniformity leads managers to use fewer power tactics if they saw themselves far above their subordinates in power. To the contrary, managers used more power-use tactics in the high than in the low resource difference condition but made up for that quantitative difference by using power-balancing tactics in the low resource difference condition. The overall number of power tactics used remained approximately the same. Therefore, this aspect of social comparison theory was not found to be supported in this study. People performing highly in a group of otherwise equals would probably lower their performance to fit in with the group, but this kind of behavior did not extend to the context of power differences in the established hierarchies studied here. An established hierarchy seems to protect those on its upper ranks from the pressure toward uniformity (Rijsman, 1974, 1983).

Social comparison theory also suggests that people do not compare themselves to others whom they consider too different from themselves. Managers and their subordinates may consider each other too different to use as comparison objects. However, in this study, when the difference in reward power between managers and subordinates was small (i.e., the low reward-power difference condition), both parties used power tactics to manage the power relationship between the parties. Subordinates attempted to close the power gap, and managers sought to keep the distance. This behavior seems to indicate that parties did use each other as comparison objects.

When the difference in reward power was high (i.e., the high reward-power difference condition), subordinates adjusted by using fewer power tactics, and managers

adjusted by using more power-use tactics. This behavior in the high reward-power difference condition could be considered compatible with social comparison theory's idea that parties too different from each other will not compare themselves to each other. If that were the case, the border between managers and subordinates using and not using each other as comparison objects seems to lie between the low and the high reward-power difference condition.

#### **Limitations and Directions for Future Research**

Accomplishing the goals of this study required not only a clear theoretical foundation for the proposed hypotheses but also the development of new measurement instruments, scenarios, and manipulations, as well as the choice of a research procedure and coding scheme. At each of these stages, decisions were made that have implications for the results. In this section, the main issues with these decisions are discussed together with proposals for future research.

Internal validity. A basic condition for testing hypotheses is the achievement of internal validity in the study, that is, to show that differences between conditions are caused by the treatment and not by extraneous variables such as the testing situation, the selection of participants, or events outside the boundaries of the laboratory (Campbell & Stanley, 1963). The experiment in this study did not suffer from any of the traditionally discussed challenges to internal validity. Manipulations were pretested and found to work in the pilot studies. In the main study, the difference in perception of reward-power difference differed significantly for participants in the two conditions and two roles, meaning that the manipulation was successful. However, pilot tests and the main study used very similar samples (i.e., undergraduate students at the University of Maryland

earning extra credit for a Communication course). The success of the manipulations with these participants may not transfer to different populations and contexts. Therefore, future research should look into further improving the manipulation by making it accessible to different kinds of populations from which samples may be drawn.

Darroch and Steiner (1970) suggested that the efficacy of simulations depends on whether participants have an implicit theory of the role they are asked to play. The less familiar they are with a role, the less likely they are to have an implicit theory. Although the college student sample used in this study may have some experience with the role of an employee, not all may have enough experience to create implicit theories for the specific roles they were asked to play in this study. The simulation could be strengthened in future research by training participants for their role or by using a different set of participants with more experience filling the roles they are asked to play (see below).

Choice of sample. The use of college students for negotiation research is controversial also because of issues of generalizability of results to other populations (Buelens, Van der Woestyne, Mestdagh, & Bouckenooghe, 2008; Gordon, Schmitt, & Schneider, 1984). Although the participants in this study were confident that they could imagine being in the situation assigned to them by the scenario, they also reported having very little experience with similar situations. Although the roles used in this study are positions many of them are likely to fill in the future, the question is how similar undergraduate students are to their own future selves. The two issues discussed above—the lower efficacy of the manipulation for participants in subordinate roles and the issues with generalizability to other populations for students samples—could be addressed in different ways. One possibility is to use a different sample, ideally one including people

with the same amount of experience for the specific roles they are asked to play (i.e., sales representatives for that role and managers for the manager role). Another possibility would be to train participants, which is discussed further below.

Role-Playing. This study also employed role-playing to simulate a negotiation interaction. This technique has been criticized for its lack of realism (Greenberg & Eskew, 1993). No matter how realistic the simulation is, participants are still likely to be aware that they are not "playing for keeps" (Greenberg & Eskew, p. 224). Some evidence of this issue was observed in the process of coding when some participants in subordinate roles were found to easily agree to ten or more extra hours of work per week or to achieving 50% increases in their sales volume. If they actually had to follow through with these promises, most of them would probably have been more careful about making such promises.

Nevertheless, role-playing may be the closest the researcher can get to realism short of sitting in on actual negotiations. Although using actual negotiations would be preferable as far as realism is concerned, companies would likely not be willing to have their negotiations be subject to manipulations that meet the conditions for experimental research and theory testing, nor can actual negotiations offer the controlled environment of an experiment in the laboratory. Greenberg and Eskew suggested three criteria to judge the quality of role-playing research. First, the level of involvement needs to be as high as possible. Studies asking participants to imagine being in a situation achieve much less realism than studies employing role-playing interactions over several days or weeks. On their scale of involvement, this study is considered a limited simulation exercise, which is rated as having a *moderate* level of involvement. Future research could seek to increase

the level of involvement to *moderately high* (i.e., the highest level in the rating system) by extending the time participants spend on the simulation. For example, participants could be trained for their respective roles as suggested above, which could also help them create an implicit theory of their role. They could spend more time in their respective roles acting out the mundane reality of organizational life, ideally with the coworkers with whom they will later negotiate. This more extensive simulation would also address related issues of experiments such as getting participants more involved in their roles and creating actual relationships between participants—a feature of organizational life that is hard to recreate in experiments (Gordon et al., 1984).

Second, Greenberg and Eskew (1993) suggested giving participants as much freedom to define their own responses as possible. This study achieved that by letting participants negotiate freely, coding their interaction, and having them report their outcomes without any guidelines. Although this approach creates more complications in quantifying results, responses should be more realistic than if participants are given a set of predefined outcomes from which to choose.

Finally, Greenberg and Eskew (1993) suggested having participants play themselves in roles that they are familiar with. This study did not follow this suggestion, because participants were asked to play roles with which most of them were not familiar. As suggested above, this issue could be addressed in future research either by choosing a sample more familiar with the roles or by training participants to be more familiar with their assigned roles.

**Sample size.** Using structural equation modeling in negotiation research offers the possibility of representing complex interaction data in an equally complex analysis. A

model can reflect the multiple simultaneous influences that variables have on each other in a way that more traditional forms of analysis cannot. However, structural equation modeling is a technique requiring large samples, which poses a significant difficulty in researching negotiation interactions in which each dyad represents only one case. This dissertation had a relatively small sample for a structural equation model. Therefore, weights for the indicators had to be estimated implicitly in the creation of scale scores rather than explicitly as part of the model. Relationships between latent variables were disattenuated mathematically by fixing error variances based on reliabilities of the scales. However, estimating the model including all indicators and avoiding the need to make assumptions about error variances would be preferable. Therefore, future research should either collect a larger sample or reduce the number of parameters to be estimated in the model.

Reliability of measurement. Reliabilities of measures developed for or used in this study were generally good. However, measures completed by participants in subordinate roles were always more reliable than those completed by participants in manager roles. Because the items were the same, this difference could indicate that the same items did not apply equally well to both roles. This lower reliability could have contributed to the lack of support for the relationship between power distance and perceived overall power difference for managers. Future research should explore reasons for the difference in reliability of measures between responses from the two roles.

Another issue related to reliability is the measurement of perceived reward-power difference. Although close to the theoretical basis that provided the foundation for its development, the measure's two-stage structure (i.e., measure six resources separately,

add the six resource subscales to create one scale) may introduce additional unreliability. This increased unreliability could make supporting hypotheses involving the variable—including Hypothesis 1 about the success of manipulations—much harder. Therefore, future research should explore options for creating a single-stage measure for perceived reward-power difference and compare the two versions of the scale.

**Power distance.** A weakness of the sample used in this study was the relatively small range of power distance among the participants. Although power distance was a strong predictor in the model, the relationship may have been attenuated because the sample was collected in the U.S. only and contained only a small percentage of participants from different cultural backgrounds who could possibly have higher or lower power distance. For a more complete view of the role of power distance in negotiation, adding participants from cultures with either much higher (e.g., Malaysia, Guatemala) or lower (e.g., Israel) power distance would be valuable (Hofstede, 2001).

Predicting use of power tactics. Although negotiators behaved differently based on role and condition, negotiators' perception of the overall power difference between themselves and the other party did not predict their use of power tactics. One possible reason is that the number of power tactics is not an appropriate operationalization for the use of power tactics. Frequency of occurrence of a phenomenon is the most common approach to coding of negotiation interactions and is useful for drawing broad conclusions (Weingart, Olekalns, & Smith, 2004). For the purpose of testing the theory proposed here, this approach may use too broad a brush. Negotiators may change their negotiation style rather than the quantity of power tactics, as shown in this study:

Managers adapted to different distributions of power by using different types of resources

and directions of power tactic. A new model should reflect these findings.

### **Summary of Chapter 5**

This dissertation set out to accomplish a number of goals. It proposed new definitions of reward power and power tactics, including both contentious and noncontentious behaviors, and introduced resource theory (Foa et al., 1993) as a basis for categorizing and measuring power tactics. It tested a model of the influence of differences in the resource distribution and power distance on the negotiation process and hypothesized that negotiators' use of power tactics is predictable from power distance reduction theory (Mulder et al., 1973).

Findings show that power tactics come in a large variety. In this study, power tactics can focus on any of six resources and can be formulated as power use or power balancing tactics. Showing that contentious power tactics are the least used among a large variety of types of power tactics is a much needed extension of Ury et al.'s (1988) discussion of power tactics. For negotiation practice, awareness of these options can help negotiators tailor their behavior to the resources they have at their disposal and believe the other party may appreciate. Negotiators can also design messages that express their own party's power at the level of contention they believe to be most appropriate: from very contentious to not contentious at all.

The model tested in this dissertation showed that negotiators' perception of reward power is a function of both the resource distribution and negotiators' power distance. Hofstede's (2001) power distance dimension is here shown to not only concern people's attitudes toward acceptability of differences in power distribution. Power distance also fundamentally shapes people's perception of reality in other ways. This

study showed that the same difference in resources will be perceived as much larger if the perceiver has high power distance than if the perceiver has lower power distance.

This finding has a number of implications for negotiation practice. For negotiators on any level of a hierarchy, their power distance will shape their expectations of their interaction with the other party. For example, for a high-power-distance low-power person, the perception that the high-power person has a lot of reward power may increase his or her likelihood of compliance with the high-power party's wishes but may also increase his or her expectation of benefits to be received from the high-power person. In a negotiation between parties with different power distance levels, the behavior of a lowpower-distance high-power party will be based on his or her own perception of his or her smaller reward power, which may make that party look weak or stingy in the eyes of the high-power distance low-power party. A low-power-distance low-power party, on the other hand, may be less deferential but also expect less from the high-power party, possibly missing out on rewards the high-power-distance high-power party may see at his or her disposal to distribute. Overall, in any position, negotiators need to be aware of their own and the other party's power distance and of the possible effects power distance can have on each party's perception of the resource distribution between the parties.

Finally, this study offers the first test and support of power distance reduction theory (Mulder et al., 1973) in the context of face-to-face negotiation interactions.

Findings show that low-power negotiators will increase their use of power tactics if the difference in resources between themselves and the high-power party is small. High-power parties, on the other hand, will not change the number of tactics they use depending on the resource distribution. However, they will change their negotiation style

by choosing different types of power tactics.

For negotiation practice, this finding means that an evaluation of the resource distribution between parties needs to be an integral part of the planning process, because it will help both low- and high-power parties predict the behavior of the other party. Both parties can also draw valuable conclusions about the perception the other party has of the resource distribution from that party's use of power tactics during the negotiation. For example, if the high-power party uses more love- and status-focused power tactics as well as power-balancing tactics, the low-power party can deduce that the high-power party perceives that he or she has fewer resources as compared to the low-power party. Whether or not this perception is based on reality, an accurate interpretation of the other party's behavior is helpful in tailoring one's own responses.

