How are Choice Givers Perceived?
Effects of Choice Provision on Leadership and Trust Perceptions

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ABSTRACT

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Yong-Joo Roy Chua

Managers today often try to engage employees by giving them more freedom and flexibility at work. One simple yet powerful way to do so is to give them choice, i.e., the selection of one or more options out of multiple available alternatives. However, choice as a tactic in granting employees work flexibility is seldom explicitly studied in organizational research. In this dissertation, I investigate how choice givers are perceived in terms of leadership and trust when they offer different degree of choice to others. I conceptualize degree of choice broadly as the extent of flexibility and freedom that one faces when receiving choice. Examples include the number of options available in a choice set, the frequency by which choice is given, and the degree of constraint during choice decisions.

In my theory development, I draw on social psychological research which shows that perceived warmth and competence are the two universal dimensions of human social cognition. Specifically, I propose that the higher degree of choice one gives to another person at work, the more one is perceived as warm or agreeable. Giving others choice beyond a certain level, however, might cause one to be perceived as less competent or conscientious because a high degree of choice causes the task at hand, or one’s job in general, to be more unstructured and ambiguous. I then use this set of basic predictions as building blocks to derive other perceptual outcomes such as leadership and trust.
Through six studies, I show that there is an *inverted-U shape relationship* between degree of choice and leadership perceptions. Those who give others a moderate degree of choice are likely to be perceived as more of a leader than either those who give a low degree of choice (or no choice) or those who give a high degree of choice. Further, I demonstrate that the increase in leadership perceptions between low and moderate degree of choice is mediated by increased perceived *warmth*; whereas the decrease in leadership perceptions between moderate and high degree of choice is mediated by decreased perceived *competence*.

I also consider the effects of choice provision on interpersonal trust. Adopting the basic distinction between affect- versus cognition-based trust, I show that degree of choice is positively associated with affect-based trust but *negatively* associated with cognition-based trust. These relationships can be explained by perceived warmth and competence respectively. Theoretical and practical implications of these findings are discussed.
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CHAPTER 1
INTRODUCTION
Managers today often try to engage employees at the workplace by involving them in organizational decision making. There are many approaches by which managers can achieve this. Prior research on employee involvement has examined tactics such as delegation (i.e., giving employees complete responsibility over certain decisions) and participative management (i.e., giving employees varying degrees of process control, or “voice,” during decision making processes) (e.g., Leana, 1986; Schriesheim, Neider, & Scandura, 1998; Cotton, Vollrath, Froggatt, Lengnick-Hall & Jennings, 1988). Less commonly discussed is the provision of choice, that is, the selection of one or more options out of multiple available alternatives. Even less examined is how choice givers are perceived by choice receivers. Yet, giving employees choice in their work is one of the simplest and most commonly available tactics for increasing employee involvement in decision making (Chua & Iyengar, 2006).

In this dissertation, I investigate the effects of choice provision on how choice givers are perceived in terms of leadership and trust. In their effort to engage others by giving them choice in their work, could managers also be altering, or worse, undermining their leadership and trustworthiness standing in the eyes of others? This is an important question because choice is a readily available tactic commonly used by managers. At the same time, leadership and trust perceptions are highly important perceptual variable for

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1 Following the procedural justice research, I differentiate between choice versus voice (Earley & Lind, 1987). Voice refers to participation via expression of opinions or values whereas choice refers to participation via selection of decision options. The provision of voice can take many forms in terms of different decision rules (e.g., Cotton et al., 1988; Peterson, 1999); the provision of choice is comparatively more straightforward, involving mainly the provision of a choice set.
managers, often linked to managerial success (Hogg, 2001; Maurer & Lord, 1991; Hollander & Julian, 1969). Thus, it is worthwhile to better understand how giving others choice influences people’s judgments of choice givers with regards to leadership and trust.

I propose that by giving others varying degrees of choice, managers invoke differential effects on leadership and trust evaluations through interpersonal perceptions of warmth and competence. In this research, I conceptualize degree of choice broadly such that it includes not only the number of options available in a choice set but also the frequency by which choice is given, and the degree of flexibility and freedom under which choices can be made. By doing so, I hope to provide a richer analysis of how choice givers are perceived, compared to just focusing on a single aspect of choice provision such as the number of choices.