Further research is needed to better predict negotiation behavior from negotiators' perception of reward power and overall power difference. However, the model proposed here is a good starting point for predicting the influence of power on negotiation processes.

# Appendix A. Measure of Power Distance Adapted from Spencer-Oatey (1997)

Please rate the following statements according to <u>how appropriate</u> you consider the action described in the statement to be. A rating of <u>100</u> represents a <u>moderate amount of</u> appropriateness. You can choose any number from 0 on up to rate each statement.

For example: If the statement to evaluate is "A manager tells an employee that he/she disagrees with him/her.":

- A moderate level of appropriateness of the action described in the statement is <u>100</u>.
- If you consider the action described in the statement less than moderately appropriate, you need to assign a number between 0 and 99–the less appropriate, the lower the number.
- If you consider the action described in the statement more than moderately appropriate, you need to assign a number above 100–the more appropriate, the higher the number.

		Yardstick	Your Rating
1.	A manager tells an employee that he/she disagrees with him/her.	Moderate level of appropriateness = 100	
2.	A manager corrects an employee over a work related matter.	Moderate level of appropriateness = 100	
3.	A manager tells an employee to do something (relating to work).	Moderate level of appropriateness = 100	
4.	A manager advises an employee on a work related matter.	Moderate level of appropriateness = 100	
5.	A manager criticizes an employee's work related opinions (i.e., to his/her face).	Moderate level of appropriateness = 100	
6.	A manager reproves an employee for failing to fulfill his or her work related duties.	Moderate level of appropriateness = 100	
7.	A manager tells an employee that his/her work is unsatisfactory.	Moderate level of appropriateness = 100	
8.	A manager challenges an employee on his/her work related viewpoint.	Moderate level of appropriateness = 100	
9.	When a manager is annoyed with an employee, he/she lets the employee know he/she is annoyed.	Moderate level of appropriateness = 100	

	Yardstick	Your Rating
10. A manager instructs an employee in organization related knowledge.	Moderate level of appropriateness = 100	
11. An employee tells a manager that he/she disagrees with him/her.	Moderate level of appropriateness = 100	
12. An employee corrects a manager over a work related matter.	Moderate level of appropriateness = 100	
13. An employee tells a manager to do something (relating to work).	Moderate level of appropriateness = 100	
14. An employee advises a manager on a work related matter.	Moderate level of appropriateness = 100	
15. An employee criticizes a manager's work related opinions (i.e., to his/her face).	Moderate level of appropriateness = 100	
16. An employee reproves a manager for failing to fulfill his or her work related duties.	Moderate level of appropriateness = 100	
17. An employee tells a manager that his/her work is unsatisfactory.	Moderate level of appropriateness = 100	
18. An employee challenges a manager on his/her work related viewpoint.	Moderate level of appropriateness = 100	
19. When an employee is annoyed with a manager, he/she lets the manager know he/she is annoyed.	Moderate level of appropriateness = 100	
20. An employee instructs a manager in organization related knowledge.	Moderate level of appropriateness = 100	

Appendix B. Winsorizing and Transformation of Data: Power Distance Scales in Pilot Study 1: Dorfman and Howell (1988),

Earley and Erez (1997), and Maznevski et al. (2002)

	Befo	ore wins	sorizing and	l			Afte	er winso	orizing and	
	1	transfor	rmation		_		transformation			
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
Dorfman and Howell (1988)										
PD1	2.60	0.15	17.34	0.30	1,000	5/12	-0.74	0.15	1.81	0.30
PD3	9.62	0.15	128.46	0.30	1,000	5/12	-0.10	0.15	2.17	0.30
PD4	4.10	0.15	28.12	0.30	1,000	5/12	-0.20	0.15	0.34	0.30
PD8	1.91	0.15	6.02	0.30	1,000	5/12	-0.23	0.15	-0.57	0.30
PD13	2.50	0.15	15.53	0.30	1,000	5/12	-0.75	0.15	3.99	0.30
PD21	5.02	0.15	47.76	0.30	1,000	5/12	-0.07	0.15	-0.34	0.30

	Befo	re wins	orizing and	i			Afte	er winso	orizing and	
	1	transfor	rmation		_		1	transfor	rmation	
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
Earley and Erez (1997)										
In work related matters, managers	4.85	0.15	37.70	0.30	1,000	5/12	0.24	0.15	7.06	0.30
have a right to expect obedience										
from their subordinates.										
Managers should be able to make	3.87	0.15	25.66	0.30	1,000	5/12	-0.33	0.15	3.55	0.30
the right decision without										
consulting with others.										
Managers who let their employees	1.06	0.15	1.41	0.30	1,000	5/12	-0.49	0.15	-0.76	0.30
participate in decisions lose power.										
Employees who often question	0.49	0.15	1.05	0.30	1,000	5/12	-1.38	0.15	1.95	0.30
authority sometimes keep their										
managers from being effective.										

	Befo	re wins	orizing and	l			Afte	er winso	orizing and	
	1	transfor	rmation			transformation				
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
In most situations managers	16.18	0.15	261.86	0.30	1,000	5/12	-0.08	0.15	3.60	0.30
should make decisions without										
consulting their subordinates.										
A company's rules should not be	6.10	0.15	62.66	0.30	1,000	5/12	0.20	0.15	4.57	0.30
broken-not even when the										
employee thinks it is in the										
company's best interest.										
Employees should not express	0.54	0.15	0.41	0.30	1,000	5/12	-0.89	0.15	-0.21	0.30
disagreement with their										
managers.										

	Befo	re wins	orizing and	1			Afte	er winso	orizing and	
	1	transfor	rmation		_		1	ransfor	rmation	
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
Maznevski et al. (2002)										
PD6	8.85	0.15	114.55	0.30	1,000	5/12	-0.28	0.15	6.06	0.30
PD29	2.39	0.15	12.12	0.30	1,000	5/12	-0.77	0.15	2.38	0.30
PD30	4.16	0.15	28.82	0.30	1,000	5/12	0.09	0.15	6.60	0.30
PD32	2.75	0.15	14.00	0.30	1,000	5/12	-0.75	0.15	4.24	0.30
PD34	16.18	0.15	261.93	0.30	1,000	5/12	0.13	0.15	5.66	0.30
PD36	15.75	0.15	252.20	0.30	1,000	5/12	1.18	0.15	8.87	0.30
PD38	3.78	0.15	30.13	0.30	1,000	5/12	-0.90	0.15	2.09	0.30

*Note*. Items for Dorfman and Howell's (1988) scale have not been published by the authors yet and permission to include them here has not been given. Items for Maznevski et al.'s (2002) scale are not publicly available and permission to include them here has not been given. No constant was added to the items before transformation.

Appendix C. Winsorizing and Transformation of Data: Power Distance Scales in Pilot Study 1: Spencer-Oatey (1997)

	Before wi	nsorizin	g and transforr	nation			After winsorizing and transformation				
					Winsorizing	Exponent for					
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE	
1 (2-12)	4.95	0.15	45.72	0.30	1,000	5/12	0.83	0.15	9.96	0.30	
2 (3-13)	13.99	0.15	216.30	0.30	1,000	5/12	1.10	0.15	3.90	0.30	
3 (4-14)	2.21	0.15	7.36	0.30	1,000	5/12	1.32	0.15	2.99	0.30	
4 (6-16)	3.73	0.15	27.05	0.30	1,000	5/12	1.69	0.15	8.15	0.30	
5 (7-17)	1.52	0.15	4.91	0.30	1,000	5/12	-1.22	0.15	16.31	0.30	
6 (10-20)	9.56	0.15	107.22	0.30	1,000	5/12	1.83	0.15	6.95	0.30	

*Note.* The information given in the table above under the label *item* refers to Spencer-Oatey's measure of power distance in Appendix A. As discussed in Chapter 3, the items referring to employees were subtracted from items referring to managers. Therefore, the information in the parentheses after the item numbers for items 1 through 6 indicates which items in the measure referring to employees were subtracted from which items referring to managers to result in the scores for items 1 through 6 reported in this table. To eliminate negative values created by the subtraction, the constant 200 was added to all items before transformation.

# Appendix D. Measure of Power Distance Adapted from Spencer-Oatey (1997):

### **Revised Instructions**

Please rate the following statements according to  $\underline{\text{how appropriate}}$  you consider the action described in the statement to be. A rating of  $\underline{100}$  represents a  $\underline{\text{moderate amount of appropriateness}}$ . You can choose any number from 0 on up to rate each statement.

For example: If the statement to evaluate is "A manager tells an employee that he/she disagrees with him/her.":

• Action is less than moderately appropriate -> 0–99

• Action is more than moderately appropriate -> Above 100

	Yardstick	Your Rating
21. A manager tells an employee that he/she disagrees with him/her.	Moderate level of appropriateness = 100	
22. A manager corrects an employee over a work related matter.	Moderate level of appropriateness = 100	
23. A manager tells an employee to do something (relating to work).	Moderate level of appropriateness = 100	
24. A manager advises an employee on a work related matter.	Moderate level of appropriateness = 100	
25. A manager criticizes an employee's work related opinions (i.e., to his/her face).	Moderate level of appropriateness = 100	
26. A manager reproves an employee for failing to fulfill his or her work related duties.	Moderate level of appropriateness = 100	
27. A manager tells an employee that his/her work is unsatisfactory.	Moderate level of appropriateness = 100	
28. A manager challenges an employee on his/her work related viewpoint.	Moderate level of appropriateness = 100	
29. When a manager is annoyed with an employee, he/she lets the employee know he/she is annoyed.	Moderate level of appropriateness = 100	
30. A manager instructs an employee in organization related knowledge.	Moderate level of appropriateness = 100	

	Yardstick	Your Rating
31. An employee tells a manager that he/she disagrees with him/her.	Moderate level of appropriateness = 100	
32. An employee corrects a manager over a work related matter.	Moderate level of appropriateness = 100	
33. An employee tells a manager to do something (relating to work).	Moderate level of appropriateness = 100	
34. An employee advises a manager on a work related matter.	Moderate level of appropriateness = 100	
35. An employee criticizes a manager's work related opinions (i.e., to his/her face).	Moderate level of appropriateness = 100	
36. An employee reproves a manager for failing to fulfill his or her work related duties.	Moderate level of appropriateness = 100	
37. An employee tells a manager that his/her work is unsatisfactory.	Moderate level of appropriateness = 100	
38. An employee challenges a manager on his/her work related viewpoint.	Moderate level of appropriateness = 100	
39. When an employee is annoyed with a manager, he/she lets the manager know he/she is annoyed.	Moderate level of appropriateness = 100	
40. An employee instructs a manager in organization related knowledge.	Moderate level of appropriateness = 100	

Appendix E. Winsorizing and Transformation of Data: Power Distance Scale Adapted From Spencer-Oatey (1997) with Revised Instructions

	Before wi	nsorizin	g and transfor	mation			After wi	nsorizing	and transform	ation
Item	skewness	SE	kurtosis	SE	Winsorizing cutoff	Exponent for transformation	skewness	SE	kurtosis	SE
1 (22-32)	0.60	0.35	-0.70	0.69	500	5/12	0.25	0.35	-1.04	0.69
2 (23-33)	1.26	0.35	2.48	0.69	500	5/12	0.39	0.35	0.14	0.69
3 (24-34)	1.75	0.35	3.68	0.69	500	5/12	0.87	0.35	0.49	0.69
4 (26-36)	0.42	0.35	-0.80	0.69	500	5/12	-0.16	0.35	-0.43	0.69
5 (27-37)	1.89	0.35	6.38	0.69	500	5/12	0.75	0.35	1.26	0.69
6 (30-40)	1.55	0.35	3.24	0.69	500	5/12	0.64	0.35	0.27	0.69

*Note.* The information given in the table above under the label *item* refers to Spencer-Oatey's measure of power distance in Appendix D. As discussed in Chapter 3, the items referring to employees were subtracted from items referring to managers. Therefore, the information in the parentheses after the item numbers for items 1 through 6 indicates which items in the measure referring to employees were subtracted from which items referring to managers to result in the scores for items 1 through 6 reported in this table. To eliminate negative values created by the subtraction, the constant 50 was added to all items before transformation.

### Appendix F. Scenario as Used in Pilot Study 2: Manager Role

# **Introduction: HealthyFoods Sales Negotiation (Mr./Ms. Mueller)**

The purpose of this study is to examine relationships between negotiators. You will read a negotiation scenario and fill out the attached questionnaire.

You will take the role of Mr./Ms. Mueller, general manager of the sales department of the HealthyFoods Corporation, a company producing and selling high quality frozen foods to supermarkets. In a few minutes, you will meet with Mr./Ms. Johnson, a sales representative in your company.

Before meeting with Mr./Ms. Johnson, please read the following role information and answer some questions on how you perceive the relationship between yourself and Mr./Ms. Johnson.

#### Confidential Role Information for Mr./Ms. Mueller

You have been the general manager of sales with the HealthyFoods Corporation for ten years now. The sales department has been doing well most of this time, but recently sales have dropped. To bring the numbers back up, two strategies have been decided on: Launching a new product line (Good&Easy single entrées packages) and targeting new audiences, such as hospitals and retirement homes. To make these efforts a success, you have argued in the management assembly that more money should be allocated to the sales department. However, the financial situation for the company has become more difficult recently, and although you were able to secure a higher percentage of the total budget than in previous years, this amount is still barely equal to last year's.

You know that the work load of your sales representatives has been relatively low recently due to additional hires in the last couple of years. So, an increase in workload seems reasonable. As you cannot afford to hire more staff with the budget you have, you need the existing sales representatives to introduce the new product line to their existing customers and recruit new customers in their area among the new target audience. In addition, you had to promise the marketing department in the budget negotiations that your staff would support them in developing the advertising strategy for the new product line. Further, to finance advertising for the new line, sales of existing products needs to increase. Finally, you need your staff to not take their vacation in fall this year as many institutions among the new target audience are making their financial decisions for the next fiscal year at that time, meaning that fall will require the most intense effort from the sales department. You have recently sent out a memo to inform your sales staff about the upcoming changes. You know that they will not be happy with such a large and sudden increase in duties and although you also know that all these things need to be accomplished, you hope to find arrangements that are as acceptable to your staff as possible. For example, you would be ready to pay a reasonable bonus to representatives increasing their overall sales volume by more than 50% including the new line or 20% excluding the new line. You do not want to pay overtime but you could offer compensatory time off as long as the additional vacation is not taken in the fall. Finally, the additional duties (and maybe also existing ones) could be distributed between the staff according to their own interest. Overall you expect some discussion, but hope that employees will understand how important this effort is for the

company and act accordingly.

One of your sales representatives, Mr./Ms. Johnson, has asked for a meeting and you expect that the main topic will be the increased workload.

In preparation for that meeting, please turn to the questionnaire attached and answer some questions about the relationship between yourself and Mr./Ms. Johnson.

### Manipulations of Foa et al.'s (1993) Resources to be Added

You doubt that Mr./Ms. Johnson will risk challenging you too much, though, because

**Money.** your recommendation has major weight in decisions on salary increases.

**Love.** you know that your good opinion of him/her is very important to him/her.

**Services.** you have been very accommodating in approving his/her flexible work schedule and he/she will not want to risk a change of attitude in that respect.

**Goods.** you are also in charge of assigning office space and he/she has been hoping for an office of his/her own for some time.

**Status.** your evaluation of his/her work carries major weight in the company and will influence the respect he/she gets from others in the company.

**Information.** much of his/her work depends on the free flow of information from you to him/her.

#### **Example of Manipulation in Text**

One of your sales representatives, Mr./Ms. Johnson, has asked for a meeting and you expect that the main topic will be the increased workload. You doubt that Mr./Ms. Johnson will risk challenging you too much, though, because your recommendations have major weight in decisions on salary increases.

In preparation for that meeting, please turn to the questionnaire attached and answer some questions about the relationship between yourself and Mr./Ms. Johnson.

### Appendix G. Scenario as Used in Pilot Study 2: Employee Role

## **Introduction: HealthyFoods Sales Negotiation (Mr./Ms. Johnson)**

The purpose of this study is to examine relationships between negotiators. You will read a negotiation scenario and fill out the attached questionnaire.

You will take the role of Mr./Ms. Johnson, a sales representative in the HealthyFoods Corporation, a company producing and selling high quality frozen foods to supermarkets. In a few minutes, you will meet with Mr./Ms. Mueller, the general manager of the sales department of your company.

Before meeting with Mr./Ms. Mueller, please read the following role information and answer some questions on how you perceive the relationship between yourself and Mr./Ms. Mueller.

#### Confidential Role Information for Mr./Ms. Johnson

You have been a sales representative resentative with the HealthyFoods Corporation now for about five years. In this time, you have built up a steady clientele and most of your time is now taken up by attending to existing customers. Recently, management has announced its plan to increase sales both by introducing a new product line (Good&Easy single entrées packages) and by targeting new audiences, such as hospitals and retirement homes. No moves have been made, however, to hire additional staff. Now you have received a memo informing you that as a sales representative you will be asked to support the launch of the new product line by providing the marketing team with your knowledge about existing and potential customers in your area. In addition, you are asked to introduce the new product line to your existing customers as well as recruit new customers in your area among the new target audience. Management also encourages you to increase sales of existing products as the additional profit will help to finance advertising for the new line. Finally, you are asked not to take your vacation in fall this year as many institutions among the new target audience are making their financial decisions for the next fiscal year at that time, meaning that fall will require the most intense effort from the sales department.

Although you understand that launching the new product line as well as expanding the potential customer pool are promising avenues for the company to solve their current financial problems, you feel that management is asking too much. Therefore, you have made an appointment with Mr./Ms. Mueller, the general manager of the sales department to discuss the issue. You believe that you cannot add much more to your schedule without starting to neglect existing customer relations. So, ideally you do not want any additional duties added to your load. However, you are ready to negotiate. Supporting the marketing team, for example, sounds like an interesting challenge and you are ready to try it as long as the hours dedicated to that activity are strictly limited. Also, introducing a new product line to your customers could be done with very little extra effort and may even increase your sales total. In that case, you are hoping for an adequate bonus. However, you very much hope to avoid having to recruit new customers among target groups you are not familiar with. Also, you really have to take your vacation in the fall this year as your sister is getting married in Australia and you are planning to take all that

year's vacation for that event.

In preparation for your negotiation, please turn to the questionnaire attached and answer some questions about the relationship between yourself and Mr./Ms. Mueller.

### Manipulations of Foa et al.'s (1993) Resources to be Added

While talking to Mr./Ms. Mueller you have to keep in mind, however, that

**Money.** his/her recommendation has major weight in decisions on salary increases.

Love. his/her good opinion of you is very important to you.

**Services.** he/she has been very accommodating in approving your flexible work schedule and you do not want to risk a change of attitude in that respect.

**Goods.** he/she is also in charge of assigning office space and you have been hoping for an office of your own for some time.

**Status.** his/her evaluation of your work carries major weight in the company and will influence the respect you get from others in the company.

**Information.** much of your work depends on the free flow of information from Mr./Ms. Mueller to you.

So, you do not want to upset him/her too much.

#### **Example of Manipulation in Text**

Also, you really have to take your vacation in the fall this year as your sister is getting married in Australia and you are planning to take all that year's vacation for that event.

While talking to Mr./Ms.Mueller, you have to keep in mind however, that his/her recommendation has major weight in decisions on salary increases. So, you do not want to upset him/her too much.

In preparation for your negotiation, please turn to the questionnaire attached and answer some questions about the relationship between yourself and Mr./Ms. Mueller.

Appendix H. Winsorizing and Transformation of Data: Pilot 2: Scenario Realism, Personal Relevance, and Negotiation

Experience

	Befo	re wins	orizing and	l			Afte	er winso	orizing and	
	t	ransfor	mation				Т	Transfo	mation	
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
Scenario Realism										
The scenario was believable.	5.03	0.12	30.39	0.24	500	1/3	1.53	0.12	3.47	0.24
The scenario was realistic.	5.11	0.12	31.68	0.24	500	1/3	0.35	0.12	5.02	0.24
The situation described in the										
scenario may happen in real life.	4.42	0.12	23.38	0.24	500	1/3	0.10	0.12	5.40	0.24
Personal Relevance										
I can easily imagine being in this										
situation.	5.87	0.12	44.07	0.24	500	5/12	-0.36	0.12	3.12	0.24

	Befo	re wins	orizing and				Afte	er winsc	orizing and	
	1	ransfor	mation				Γ	Transfo	mation	
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
It is possible that I will encounter										
the situation in the scenario in real										
life.	4.55	0.12	25.58	0.24	500	5/12	-0.03	0.12	2.62	0.24
It is possible that I will negotiate a										
situation like this in the future.	4.45	0.12	25.25	0.24	500	5/12	0.27	0.12	3.23	0.24
Negotiation Experience										
I have a lot of experience	_									
negotiating in situations like the one										
described in the scenario.	5.63	0.12	64.49	0.24	500	7/12	0.23	0.12	2.05	0.24
I have a lot of experience										
negotiating in situations similar to										
the one described in the scenario.	5.73	0.12	68.65	0.24	500	7/12	0.12	0.12	2.32	0.24

	Before winsorizing and				After winsorizing and					
	transformation					Transformation				
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
I know how to handle the situation										
described in the scenario.	4.85	0.12	57.60	0.24	500	7/12	-0.18	0.12	2.82	0.24

*Note.* No constant was added to the items before transformation.

# Appendix I. Perceived Reward-Power Difference Scale Used in Pilot Study 2

We are interested in your perception of the relationship between the two parties involved in the negotiation (i.e., manager and sales representative). Think about the relationship between the two, and consider how strongly you agree with the statements below. Please assign a number to each statement representing <a href="https://www.negotiatrico.com/howstrongly-you agree">how strongly-you agree</a> with that statement. A <a href="mailto:rating-of-100">rating-of-100</a> represents a <a href="mailto:moderate amount of agreement">moderate amount of agreement</a>. You can choose any number from 0 on up to rate each statement.