In my theory development, I draw on a long tradition of social psychological research which shows that perceived warmth and competence are the two universal dimensions of human social cognition (Fiske, Cuddy, & Glick, 2007). I first describe how degree of choice invokes differential effects on warmth and competence perceptions of the choice giver. I then use this set of basic predictions as building blocks to derive other perceptual outcomes regarding leadership and trust. In the ensuing sections, I first review some key theoretical underpinnings regarding choice provision and the literature on warmth and competence as universal dimensions of social perception before developing specific hypotheses. Next, I describe a series of six studies that I have conducted to elucidate how choice givers are perceived as leaders and how choice receivers trust them.
EFFECTS OF CHOICE PROVISION

Choice is frequently encountered in organizational decision making in the form of the selection of one or more options from among multiple available alternatives (Sheppard, 1983, 1984). Examples include choosing which programming language to use to implement new software, choosing which color theme to use for an advertising campaign, and offering a colleague multiple options during an inter-department negotiation. Such problem-solving contexts are ubiquitous, providing ample opportunities for managers to give others choice as a means of increasing their sense of control over a task, and in turn their engagement in the task.

The idea that choice confers personal agency and control to the chooser, and is thus intrinsically motivating, can be traced back to early psychological research on choice and self-determination (deCharms, 1968; Deci, Connell, & Ryan, 1989; McClelland, 1975; Deci, 1975). Across many domains of inquiry, psychologists have found that the provision of choice increases an individual’s sense of personal control (Lefcourt, 1973; Rotter, 1966; Taylor, 1989; Taylor & Brown, 1988) and feelings of intrinsic motivation (deCharms, 1968; Deci, 1981; Deci & Ryan, 1985). Yet choice research thus far has largely ignored how choice givers are perceived, choosing instead to focus on the motivational states and work performance of the choice receivers. Put differently, extant research on choice focuses primarily on the intrapersonal experience of having freedom and discretion (e.g., motivation and satisfaction). Less commonly examined is the interpersonal experience of receiving choice.

To the extent that choice provision is very much an interpersonal act involving explicit social interaction between a choice giver and a choice receiver, it is useful to not
only pay attention to the intrapersonal experience of receiving choice but also to examine how the act of giving choice to others influence interpersonal perceptions. By studying the interpersonal process of choice, I hope to highlight to managers a largely neglected aspect of choice provision – they could be judged based on how they give choice to others.

Of course, there are many aspects to choice provision. Some key ones include number of choices (i.e., number of options in a choice set), content of choices (positive versus negative options; consequential versus inconsequential options), and frequency of choice (i.e., how often is choice presented?). In the present research, I focus on the degree of flexibility and freedom that choice givers give to choice receivers (henceforth referred to as degree of choice). Specifically, I examine aspects of choice provision pertaining to the number of choices, the frequency by which choice is given, and the degree of constraint surrounding choice decisions. All these aspects of choice provision invoke varying degrees of flexibility and freedom for the choice receiver. For instance, the larger the number of choices one is given, the more latitude there is to choose a desired option. The more frequently choice is given, the more often one can determine for oneself based on one's preference. Finally, the lower the degree of constraint surrounding choice decisions (e.g., less rules governing how choices can be made), the greater the latitude there is for making a decision.

WARMTH AND COMPETENCE PERCEPTIONS

So, how are choice givers perceived? To address this question, I draw on a long tradition of basic social psychological research which shows that perceived warmth and competence are the two universal dimensions of human social cognition (Fiske, Cuddy, &
Glick, 2007). In a series of influential studies, Fiske and colleagues found that when people interact with others, they are mostly interested in finding out the *warmth* and *competence* dimensions of the others’ actions (Fiske, Cuddy, Glick, & Xu, 2002; Wojciszke, 2005). The *warmth* dimension reflects perceptions related to friendliness, sincerity, and sociability whereas the *competence* dimension captures ability-related perceptions such as intelligence, skills, and industriousness. The focus on these two dimensions has survival values because in interacting with others, it is important to know whether they harbor good intentions toward oneself (*warmth*). It is also key to know whether others have the capability in enacting their intentions (*competence*). Given that these two basic dimensions of *warmth* and *competence* in social perception account for significant variance in perceptions of everyday social behaviors (Wojciszke, Bazinska, & Jaworski, 1998), they can be particularly useful in illuminating the nuances in interpersonal perceptions.