For example: • If you agree less than moderately strongly -> 0–99

• If you agree more than moderately strongly-> Above 100

		Yardstick	Your Rating
1.	1. The manager can make the sales representative feel personally valued.*		8
2.	2. The manager can make sure that the equipment the sales representative needs for work is regularly updated.		
3.	The sales representative's evaluation of the manager influences how much the manager is valued in the company.	Moderate level of agreement = 100	
4.	The manager can influence whether the sales representative has the necessary material to do his/her work.	Moderate level of agreement = 100	
5.	The sales representative can provide the manager with needed instructions.	Moderate level of agreement = 100	
6.	The manager can increase the sales representative's pay level.*	Moderate level of agreement = 100	
7.	The sales representative can influence the allocation of funds to the manager's work.	Moderate level of agreement = 100	
8.	The manager can provide the sales representative with sound job-related advice.*	Moderate level of agreement = 100	
9.	9. The manager's evaluation of the sales representative affects the sales representative's prestige in the company.		
10.	The sales representative can influence the quality of equipment the manager gets to do his/her work.	Moderate level of agreement = 100	

	Yardstick	Your Rating
11. The sales representative can make the manager feel good about himself/herself.	Moderate level of agreement = 100	
12. The manager can make the sales representative feel like he/she approves of him/her.*	Moderate level of agreement = 100	
13. The manager can influence whether or not work runs smoothly for the sales representative.	Moderate level of agreement = 100	
14. The sales representative's evaluation of the manager affects how much the manager is esteemed by others in the company.	Moderate level of agreement = 100	
15. The manager can influence what kind of equipment the sales representative gets to work with.	Moderate level of agreement = 100	
16. The sales representative can provide the manager with valuable information.	Moderate level of agreement = 100	
17. The manager can influence the sales representative's getting a pay raise.*	Moderate level of agreement = 100	
18. The sales representative can influence the manager's getting a promotion.*	Moderate level of agreement = 100	
19. The manager can share with the sales representative his/her considerable experience and/or training.*	Moderate level of agreement = 100	
20. The sales representative can influence whether the manager's department gets all the staff needed.	Moderate level of agreement = 100	
21. The manager's evaluation of the sales representative affects how the sales representative is regarded in the company.	Moderate level of agreement = 100	
22. The sales representative can make the manager feel personally accepted.*	Moderate level of agreement = 100	
23. The sales representative can influence whether the manager has access to services important to his/her work.	Moderate level of agreement = 100	
24. The manager can make the sales representative feel personally accepted.*	Moderate level of agreement = 100	

	Yardstick	Your Rating
25. The manager can influence whether the sales representative	Moderate level of agreement =	<u>8</u>
has access to services important to his/her work.	100	
26. The sales representative's evaluation of the manager affects	Moderate level of agreement =	
how the manager is regarded in the company.	100	
27. The manager can influence whether the sales representative's	Moderate level of agreement =	
department gets all the staff needed.	100	
28. The sales representative can share with the manager his/her	Moderate level of agreement =	
considerable experience and/or training.*	100	
29. The manager can influence the sales representative's getting	Moderate level	
a promotion.*	of agreement =	
30. The sales representative can influence the manager's getting	Moderate level	
a pay raise.*	of agreement =	
31. The manager can provide the sales representative with	100 Moderate level	
valuable information.	of agreement =	
	100 Moderate level	
32. The sales representative can influence what kind of	of agreement =	
equipment the manager gets to work with.		
33. The manager's evaluation of the sales representative affects	Moderate level of agreement =	
how much the sales representative is esteemed by others in	100	
the company.		
34. The sales representative can influence whether or not work	Moderate level of agreement =	
runs smoothly for the manager.	100	
35. The sales representative can make the manager feel like	Moderate level of agreement =	
he/she approve of him/her.*	100	
36. The manager can make the sales representative feel good	Moderate level of agreement =	
about himself/herself.	100	
37. The manager can influence the quality of equipment the sales	Moderate level of agreement =	
representative gets to do his/her work.	100	
38. The sales representative's evaluation of the manager affects	Moderate level of agreement =	
the manager's prestige in the company.	100	

	Yardstick	Your
39. The sales representative can provide the manager with sound job-related advice.*	Moderate level of agreement = 100	Rating
40. The manager can influence the allocation of funds to the sales representative's work.	Moderate level of agreement = 100	
41. The sales representative can increase the manager's pay level.*	Moderate level of agreement = 100	
42. The manager can provide the sales representative with needed instructions.	Moderate level of agreement = 100	
43. The sales representative can influence whether the manager has the necessary material to do his/her work.	Moderate level of agreement = 100	
44. The manager's evaluation of the sales representative influences how much the sales representative is valued in the company.	Moderate level of agreement = 100	
45. The sales representative can make sure that the equipment the manager needs for work is regularly updated.	Moderate level of agreement = 100	
46. The sales representative can make the manager feel personally valued.*	Moderate level of agreement = 100	

<sup>\*</sup> Adapted from Hinkin and Schriesheim (1989).

Appendix J. Winsorizing and Transformation of Data: Perceived Reward-Power Difference Scale; Long Form (46 items), N = 416

	Before wi	insorizin	g and transfor	mation			After wi	nsorizing	and transform	ation
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
1MLo	5.03	0.12	33.13	0.24	800	1/3	0.54	0.12	7.96	0.24
12MLo	3.93	0.12	19.82	0.24	800	1/3	1.30	0.12	4.22	0.24
24MLo	18.16	0.12	349.63	0.24	800	1/3	1.31	0.12	5.62	0.24
36MLo	6.78	0.12	68.39	0.24	800	1/3	0.74	0.12	5.42	0.24
2MSe	5.00	0.12	32.66	0.24	800	1/3	0.82	0.12	8.80	0.24
13MSe	4.36	0.12	24.00	0.24	800	1/3	0.66	0.12	6.23	0.24
25MSe	11.49	0.12	171.06	0.24	800	1/3	1.77	0.12	6.54	0.24
9MSt	4.40	0.12	23.06	0.24	800	1/3	0.87	0.12	5.79	0.24
21MSt	7.43	0.12	69.85	0.24	800	1/3	0.74	0.12	7.05	0.24
33MSt	4.41	0.12	27.23	0.24	800	1/3	0.04	0.12	6.78	0.24

	Before wi	insorizin	g and transform	mation			After winsorizing and transformation			
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
44MSt	20.15	0.12	405.97	0.24	800	1/3	-0.08	0.12	6.57	0.24
4MGo	4.79	0.12	29.89	0.24	800	1/3	0.65	0.12	7.98	0.24
15MGo	8.59	0.12	104.68	0.24	800	1/3	0.76	0.12	6.56	0.24
27MGo	15.41	0.12	275.64	0.24	800	1/3	0.54	0.12	6.97	0.24
37MGo	14.13	0.12	241.54	0.24	800	1/3	0.67	0.12	6.05	0.24
8MIn	4.43	0.12	26.06	0.24	800	1/3	0.45	0.12	5.97	0.24
19MIn	11.87	0.12	169.80	0.24	800	1/3	1.21	0.12	3.83	0.24
31MIn	9.65	0.12	131.57	0.24	800	1/3	0.63	0.12	5.82	0.24
42MIn	12.10	0.12	159.22	0.24	800	1/3	0.47	0.12	6.08	0.24
6MMo	12.70	0.12	200.43	0.24	800	1/3	0.18	0.12	4.43	0.24
17MMo	11.16	0.12	144.88	0.24	800	1/3	0.79	0.12	3.57	0.24
29MMo	16.41	0.12	304.29	0.24	800	1/3	1.18	0.12	3.27	0.24

	Before wi	insorizin	g and transform	nation			After wi	nsorizing	and transform	ation
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
40MMo	12.00	0.12	160.86	0.24	800	1/3	0.74	0.12	5.15	0.24
11SLo	4.64	0.12	27.95	0.24	800	1/3	0.71	0.12	6.23	0.24
22SLo	6.20	0.12	47.46	0.24	800	1/3	-0.23	0.12	6.53	0.24
35SLo	4.58	0.12	32.79	0.24	800	1/3	-0.84	0.12	5.55	0.24
46SLo	5.84	0.12	55.97	0.24	800	1/3	-0.41	0.12	6.26	0.24
23SSe	5.38	0.12	51.38	0.24	800	1/3	-0.93	0.12	1.33	0.24
34SSe	13.02	0.12	204.38	0.24	800	1/3	-0.56	0.12	5.13	0.24
45SSe	14.98	0.12	265.33	0.24	800	1/3	-0.73	0.12	1.12	0.24
3SSt	5.37	0.12	51.40	0.24	800	1/3	-1.14	0.12	5.51	0.24
14SSt	5.48	0.12	37.09	0.24	800	1/3	-0.39	0.12	5.11	0.24
26SSt	18.71	0.12	366.52	0.24	800	1/3	-0.59	0.12	5.04	0.24
38SSt	14.53	0.12	250.99	0.24	800	1/3	-0.67	0.12	5.33	0.24

	Before wi	insorizir	ng and transforr	mation			After wi	nsorizing	and transform	ation
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
10SGo	4.86	0.12	41.78	0.24	800	1/3	-0.87	0.12	2.01	0.24
20SGo	5.68	0.12	53.12	0.24	800	1/3	-0.96	0.12	2.21	0.24
32SGo	12.26	0.12	193.59	0.24	800	1/3	-0.72	0.12	1.00	0.24
43SGo	11.48	0.12	170.48	0.24	800	1/3	-0.71	0.12	1.09	0.24
5SIn	11.66	0.12	177.87	0.24	800	1/3	0.20	0.12	5.04	0.24
16SIn	6.62	0.12	62.96	0.24	800	1/3	0.70	0.12	4.88	0.24
28SIn	11.60	0.12	158.77	0.24	800	1/3	-0.47	0.12	4.40	0.24
39SIn	14.43	0.12	246.82	0.24	800	1/3	-0.57	0.12	5.05	0.24
7SMo	4.04	0.12	30.93	0.24	800	1/3	-0.97	0.12	1.03	0.24
18SMo	4.77	0.12	33.33	0.24	800	1/3	-0.84	0.12	3.01	0.24
30SMo	4.43	0.12	39.13	0.24	800	1/3	-0.93	0.12	1.35	0.24
41SMo	6.93	0.12	70.19	0.24	800	1/3	-0.35	0.12	-0.55	0.24

*Note*. The numbers in the item labels refer to the item numbers in the questionnaire in Appendix I. No constant was added to the items before transformation.

## Appendix K. Short Version of Perceived Reward-Power Difference Scale Used in Pilot Study 2

The following statements describe things people working in organization may do. The **ability of the manager** to do what is described in the statement serves as the object of comparison and is **always** 100. Please **rate the ability of the sales representative** to do the things described **in relation to the manager described in this specific scenario**.

scenario.									
For example:  • If sales rep is less able to do what is described than the manager ->									
• If sales rep is more able to do what is described than	n the manager ->	Above 100							
	Yardstick	Your Rating							
1. Make the other feel personally valued	Ability of Manager = 100								
2. Make sure the equipment the other needs for work is regularly updated	Ability of Manager = 100								
3. Influence what kind of equipment the other gets to do	Ability of								

	regularly apacted		
3.	Influence what kind of equipment the other gets to do	Ability of	
	his/her work	Manager = 100	
1	Inflyence the other's cetting a new miss	Ability of	
4.	Influence the other's getting a pay raise	Ability of	
		Manager = 100	
5.	Share with the other his/her considerable experience	Ability of	
	1/	Manager = 100	
	and/or training		
6.	His/her evaluation affects how the other is regarded in	Ability of	
	4	Manager = 100	
	the company		
7.	Make the other feel approved of	Ability of	
		Manager = 100	
8.	Influence whether or not work runs smoothly for the	Ability of	
		Manager = 100	
	other		
9.	Influence whether the other's department gets all the	Ability of	
	1	Manager = 100	
	staff needed		

10. Influence the other's getting a promotion

11. Provide the other with valuable information

Ability of

Ability of Manager = 100

Manager = 100

	Yardstick	Your Rating
12. His/her evaluation affects how much the other is esteemed by others in the company	Ability of Manager = 100	8
13. Make the other feel personally accepted	Ability of Manager = 100	
14. Influence whether the other has access to services important to his/her work	Ability of Manager = 100	
15.Influence the quality of equipment the other gets to do his/her work	Ability of Manager = 100	
16. Influence the allocation of funds to the other's work	Ability of Manager = 100	
17. Provide the other with needed instructions	Ability of Manager = 100	
18. His/her evaluation influences how much the other is valued in the company	Ability of Manager = 100	
19.Make the other feel good about him/herself	Ability of Manager = 100	
20.Influence whether the other has the necessary material to do his/her work	Ability of Manager = 100	
21. Increase the other's pay level	Ability of Manager = 100	
22. Provide the other with sound job related advice	Ability of Manager = 100	
23. His/her evaluation affects the other's prestige in the company	Ability of Manager = 100	

Appendix L. Winsorizing and Transformation of Data: Perceived Reward-Power Difference Scale; Short Form (23 Items), N = 40

	Before w	insorizii	ng and transfor	nation			After wi	nsorizing	and transform	ation
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
1Lo	0.23	0.37	-0.10	0.73	200	5/6	0.05	0.37	-0.09	0.73
7Lo	-0.29	0.37	1.34	0.73	200	5/6	-0.76	0.37	1.81	0.73
13Lo	1.82	0.37	7.94	0.73	200	5/6	-0.18	0.37	2.08	0.73
19Lo	1.09	0.37	3.45	0.73	200	5/6	0.09	0.37	0.63	0.73
2Se	0.71	0.37	1.40	0.73	200	5/6	0.28	0.37	0.94	0.73
8Se	0.54	0.37	-0.01	0.73	200	5/6	0.25	0.37	0.19	0.73
14Se	-0.02	0.37	-1.20	0.73	200	5/6	-0.18	0.37	-1.23	0.73
6St	1.68	0.37	6.38	0.73	200	5/6	-0.02	0.37	0.01	0.73
12St	0.08	0.37	-1.01	0.73	200	5/6	-0.13	0.37	-0.97	0.73
18St	0.37	0.37	0.24	0.73	200	5/6	-0.01	0.37	-0.30	0.73