I propose that the higher degree of choice one gives to another person at work, the more one is perceived as warm or agreeable. This is because giving others choice can be construed as social consideration, interpersonal sensitivity, and an expression of respect. The provision of choice can also be interpreted as sharing of control and power, and hence an expression of trust. Managers who do not give any choice (i.e., they simply dictate what is to be done), rarely give choice, or impose tremendous constraints upon how choices should be made when giving choice might be perceived as authoritarian, domineering, or even pushy. Thus, the degree of choice a manager gives to others should, in general, be positively associated with how warm and agreeable this manager is perceived.
Giving others choice beyond a certain level, however, might cause one to be perceived as less competent or conscientious because a high degree of choice causes the task at hand, or one's job in general, to be more unstructured and ambiguous. Specifically, with higher degree of choice (e.g., giving many options, giving choice very often, and giving little guidance on how choices should be made), there are more means or paths toward attaining the desired goal, decreasing task and role clarity (Evans, 1970; House, 1971). Although the provision of a single, clear, and specific path toward goal attainment does not guarantee better actual outcomes (e.g., Fleishman & Harris, 1962; Korman, 1966; Judge, Piccolo, & Illies, 2004), it would create the impression that the manager is confident, decisive, and knows exactly how to achieve a given goal (i.e., competent), at least before any outcome becomes apparent. A high degree of choice may also induce attributions that the choice giver was lazy or did not have sufficient expertise to provide more specific directions. Thus, the degree of choice a manager gives to others should, in general, be negatively associated with how competence and conscientious this manager is perceived.

In sum, I argue that the degree of choice provided should be positively related to perceived warmth but negatively related to perceived competence. These differential effects of choice provision on warmth and competence perceptions are depicted in Figure 1. In the following sections, I will discuss how these differential effects of choice on warmth and competence perceptions can be used to understand how choice influence leadership and trust evaluations.
EFFECTS OF CHOICE ON LEADERSHIP PERCEPTIONS

In organizational contexts, one key perceptual variable that is highly important to managers is how they are perceived as a leader by other organizational actors, in particular their bosses, peers, and subordinates. Being seen as a leader has clear benefits. The more one is regarded as a leader, the more effective one would be in influencing organizational decisions and policies (Pfeffer, 1977; Jago, 1982; Bass, 1990). Those who are thought of as leaders are also more likely to reap tangible rewards such as being given opportunities to lead important projects or getting promoted (Schyns, 2006).

Extensive leadership research has shown that leader behavior influences perceptions of leadership (e.g., Stogdill, 1950; Stogdill, Goode, & Day, 1963a, 1963b, 1964; Hollander & Julian, 1969; House, 1971; Lord, 1977; Phillips, 1984; Ames & Flynn, 2007). People observe leaders’ behaviors to make inferences about their leadership ability. Specifically, when people observe certain leader behaviors, they will first encode them into their relevant traits. These traits are then compared to those in their implicit leadership theories (i.e., assumptions that people hold regarding the traits, abilities, and behaviors that characterize a leader) when making leadership evaluations (Eden & Leviatan, 1975; Lord & Maher, 1993; Lord, Foti, & DeVader, 1984).

Classic leadership research also suggests that leader behaviors can be decomposed into two broad categories – **consideration** and **initiating structure** (or **structure** for short) (Stogdill, 1950; Korman, 1966; Fleishman, 1973; Judge, Piccolo, & Illies, 2004). Both are important for effective leadership. **Consideration** refers to the extent to which a leader conveys concern, respect, and care for followers, looks out for their interests and welfare, and expresses appreciation and support when necessary (Bass 1990). This dimension of
leader behaviors is frequently described as supportive, socio-emotional, or expressive (Parson, 1951; Etzioni, 1961). Leaders who exhibit high consideration are likely to be perceived as likeable and agreeable. Thus, consideration-associated behaviors maps on to the *warmth* dimension of social perception.