	Before w	insorizi	ng and transforn	nation			After wi	nsorizing	and transform	ation
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
23St	0.41	0.37	-0.04	0.73	200	5/6	0.10	0.37	-0.68	0.73
3Go	0.82	0.37	1.42	0.73	200	5/6	0.41	0.37	0.54	0.73
9Go	0.49	0.37	-0.67	0.73	200	5/6	0.24	0.37	-0.89	0.73
15Go	0.29	0.37	-1.07	0.73	200	5/6	0.11	0.37	-1.25	0.73
20Go	0.40	0.37	-0.19	0.73	200	5/6	0.11	0.37	-0.62	0.73
5In	1.33	0.37	3.79	0.73	200	5/6	0.07	0.37	0.87	0.73
11In	0.26	0.37	2.03	0.73	200	5/6	-0.07	0.37	1.81	0.73
17In	0.17	0.37	-0.18	0.73	200	5/6	-0.12	0.37	-0.45	0.73
22In	1.35	0.37	4.60	0.73	200	5/6	-0.13	0.37	0.50	0.73
4Mo	2.49	0.37	9.57	0.73	200	5/6	0.83	0.37	0.38	0.73
10Mo	2.02	0.37	6.04	0.73	200	5/6	0.77	0.37	0.25	0.73
16Mo	1.04	0.37	1.22	0.73	200	5/6	0.70	0.37	0.06	0.73

	Before w	insorizi	zing and transformation				After winsorizing and transformation			
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
21Mo	6.08	0.37	37.89	0.73	200	5/6	0.99	0.37	0.47	0.73

*Note.* The numbers in the item labels refer to the item numbers in the questionnaire in Appendix K. No constant was added to the items before transformation.

### Appendix M. Short Version of Perceived Reward-Power Difference Scale Used in

#### Pilot Study 2: Revised Instructions and Items

The following statements describe things people working in organization may do. The **ability of the sales representative** to do what is described in the statement serves as the object of comparison and is **always** <u>100</u>. Please <u>rate the ability of the manager</u> to do the things described <u>in relation to the sales representative described in this specific scenario.</u>

For example:

• If manager is less able to do what is described than the sales rep -> 0–99

• If manager is more able to do what is described than the sales rep-> Above 100

	Yardstick	Your
		Rating
1. Make the other feel personally valued	Ability of Sales	
	representative =	
2 D 1 1 1 1 1 1 2 1	100	
2. Provide services that make the other's work run more	Ability of Sales	
smoothly	representative = 100	
•		
3. Influence what kind of equipment the other gets to do	Ability of Sales representative =	
his/her work	100	
4. Influence the other's getting a new raise	Ability of Sales	
4. Influence the other's getting a pay raise	representative =	
	100	
5. His/her evaluation affects how the other is regarded in	Ability of Sales	
_	representative =	
the company	100	
6. Make the other feel approved of	Ability of Sales	
	representative =	
	100	
7. Influence whether or not work runs smoothly for the	Ability of Sales	
other	representative =	
	100	
8. Influence whether the other's department gets all the	Ability of Sales	
staff needed	representative =	
	100	
9. Influence the other's getting a promotion	Ability of Sales	
	representative =	
	100	

	Yardstick	Your
10.Provide the other with valuable information	Ability of Sales	Rating
	representative = 100	
11. His/her evaluation affects how much the other is	Ability of Sales	
esteemed by others in the company	representative = 100	
12. Make the other feel personally accepted	Ability of Sales representative = 100	
13. Influence whether the other has access to services	Ability of Sales	
important to his/her work	representative = 100	
14. Influence the quality of equipment the other gets to do	Ability of Sales	
his/her work	representative = 100	
15. Influence the allocation of funds to the other's work	Ability of Sales representative =	
	100	
16. Provide the other with needed instructions	Ability of Sales representative = 100	
17. His/her evaluation influences how much the other is	Ability of Sales	
valued in the company	representative = 100	
18. Make the other feel good about him/herself	Ability of Sales representative = 100	
19. Influence whether the other has the necessary material	Ability of Sales	
to do his/her work	representative = 100	
20. Influence whether the other gets an increase in pay	Ability of Sales representative = 100	
21. Provide the other with sound job related advice	Ability of Sales representative = 100	
22. His/her evaluation affects the other's prestige in the	Ability of Sales	
company	representative = 100	

Appendix N. Winsorizing and Transformation of Data: Perceived Reward-Power Difference Scale; Revised Short Form (22 Items), N = 77

	Before w	insorizii	ng and transfor	mation			After wi	nsorizing	and transform	ation
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
1Lo	0.58	0.28	1.74	0.55	400	5/12	-0.95	0.27	2.71	0.54
6Lo	2.53	0.28	8.50	0.55	400	5/12	0.93	0.27	3.02	0.54
12Lo	0.47	0.28	1.32	0.55	400	5/12	-0.69	0.27	2.88	0.54
18Lo	2.49	0.28	10.48	0.55	400	5/12	0.50	0.27	5.80	0.54
2Se	0.53	0.28	0.86	0.55	400	5/12	-0.99	0.27	3.04	0.54
7Se	0.21	0.28	0.55	0.55	400	5/12	-1.17	0.27	3.75	0.54
13Se	1.96	0.28	7.15	0.55	400	5/12	0.70	0.28	2.17	0.55
3Go	2.25	0.28	8.22	0.55	400	5/12	-0.28	0.27	2.21	0.54
8Go	1.34	0.28	4.98	0.55	400	5/12	-0.30	0.28	3.18	0.55
14Go	2.72	0.28	11.46	0.55	400	5/12	0.74	0.28	1.74	0.55

	Before w	insorizi	ng and transform	nation	-		After wi	nsorizing	and transform	ation
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
19Go	2.36	0.28	8.17	0.55	400	5/12	0.81	0.28	3.20	0.55
4Mo	3.83	0.28	19.39	0.55	400	5/12	0.48	0.28	1.01	0.55
9Mo	3.77	0.28	17.57	0.55	400	5/12	0.57	0.28	1.53	0.55
15Mo	1.23	0.28	2.38	0.55	400	5/12	-0.07	0.28	1.61	0.55
20Mo	3.59	0.28	18.42	0.55	400	5/12	0.46	0.28	1.35	0.55
5St	2.29	0.28	7.80	0.55	400	5/12	-0.79	0.28	4.71	0.55
11St	3.26	0.28	13.78	0.55	400	5/12	0.88	0.28	2.59	0.55
17St	3.48	0.28	15.97	0.55	400	5/12	0.12	0.28	3.35	0.55
22St	2.22	0.28	8.65	0.55	400	5/12	0.27	0.28	1.67	0.55
10In	2.68	0.28	9.98	0.55	400	5/12	1.00	0.28	2.09	0.55
16In	3.13	0.28	12.06	0.55	400	5/12	1.14	0.28	1.52	0.55
21In	2.75	0.28	12.70	0.55	400	5/12	0.63	0.27	2.55	0.54

*Note*. The numbers in the item labels refer to the item numbers in the questionnaire in Appendix M. No constant was added to the items before transformation.

#### Appendix O. Revised Scenario: High Reward-Power Difference Condition:

#### Manager

**Introduction: HealthyFoods Sales Negotiation (Mr./Ms. Mueller)** 

While reading the information below, please <u>underline what you consider to be the key</u> <u>points to remember</u> for your negotiation.

You will take the role of Mr./Ms. Mueller, general manager of the sales department of the HealthyFoods Corporation, a company producing and selling high quality frozen foods to supermarkets. In a few minutes, you will meet with M. Johnson, a sales representative in your company.

Before meeting with M. Johnson, please read the following role information.

**Your Position:** General Manager of Sales with the HealthyFoods

Corporation

Other Information:

- Chair of Promotions Committee (i.e., you have tremendous influence on any decisions about promotions and salary increases in the company)
- Central position in company's information network (all information from management assembly to sales employees and the other way around passes through you)
- Highly respected and influential in the company

# PLEASE TAKE A MOMENT TO RE-READ THE ABOVE ROLE INFORMATION SO THAT YOU UNDERSTAND IT COMPLETELY BEFORE MOVING ON

**The Situation:** Recently sales have dropped. Two remedial strategies have been decided on: Launching a new product line (Good&Easy single entrées packages) and targeting new audiences, such as hospitals and retirement homes. To make these efforts a success, you have argued in the management assembly that more money should be allocated to the sales department. However, the financial situation for the company has become more difficult recently, and although the sales department was able to secure a higher percentage of the total budget than in previous years, this amount is still barely equal to last year's.

**Your Goals**: There is no money to hire additional staff. Therefore, currently employed sales representatives need to:

- 1. introduce the new product line to existing customers
- 2. recruit new customers among the new target audience
- 3. support marketing in the development of the advertising strategy for the new

- product line (a promise made in budget negotiations)
- 4. increase sales of existing products (to finance advertising for the new line)
- 5. not take vacation in the fall (because that's when many institutions make financial decisions for the next fiscal year)

The work load of your sales representatives has been relatively low recently due to additional hires in the last couple of years. So, an increase in workload seems reasonable.

#### **Potential Compensations:** 1.

- reasonable bonus if overall sales volume increases by more than 50% including the new line or 20% excluding the new line
- 2. compensatory time off (as long as it's not in the fall)
- 3. staff could choose additional duties based on personal interest

One of your sales representatives, M. Johnson, has asked for a meeting and you expect that the main topic will be the increased workload.

#### Information on M. Johnson

**Position:** Sales representative with the HealthyFoods Corporation

Other Information:

- Average Sales Record
- Often out of the information loop (due to extensive traveling on the job)
- Not too much contact with other employees

You doubt that M. Johnson will risk challenging you too much, though, not only because your recommendations have major weight in decisions on salary increases but also because much of Johnson's work depends on the free flow of information from you to Johnson and your evaluation of Johnson's work carries major weight in the company.

In preparation for that meeting, please answer the questions attached about the relationship between M. Johnson and you.

### Appendix P. Revised Scenario: High Reward-Power Difference Condition: Sales Representative

Introduction: HealthyFoods Sales Negotiation (Mr./Ms. Johnson)

While reading the information below, please <u>underline what you consider to be the key</u> <u>point to remember</u> for your negotiation.

You will take the role of Mr./Ms. Johnson, a sales representative in the HealthyFoods Corporation, a company producing and selling high quality frozen foods to supermarkets. In a few minutes, you will meet with P. Mueller, the general manager of the sales department of your company.

Before meeting with P. Mueller, please read the following <u>role information</u>.

**Your Position:** Sales representative with the HealthyFoods Corporation

Other Information: • Average Sales Record

• Often out of the information loop (due to extensive traveling on the job)

• Not too much contact with other employees

PLEASE TAKE A MOMENT TO RE-READ THE ABOVE ROLE INFORMATION SO THAT YOU UNDERSTAND IT COMPLETELY BEFORE MOVING ON

**The Situation:** Recently the company's sales have dropped. Management has announced its plan to increase sales by introducing a new product line (Good&Easy single entrées packages) and by targeting new audiences, such as hospitals and retirement homes. No moves have been made, however, to hire additional staff. Now you have received a memo informing you that as a sales representative you will be asked to

- 1. introduce the new product line to existing customers
- 2. recruit new customers among the new target audience
- 3. support marketing in the development of the advertising strategy for the new product line
- 4. increase sales of existing products (to finance advertising for the new line)
- 5. not take vacation in the fall (because that's when many institutions make financial decisions for the next fiscal year)

**Your Goals:** You understand the company's efforts to solve their current financial problems, but you feel that management is asking too much. Your main points:

1. You do not want to add much more to your schedule (to avoid neglecting existing customer relations)

- 2. You ideally want no additional duties, but you see room for negotiation (see point 3)
- 3. some of the additional duties management listed sound more appealing than others:
  - a. Supporting the marketing team sounds interesting; you are ready to try it as long as hours are strictly limited.
  - b. Introducing the new line to existing customers could be done with little extra effort and may even boost your sales total. In that case, you are hoping for an adequate bonus.
  - c. You do not want to recruit customers among target groups you are not familiar with.
  - d. You have to take some vacation in the fall this year as your sister is getting married in Australia and you were actually planning to take all that year's vacation for that event.

You have made an appointment with P. Mueller, the general manager of the sales department, to discuss these issues.

#### Information on P. Mueller

**Position:** General Manager of Sales with the HealthyFoods Corporation

Other Information:

- Chair of Promotions Committee (i.e., has tremendous influence on any decisions about promotions and salary increases in the company)
- Central position in company's information network (all information from management assembly to sales employees and the other way around passes through Mueller)
- Highly respected and influential in the company

While talking to P. Mueller, you have to keep in mind that Mueller's recommendation has major weight in decisions on your salary increases, much of your work depends on the free flow of information from P. Mueller to you, and the manager's evaluation of your work carries major weight in the company and will influence the respect you get from others in the company. So, you do not want to upset Mueller too much.

In preparation for your negotiation, please answer the questions attached about the relationship between P. Mueller and you.

#### Appendix Q. Revised Scenario: Low Reward-Power Difference Condition: Manager

**Introduction: HealthyFoods Sales Negotiation (Mr./Ms. Mueller)** 

While reading the information below, please <u>underline what you consider to be the key</u> <u>points to remember</u> for your negotiation.

You will take the role of Mr./Ms. Mueller, assistant manager in the sales department of the HealthyFoods Corporation, a company producing and selling high quality frozen foods to supermarkets. In a few minutes, you will meet with M. Johnson, a sales representative in your department.

Before meeting with M. Johnson, please read the following role information.

**Your Position:** Assistant Manager of Sales with the HealthyFoods

Corporation

Other Information:

- Secretary of Promotions Committee (i.e., you are on the committee deciding on promotions and salary increases but are mostly responsible for taking notes in meetings)
- Somewhat peripheral position in company's information network

(information from management assembly to sales employees goes through a special information manager)

 Somewhat successful but not very influential in the company (in comparison to other members of the management assembly)

PLEASE TAKE A MOMENT TO RE-READ THE ABOVE ROLE INFORMATION SO THAT YOU UNDERSTAND IT COMPLETELY BEFORE MOVING ON.

The Situation: Recently sales have dropped. Two remedial strategies have been decided on: Launching a new product line (Good&Easy single entrées packages) and targeting new audiences, such as hospitals and retirement homes. To make these efforts a success, you have argued in the management assembly that more money should be allocated to the sales department. However, the financial situation for the company has become more difficult recently, and although the sales department was able to secure a higher percentage of the total budget than in previous years, this amount is still barely equal to last year's.

**Your Goals**: There is no money to hire additional staff. Therefore, currently employed sales representatives need to:

- 1. introduce the new product line to existing customers
- 2. recruit new customers among the new target audience
- 3. support marketing in the development of the advertising

- strategy for the new product line (a promise made in budget negotiations)
- 4. increase sales of existing products (to finance advertising for the new line)
- 5. not take vacation in the fall (because that's when many institutions make financial decisions for the next fiscal year)

The work load of your sales representatives has been relatively low recently due to additional hires in the last couple of years. So, an increase in workload seems reasonable.

- **Potential Compensations**: 1. reasonable bonus if overall sales volume increases by more than 50% including the new line or 20% excluding the new line
  - 2. compensatory time off (as long as it's not in the fall)
  - 3. staff could choose additional duties based on personal interest

Employees received the memo detailing the changes toward the end of last week and you are wondering how they feels about the issue. You expect some discussion, but hope that they will understand how important this effort is for the company and act accordingly. One of your sales representatives, M. Johnson, has asked for a meeting and you expect that the main topic will be the increased workload.

#### Information on M. Johnson

**Position:** Sales representative with the HealthyFoods Corporation

**Other Information:** 

- **Outstanding Sales Record**
- Very knowledgeable about everything going on in the company
- Well respected by co-workers and management alike

In preparation for that meeting, please answer the questions attached about the relationship between M. Johnson and you.

### Appendix R. Revised Scenario: Low Reward-Power Difference Condition: Sales Representative

#### **Introduction: HealthyFoods Sales Negotiation (Mr./Ms. Johnson)**

While reading the information below, please <u>underline what you consider to be the key</u> <u>point to remember</u> for your negotiation.

You will take the role of Mr./Ms. Johnson, a sales representative in the HealthyFoods Corporation, a company producing and selling high quality frozen foods to supermarkets. In a few minutes, you will meet with P. Mueller, the assistant manager of the sales department of your company.

Before meeting with P. Mueller, please read the following <u>role information</u>.

**Your Position:** Sales representative with the HealthyFoods Corporation

Other Information:

- Outstanding Sales Record
- Very knowledgeable about everything going on in the company
- Well respected by co-workers and management alike

PLEASE TAKE A MOMENT TO RE-READ THE ABOVE ROLE INFORMATION SO THAT YOU UNDERSTAND IT COMPLETELY BEFORE MOVING ON.

**The Situation:** Recently the company's sales have dropped. Management has announced its plan to increase sales by introducing a new product line (Good&Easy single entrées packages) and by targeting new audiences, such as hospitals and retirement homes. No moves have been made, however, to hire additional staff. Now you have received a memo informing you that as a sales representative you will be asked to

- 1. introduce the new product line to existing customers
- 2. recruit new customers among the new target audience
- 3. support marketing in the development of the advertising strategy for the new product line
- 4. increase sales of existing products (to finance advertising for the new line)
- 5. not take vacation in the fall (because that's when many institutions make financial decisions for the next fiscal year)

**Your Goals:** You understand the company's efforts to solve their current financial problems, but you feel that management is asking too much. <u>Your main points:</u>

1. You do not want to add much more to your schedule (to avoid neglecting existing customer relations)

- 2. You ideally want no additional duties, but you see room for negotiation (see point 3)
- 3. some of the additional duties management listed sound more appealing than others:
  - a. Supporting the marketing team sounds interesting; you are ready to try it as long as hours are strictly limited.
  - b. Introducing the new line to existing customers could be done with little extra effort and may even boost your sales total. In that case, you are hoping for an adequate bonus.
  - c. You do not want to recruit customers among target groups you are not familiar with.
  - d. You have to take some vacation in the fall this year as your sister is getting married in Australia and you were actually planning to take all that year's vacation for that event.

You have made an appointment with P. Mueller, the assistant manager of your department, to discuss these issues.

#### Information on P. Mueller

**Position:** Assistant Manager of Sales with the HealthyFoods Corporation

Other Information:

- Secretary of Promotions Committee (i.e., is on the committee deciding on promotions and salary increases but is mostly responsible for taking notes in meetings)
- Somewhat peripheral position in company's information network (information from management assembly to sales employees goes through a special information manager)
- Somewhat successful but not very influential in the company (in comparison to other members of the management assembly)

In preparation for your negotiation, please answer the questions attached about the relationship between P. Mueller and you.

Appendix S. Winsorizing and Transformation of Data: Perceived Reward-Power Difference Scale; Long Form (44 Items), N = 77

	Before wi	insorizin	g and transform	mation			After wi	nsorizing	and transform	ation
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
1MLo	0.96	0.28	0.97	0.55	400	1/2	0.63	0.28	-0.06	0.55
6MLo	4.39	0.28	27.40	0.55	400	1/2	1.09	0.28	1.92	0.55
12MLo	1.29	0.28	2.19	0.55	400	1/2	0.87	0.28	0.69	0.55
18MLo	3.41	0.28	18.34	0.55	400	1/2	1.41	0.28	3.67	0.55
2MSe	1.24	0.28	1.83	0.55	400	1/2	0.85	0.28	0.57	0.55
7MSe	2.22	0.28	8.31	0.55	400	1/2	0.53	0.28	1.97	0.55
13MSe	3.36	0.28	18.62	0.55	400	1/2	0.95	0.28	2.10	0.55
22MSt	2.07	0.28	6.99	0.55	400	1/2	0.87	0.28	1.14	0.55
5MSt	2.59	0.28	9.61	0.55	400	1/2	0.63	0.28	2.86	0.55
11MSt	2.66	0.28	12.04	0.55	400	1/2	0.53	0.28	3.09	0.55

	Before wi	nsorizir	ng and transforr	nation			After wi	nsorizing	and transform	ation
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
17MSt	2.00	0.28	7.77	0.55	400	1/2	0.18	0.28	2.81	0.55
19MGo	2.45	0.28	9.72	0.55	400	1/2	0.59	0.28	2.80	0.55
3MGo	2.59	0.28	11.43	0.55	400	1/2	0.92	0.28	1.81	0.55
8MGo	1.07	0.28	2.12	0.55	400	1/2	-0.00	0.28	2.43	0.55
14MGo	1.91	0.28	5.50	0.55	400	1/2	1.16	0.28	2.20	0.55
21MIn	6.94	0.28	53.89	0.55	400	1/2	0.63	0.28	4.00	0.55
10MIn	4.41	0.28	28.23	0.55	400	1/2	0.54	0.28	2.56	0.55
16MIn	2.48	0.28	9.84	0.55	400	1/2	1.02	0.28	1.86	0.55
20MMo	3.59	0.28	19.89	0.55	400	1/2	0.71	0.28	1.13	0.55
4MMo	4.25	0.28	23.25	0.55	400	1/2	0.74	0.28	1.33	0.55
9MMo	2.86	0.28	10.98	0.55	400	1/2	-0.53	0.28	6.53	0.55
15MMo	2.21	0.28	7.92	0.55	400	1/2	0.35	0.28	2.31	0.55

	Before wi	insorizir	ng and transforr	nation			After wi	nsorizing	and transform	ation
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
18SLo	0.31	0.28	1.38	0.55	400	1/2	-1.33	0.28	4.11	0.55
12SLo	1.43	0.28	5.03	0.55	400	1/2	-0.59	0.28	3.78	0.55
6SLo	0.54	0.28	1.16	0.55	400	1/2	-0.92	0.28	2.23	0.55
1SLo	0.71	0.28	2.26	0.55	400	1/2	-1.01	0.28	2.75	0.55
13SSe	0.50	0.28	-0.45	0.55	400	1/2	-0.41	0.28	-0.90	0.55
7SSe	2.60	0.28	11.23	0.55	400	1/2	-0.43	0.28	2.26	0.55
2SSe	2.99	0.28	16.31	0.55	400	1/2	-0.68	0.28	2.56	0.55
17SSt	5.12	0.28	36.66	0.55	400	1/2	-0.35	0.28	4.89	0.55
11SSt	0.48	0.28	0.49	0.55	400	1/2	-0.82	0.28	1.16	0.55
5SSt	1.06	0.28	4.96	0.55	400	1/2	-0.84	0.28	1.94	0.55
22SSt	-0.06	0.28	0.08	0.55	400	1/2	-1.29	0.28	1.38	0.55
14SGo	1.72	0.28	7.54	0.55	400	1/2	-0.45	0.28	-0.11	0.55

	Before wi	insorizin	g and transfor	mation			After wi	nsorizing	and transform	ation
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
8SGo	1.39	0.28	5.20	0.55	400	1/2	-0.44	0.28	-0.40	0.55
3SGo	1.72	0.28	6.30	0.55	400	1/2	-0.22	0.28	-0.59	0.55
19SGo	1.20	0.28	3.72	0.55	400	1/2	-0.50	0.28	-0.37	0.55
16SIn	1.32	0.28	5.00	0.55	400	1/2	-0.83	0.28	1.98	0.55
10SIn	6.13	0.28	45.87	0.55	400	1/2	0.54	0.28	2.53	0.55
21SIn	0.02	0.28	0.67	0.55	400	1/2	-1.33	0.28	1.71	0.55
15SMo	2.23	0.28	7.24	0.55	400	1/2	0.14	0.28	0.20	0.55
9SMo	0.74	0.28	1.21	0.55	400	1/2	-0.62	0.28	-0.11	0.55
4SMo	0.29	0.28	-0.06	0.55	400	1/2	-0.72	0.28	-0.45	0.55
20SMo	0.83	0.28	1.31	0.55	400	1/2	-0.47	0.28	-0.64	0.55

*Note*. The numbers in the item labels refer to the item numbers in the questionnaire in Appendix M. No constant was added to the items before transformation.

#### **Appendix T. Perceived Overall Power Difference Scale (long)**

We are interested in your perception of the relationship between the two parties involved in the negotiation (i.e., manager and sales representative). Think about the relationship between the two, and consider how strongly you agree with the statements below. Please assign a number to each statement representing <a href="https://www.negotiatrico.com/howstrongly-you agree">how strongly-you agree</a> with that statement. A <a href="mailto:rating-of-100">rating-of-100</a> represents a <a href="mailto:moderate amount of agreement">moderate amount of agreement</a>. You can choose any number from 0 on up to rate each statement.

For example: • If you agree less than moderately strongly -> 0–99

• If you agree more than moderately strongly-> Above 100

		Yardstick	Your Rating
1.	The sales representative can influence how the manager evaluates the work of others in his/her company.	Moderate level of agreement = 100	8
2.	The sales representative can influence how the manager evaluates his/her own work.	Moderate level of agreement = 100	
3.	The manager can influence the sales representative to work harder at his/her job.	Moderate level of agreement = 100	
4.	The sales representative can influence the way the manager does his/her work.	Moderate level of agreement = 100	
5.	The manager can influence the type of projects the sales representative works on.	Moderate level of agreement = 100	
6.	The sales representative can influence the type of projects the manager works on.	Moderate level of agreement = 100	
7.	The manager can influence the way the sales representative does his/her work.	Moderate level of agreement = 100	
8.	The sales representative can influence the manager to work harder at his/her job.	Moderate level of agreement = 100	
9.	The manager can influence how the sales representative evaluates the work of others in his/her company.	Moderate level of agreement = 100	
10	The manager can influence how the sales representative evaluates his/her own work.	Moderate level of agreement = 100	

Appendix U. Winsorizing and Transformation of Data: Perceived Overall Power Difference Scale Adapted From Nesler et al. (1999); 10 Items, N = 416

	Before w	insorizii	ng and transform	mation			After wi	nsorizing	and transform	ation
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
opd1	4.82	0.12	36.74	0.24	800	17/48	-0.27	0.12	7.52	0.24
opd2	4.32	0.12	34.64	0.24	800	17/48	-0.91	0.12	4.12	0.24
opd3	20.30	0.12	411.99	0.24	800	17/48	1.32	0.12	4.04	0.24
opd4	5.10	0.12	40.72	0.24	800	17/48	-0.52	0.12	4.27	0.24
opd5	6.59	0.12	63.51	0.24	800	17/48	0.68	0.12	5.89	0.24
opd6	4.32	0.12	32.73	0.24	800	17/48	-0.72	0.12	0.95	0.24
opd7	8.38	0.12	101.12	0.24	800	17/48	0.89	0.12	5.91	0.24
opd8	5.68	0.12	49.32	0.24	800	17/48	-0.71	0.12	3.05	0.24
opd9	6.31	0.12	54.93	0.24	800	17/48	-0.47	0.12	7.21	0.24
opd10	8.13	0.12	92.70	0.24	800	17/48	-0.10	0.12	6.53	0.24

*Note*. The numbers in the item labels refer to the item numbers in the questionnaire in Appendix T. No constant was added to the items before transformation.

### **Appendix V. Perceived Overall Power Difference Scale (short)**

The following statements describe things people working in organization may do. The **ability of the sales representative** to do what is described in the statement serves as the object of comparison and is **always** 100. Please **rate the ability of the manager** to do the things described **in relation to the sales representative described in this specific scenario**.

For example:

• If manager is less able to do what is described than the sales rep ->

0-99

• If manager is more able to do what is described than the sales rep ->

Above 100

	Yardstick	Your
		Rating
1. Influence the other to work harder at his/her job	Ability of Sales	
	representative	
	= 100	
2. Influence the type of projects the other works on	Ability of Sales	
	representative	
	= 100	
3. Influence the way the other does his/her work	Ability of Sales	
•	representative	
	= 100	
4. Influence how the other evaluates his/her work	Ability of Sales	
	representative	
	= 100	
5. Influence how the other evaluates the work of others in	Ability of Sales	
	representative	
the company	= 100	

Appendix W. Winsorizing and Transformation of Data: Perceived Overall Power Difference Scale Adapted From Nesler et al. (1999); Long Form (10 Items), N = 77

	Before w	rinsorizir	ng and transfor	mation			After wi	nsorizing	and transform	ation
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
1opd	1.69	0.28	4.26	0.55	400	1/2	0.55	0.28	1.93	0.55
2op2	0.80	0.28	2.63	0.55	400	1/2	-0.97	0.28	1.94	0.55
3opd	3.02	0.28	11.59	0.55	400	1/2	1.52	0.28	2.93	0.55
4opd	0.41	0.28	1.60	0.55	400	1/2	-1.13	0.28	2.06	0.55
5opd	2.14	0.28	8.38	0.55	400	1/2	0.74	0.28	0.74	0.55
6opd	0.26	0.28	-0.79	0.55	400	1/2	-0.53	0.28	-0.97	0.55
7opd	3.37	0.28	14.16	0.55	400	1/2	1.71	0.28	4.24	0.55
8opd	0.10	0.28	0.54	0.55	400	1/2	-1.24	0.28	1.35	0.55
9opd	1.01	0.28	3.28	0.55	400	1/2	-0.82	0.28	4.29	0.55
10opd	3.21	0.28	18.00	0.55	400	1/2	0.43	0.28	4.02	0.55

*Note*. The numbers in the item labels refer to the item numbers in the questionnaire in Appendix T. No constant was added to the items before transformation.

Appendix X. Winsorizing and Transformation of Data: Perceived Overall Power Difference Scale Adapted From Nesler et al. (1999); Shorter Form (5 Items), N = 77

	Before winsorizing and transformation						After winsorizing and transformation			
					Winsorizing	Exponent for				
Item	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
1opd	3.62	0.28	15.49	0.55	400	1/2	0.60	0.28	1.13	0.55
2opd	1.42	0.28	3.47	0.55	400	1/2	0.51	0.28	2.12	0.55
3opd	3.22	0.28	15.05	0.55	400	1/2	1.24	0.28	4.50	0.55
4opd	2.24	0.28	9.33	0.55	400	1/2	-0.18	0.28	7.06	0.55
5opd	1.98	0.28	8.47	0.55	400	1/2	0.44	0.28	3.45	0.55

*Note.* The numbers in the item labels refer to the item numbers in the questionnaire in Appendix V. No constant was added to the items before transformation.

# Appendix Y. Negotiation Preparation Sheet for Managers

Please use this page to prepare for your negotiation: Define your specific goals based on the information given in the scenario. Identify for each issue the level of importance, as well as your specific expectations from the employees.

<u>Issue 1:</u>	introducing	the new p	roduct line to existing	g customers	
Importance:	very high	high	medium	low	very low
Your expectat	tions of sales	representati	ves for this issue eithe	er in hours of	work/week or
in percent of	increase in s	ales volum	e:		
Issue 2:	recruiting n	new custom	ers among the new t	arget audienc	e
Importance:	very high	high	medium	low	very low
Your expectar	tions, either in	hours of v	vork/week or in perc	ent of increas	se in sales
volume:					
Issue 3:			in the development one (a promise made in		0 0
Importance:	very high	high	medium	low	very low
Your expectar	tions in hours	of work/w	reek:		
Issue 4: in	creasing sale	s of existin	g products (to finance	e advertising fo	or the new line)
Importance:	very high	high	medium	low	very low
Your expectat	tions <b>in perce</b>	nt of incre	ase in sales volume: _		
Issue 5:	U		the fall (because that' for the next fiscal year		nstitutions
Importance:	very high	high	medium	low	very low
Other Notes:					

# Appendix Z. Negotiation Preparation Sheet for Sales Representatives

Please use this page to prepare for your negotiation: Define your specific goals based on the information given in the scenario. Identify for each issue how willing you are to do it, as well as how much work specifically you would be willing to put into it.

Issue 1:	introducing	the new p	roduct line to existing	customers	
Willingness:	very high	high	medium	low	very low
Number of ho	ours/week you	would be	willing to work on this	issue:	
Absolute max	ximum you co	uld imagin	e agreeing to working o	on this issue: _	
Issue 2:	recruiting r	new custon	ners among the new ta	rget audienc	e
Willingness:	very high	high	medium	low	very low
Number of ho	ours/week you	would be	willing to work on this	issue:	
Absolute max	ximum you co	uld imagin	e agreeing to working o	on this issue: _	
Issue 3:	supporting for the new		g in the development one	f the advertis	sing strategy
Willingness:	very high	high	medium	low	very low
Number of ho	ours/week you	would be	willing to work on this	issue:	
Absolute max	ximum you co	uld imagin	e agreeing to working o	on this issue: _	
<u>Issue 4:</u> in	ncreasing sal	es of existi	ng products (to finance	e advertising f	or the new line)
Willingness:	very high	high	medium	low	very low
Number of ho	ours/week you	would be	willing to work on this	issue:	
Absolute max	ximum you co	uld imagin	e agreeing to working o	on this issue: _	
Issue 5:			the fall (because that's s for the next fiscal year		nstitutions
Willingness:	very high	high	medium	low	very low
Other Notes:					

#### Appendix AA. Coding Instructions and Coding Scheme

<u>Unit of Analysis</u>: Acts (i.e., each single occurrence of a resource use)

<u>Power Tactics:</u> Any tactic that uses the negotiator's resources (including position in the hierarchy) to increase his/her chances of goal achievement.

#### File 1 (Coding1)

ID: see dvd label (order of ID numbers on the label is the order of the recordings on the dvd)

Manemp: role of manager or employee: enter 0 for employee and 1 for manager

Time: enter time in clip the tactic was used (e.g., 2:42)

Text: transcribe the complete sentence using the tactic

Resource (res.): enter 1 for Service (activities on the body or belongings of a person (or for the organization) which often constitute labor for another)

- 2 for Goods (tangible products, objects, or materials; including vacation)
- 3 for Money (any coin, currency, or token which has some standard unit of value)
- 4 for Information (incl. advice, opinion, instruction, or enlightenment)
- 5 for Status (expression of evaluative judgment which conveys high or low prestige, regard, or esteem)
- 6 for Love (expression of affectionate regard, warmth, or comfort)

Also enter

7 for Rights (i.e., referring to an independent standard of fairness; e.g., a contract, the law, the board...)

Updown ( $\uparrow\downarrow$ ): enter

- 1 for upping oneself (e.g., I am very influential in the company.)
- 2 for downing oneself (e.g., I do not have that much clout with management)
- 3 for upping the other (e.g., You are an outstanding employee.)
- 4 for downing the other (e.g., You can easily be replaced.)

#### Additional rules:

- 1. If one sentence contains more than one resource-use, code each resource-use separately.
- 2. If participants mention a resource (e.g., promise a service) but do not ask for anything in return, do not code this as resource-use.
- 3. If participants use resources more than one time in a sentence but only mention what they want in return once, transcribe the sentence as it was said (rather than

repeating what the participant wanted; the time information should show that the two were used together, i.e., that the resource-use did not violate rule 2 above.

# **Coding Scheme:**

Resource	Power use: upping self	Power use: putting other down	Power balancing: upping other	Power balancing: putting self down
Money				
Goods				
Status				
Love				
Information				
Service				

# Appendix AB. Example for Coded Negotiation: Low Reward Power Difference Condition

The following labels and codes are used in this Appendix:

role: 1 for manager, 0 for employee

time: time in the recording at which a resource was used

res.: resource used: 1 for Service, 2 for Goods, 3 for Money, 4 for Information, 5 for Status, 6 for Love, 7 for Rights

↑↓: Updown: 1 for upping oneself, 2 for downing oneself, 3 for upping the other, 4 for downing the other

role	time	resource-use	res.	$\uparrow \downarrow$
1	2:23	as employee for the company you have to realize the importance of things we have to dopolicy is to not take vacation	7	1
	3:16	I do realize that you are a very respected member of our company	5	3
	3:20	policy is policy	7	1
	3:27	It's really out of my control, I can talk to someone and try to get you your vacation because I understand that it was short notice.	5	2
	3:37	but it's really out of my control, it's company policy	5	2
	5:36	You are a respected employee but I feel you should know your priority to the company as a respected employee	5	3
	5:40	If we don't (increase sales) you are not just at risk to lose your job, we all are.	3	4
	5:50	And I am sure after your sister gets married you want to come back to your job.	3	1
	6:10	if sales do increase we can guarantee vacation after	2	1
	6:20	And with the outstanding sales record, we really need you.	5	3
	6:45	If our sales do increase you will get a bonus	3	1
	6:51	and you'll get time off as long as it's not in the fall.	2	1
	6:56	and you can get additional duties based on your interests.	1	1
	7:09	You will get compensation for this hard work (if?) we see the efforts being made.	3	1
	8:05	You will definitely get vacation time once everything works out,you will be compensated.	2 3	1 1

role	time	resource-use	res.	$\uparrow \downarrow$					
	10:05	You will be vacation time, we cannot guarantee it in the fall, but you will get vacation time.	2	1					
	10:36	If you want to be compensated, part of it will have to be your recruiting new customers	3	1					
	11:20	You are such a valued employee	5	3					
	11:40	you are very well respected, I feel like you would want to increase our sales.  12:44 You will get a vacation, just absolutely not in the fall.							
		you are very well respected, I feel like you would want to increase our sales.	5	3					
	12:44	You will get a vacation, just absolutely not in the fall.	2	1					
	14:13	We don't want you to leave because we need you, honestly	5	3					
	14:28	28 Everybody leaving right now would hurt us, especially you with your outstanding record							
	14:30	Management is working hard, it's not just one person	1	1					
	14:40	We don't have money to hire additional stuff right now, so we just have to make up for it.	3	2					
	15:00	As soon as the Fall is over, we will have more money And you will get compenated	3	1					
		you will work fewer hours	1	1					
	and of course get the vacation it just cannot be in the fall								
	16:40	:40 We cannot have one person take vacation in the fall and nobody else can.							
	16:50	For you to take off and nobody else can, I don't think that would be fair to the other workers	7	1					
	16:56	Losing you would definitely hurt us but it's a policy	7	1					
	17:00	I assure you that you will definitely get paid	3	1					
		and you will get time off, but not in the fall.	2	1					
	17:55	The policy is to not give vacation in the fall, so it's out of my hands to change that policy	7	2					
	18:10	I am just an assistant manager of sales, I cannot bend these rules	5	2					
0	2:50	As employee of the company I also have the right to be notified of such changes earlier.	7	1					
	3:03	I have outstanding sales record.	5	1					
	3:04	I am very knowledgable about everything going on in the company	4	1					
	3:08	I am well respected by coworkers and management alike	5	1					
	4:50	These project are usually planned much more in advance, so our company doing this last minute I can still help, not to the extent that the company wants me to.	1	1					
	5:10	I already have my plans outside the company planned, so for me to give those up would be unfair to me especially at such a late notice.	7	1					
	6:39	Is it really fair for me to be doing this much more work?	7	1					
	9:28	I am ready to try supporting the marketing team as long as my hours are stricly limited.	1	1					

;	time	resource-use	res.	1
9	9:44	(?boost sales total), I am hoping for an adequate bonus	1	1
1	10:45	I am ready to support the marketing team as long as the hours are limited.	1	1
1	11:50	I want to help the company's goals, but I have to think about my personal goals	1	1
1	12:08	I can help with the project, it's just the duties that have been given to me have to be limited to some extent.	1	1
1	12:30	I can work more hours in the week so that in the end my assistance won't be needed as much and my going on vacation won't be a problem.	1	1
1	13:37	I am willing to work up to 70 hours at the beginning of this project and I feel that if I work that much in the beginning there s hould be no problem(vacation)	1	1
1	13:50	especially as I am only a sales rep and there are many other people, many other in management that could be handling some of the duties	1	2
1	14:00	Because of my record of being able to accomplish these things in the little time I have in the beginning	1	1
1	14:05	I could probably get our sales up	1	1
1	15:30	Considering my record with the company	5	1
		I think it's fair to ask for time off in the fall	7	1
1	15:50	I think it would be detrimental to the company to hire a new sales representative with no experience	5	4
1	16:00	Considering my history with the company, it would be better for the company to keep me	1	4
1	16:10	We can do this by increasing the hours in the beginning and then maybe taking half the year's vacation in the fall	1	1
1	17:40	I would have all my work completed before I go on vacation so that the financial decisions would not be as stressful	1	1

# Appendix AC. Example for Coded Negotiation: High Reward Power Difference Condition

The following labels and codes are used in this Appendix:

role: 1 for manager, 0 for employee

time: time in the recording at which a resource was used

res.: resource used: 1 for Service, 2 for Goods, 3 for Money, 4 for Information, 5 for Status, 6 for Love, 7 for Rights

↑↓: Updown: 1 for upping oneself, 2 for downing oneself, 3 for upping the other, 4 for downing the other

role	time	resource-use	res.	$\uparrow \downarrow$
1	1:15	I understand that you already have a tough schedule	6	1
		but actually recently we have not been pushing you guys as hard as in the past	1	4
		and we thought we'd introduce (the new product line) as sales have dropped recently	3	2
	1:35	and there is a reasonable bonus involved if you can increase the sales 50% 20%	3	1
	3:15	It should be more efficient than before, because now you are familiar with the product, but you have new audiences to show them to	4	3
	4:00	I understand that your sister is not gonna get married again the year after, but fall is when a lot of financial decisions are made, so would it be possible to just cut that time down?	6	1
	4:35	What I'm saying is that you can go for the wedding but you don't need to stay too much before and after	2	1
	5:05	There is compensatory time off if we get the sales up	2	1
	5:58	It's a new product, but since you are experienced in sales, I thought it would be good for you to continue to do that	5	3
	7:34	That's a total of 50 hours a week, which I understand is more than you have been working, but there is a reasonable bonus	3	1
		and you can get compensatory time off later	2	1
	8:14	I am on the Chair of Promotions Committtee, so I have some influence there, but that all just depends on how much you can increase these sales	5	1

role	time	resource-use	res.	$\uparrow \downarrow$
	8:18	We've laid the work off you guys recently at little, so it's not as much as you usually have, so I thought to make up for the easiness you had we can put in a little extra now	1	4
	8:35	but I am very influential in making decisions about promotions and salary increases, so I will look into that based on your sales	5	1
0	1:00	My schedule is already full and you are trying to push all these new duties on me	1	1
	1:48	I have no problem introducing it (the new product) to my already existing customers but introducing it to a new target audience worries me	1	1
		I am unfamiliar with them; that's not my usual customers	4	2
	4:46	As long as I can make it to the wedding, I don't have to stay there	2	1
	5:20	Marketing, I'd definitely be willing to do that as long as it does not take too many hours	1	1
	8:00	The bonus is not set in stone; I don't want to work that much more and then is there a way you can increase my salary?	1	1

# Appendix AD. Winsorizing and Transformation of Data: Main Study

Abbreviations: M: Data from Managers PD: Power Distance PRPD: Perceived Reward-Power Distance

POPD: Perceived Overall Power Distance S: Data for Subordinates

Before winsorizing and transformation							After winsorizing and transformation			ation
					Winsorizing	Exponent for				
Scale	skewness	SE	kurtosis	SE	cutoff	transformation	skewness	SE	kurtosis	SE
MPD	1.56	0.20	4.39	0.20	400	1/3	0.62	0.20	2.19	0.40
MPRPD	1.30	0.20	3.28	0.40	500	13/24	0.97	0.20	2.01	0.40
MPOPD	1.97	0.20	8.32	0.40	400	2/3	1.69	0.20	5.56	0.40
SPD	1.56	0.20	3.99	0.40	400	1/12	0.62	0.20	0.63	0.40
SPRPD	2.78	0.20	9.90	0.40	500	9/24	1.56	0.20	4.79	0.40
SPOPD	3.29	0.20	14.46	0.40	500	1/3	1.83	0.20	6.39	0.40
M tactics	1.92	0.20	4.71	0.40	none	5/12	0.11	0.20	0.49	0.40
S tactics	1.69	0.20	4.27	0.40	none	1/2	0.11	0.20	0.88	0.40

*Note.* No constant was added to the items before transformation for MPRPD, MPOPD, SPRPD, SPOPD, M tactics and S tactics. For MPD and SPD, a constant of 120 was added before transformation.

#### Appendix AE. Correlation Matrix for Variables Included in the Main Study

The following labels are used in the correlation matrix:

r: Pearson Correlation p: sig. (2 tailed)

MPRPD\_tt: managers' perceived reward-power difference

MPOPD\_2t: managers' perceived overall power difference

b1234\_5t: number of power tactics used by managers MPD\_trf: power distance of managers

e1234srt: number of power tactics used by sales representatives

SPRPD nt: sales representatives' perceived reward power difference

SPOPD sales representatives' perceived overall power difference

SPD\_trf: power distance of sales representatives

		MPOPD_2t	b1234_5t	SPRPD_nt	SPOPD	e1234srt	MPD_trf	SPD_trf
MPRPD_tt	r	.821**	047	099	072	018	.364**	094
	p	.000	.574	.231	.383	.832	.000	.260
MPOPD_2t	r		056	075	055	002	.330**	076
	p		.501	.366	.509	.977	.000	.362
b1234_5t	r			050	085	.417**	038	131
	p			.547	.304	.000	.649	.114
SPRPD_nt	r				.910**	.112	050	.534**
	p				.000	.176	.549	.000
SPOPD	r					.044	051	.481**
	p					.594	.542	.000
e1234srt	r						.089	034
	p						.281	.686
MPD_trf	r							041
	p							.621

*Note.* The *N* for all correlations in this table was 147.

<sup>\*\*</sup>p < .001 (2 tailed).

# Appendix AF. Model Syntax for LISREL and Covariance Matrix Used to Test the Hypothesized Model

The following labels are used for variables in the model syntax:

```
X_1 manipulation of reward-power difference
```

```
X_2 power distance (managers)
```

```
X_3 power distance (subordinates)
```

```
NegPowModel
```

```
DA NI=9 NO=147 MA=CM
```

LA

#### **CMATRIX**

2115.053

971.899 663.021

-2.091 -1.346 0.614

-93.984 -39.751 -0.698 422.086

-10.459 -4.437 -0.203 58.711 9.856

4.283 2.275 0.365 1.472 0.136 1.613

13.773 8.134 -0.095 4.915 0.602 -0.322 1.000

MO NY=6 NE=6 NX=3 NK=3 FI LY=ID LX=ID TE=DI, FI TD=DI, FI BE=FU, FI GA=FU, FI PS=FU,

FR GA 1 1 GA 1 2 GA 2 2 GA 4 1 GA 4 3 GA 5 3 BE 2 1 BE 3 2 BE 5 4 BE 6 5 PS 4 1 PS 5 2 PS 6 3 PS 1 1 PS 2 2 PS 3 3 PS 4 4 PS 5 5 PS 6 6

VA 9.0432 TD 2 2

VA 0.0035 TD 3 3

VA 49.4092 TE 1 1

VA 30.7286 TE 2 2

VA 15.7266 TE 4 4

VA 0.00 TE 5 5 VA 0.0663 TE 3 3 VA 0.0669 TE 6 6 PD OU AD=OFF

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