Conversely, *structure* refers to the extent to which a leader defines, organizes, and provides clear directions for his or her followers. The focus is on goal attainment and involves the establishment of well-defined patterns of work processes and communication (Fleishman, 1973; Stogdill & Coons, 1957). This dimension of leader behaviors, highly directive and task-oriented, can be described as instrumental in nature (Parson, 1951) and has been associated with higher workgroup productivity (Filley & House, 1969) and lower intergroup conflict (Oakland & Fleishman 1964). Leaders who exhibit high *structure* are therefore likely to be perceived as competent, conscientious, and well-organized. Thus, structure-associated behavior maps on to the *competence* dimension of social perception.

I propose that the degree of choice managers give influences how they are perceived as leaders. Those who give others a moderate degree of choice are likely to be perceived by the choice receiver to be more of a leader than those who do not give choice, or those who give a high degree of choice. I derive this inverted-U shape relationship between choice and leadership perceptions via a *person perception* approach. Giving others some degree of choice in their work could render one to be perceived as warm or agreeable, a positive leadership quality (Lord, et al 1984; Bass, 1990; Offermann, Kennedy, & Wirtz, 1994; Epitropaki & Martin, 2004; Feishman, 1973, 1995; Stogdill, 1950). Conversely, to the extent that leadership is associated with the provision
of direction, structure, and organization for followers (e.g., Fleishman, 1973, 1995; Stogdill, 1950; House, Filley & Gujarati, 1971; Lowin, Hrapchak, & Kavanagh, 1969), giving others a high degree of choice could render one to be perceived as disorganized, incompetent, and un-conscientious.

If choice provision is related to perceived warmth and competence in opposite directions as discussed earlier, could they cancel out each other such that the provision of choice have no effect on leadership perceptions? I argue that this is unlikely. An accumulating body of psychological research has shown that perceivers tend to exhibit negativity bias (see Rozin & Royzman, 2001 and Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001 for reviews). In other words, perceivers tend to pay more attention and give more weight to negative aspects of other people and events, as opposed to their positive attributes. This is because negative information represents potential threats and danger, and hence receives more processing and contributes more strongly to the final impression than positive information (Baumeister, et al 2001). Although most work in negativity bias focused on impression formation in non-organizational contexts, emerging research shows that negativity bias extends to leader perceptions as well (Amabile, Schatzel, Moneta, & Kramer, 2004; Ames & Flynn, 2007).

In the context of choice provision, managers who give others no choice or a low degree of choice in their work would elicit positive perceptions of high competence (e.g., they simply direct what is to be done and thus come across as focused, confident, and organized) but negative perceptions of low warmth (they are not socially sensitive and did not solicit input from others). However, it is the negative perceptions that outweigh the positive ones. Similarly, when managers give a high degree of choice to others,
negative perceptions of low competence (lack of structure and task ambiguity) outweigh positive perceptions of high warmth. In either scenario (no choice/low degree of choice and high degree of choice), even though there are both benefits and costs, it is the costs that stood out, dampening leadership evaluations (Rozin & Royzman, 2001). At a moderate degree of choice however, the positive perceptions of warmth are still present (since choice is given) but the negative perceptions of low competence are neither overwhelming nor especially salient. This is because at a moderate degree of choice, the choice receiver did not have to grapple with overwhelming task ambiguity and uncertainty. Thus, it is at a moderate degree of choice that leadership perceptions should be most favorable, giving rise to an inverted-U shape effect\(^2\) as depicted graphically in Figure 2A.

**Hypothesis 1 (H1):** There is an inverted-U shape relationship between degree of choice and how the choice giver is perceived as a leader such that (a) those who give others moderate degree of choice are perceived as more effective leaders than those who give no choice or low degree of choice; (b) those who give others a high degree of choice are perceived as less effective leaders than those who give moderate degree of choice.

**Hypothesis 2a (H2a):** The increase in leadership perception between low and moderate degree of choice is mediated by increase in warmth perception.

\(^2\) It is worth noting the similarities between the hypothesized effects in this research and those proposed by Ames and Flynn (2007) who studied the relationship between assertiveness and leadership. Both sets of research derived an inverted-U shape effect using the negativity bias argument involving the interplay between task-oriented versus socio-emotional perceptions. This suggests that similar psychological mechanisms can be used to account for the effects of different managerial behaviors (i.e., assertiveness and choice provision) on leadership perceptions.
Hypothesis 2b (H2b): The decrease in leadership perception between moderate and high degree of choice is mediated by decrease in competence perception.

I do not make specific hypothesis comparing leadership perceptions of managers who give low degree of choice (or no choice) versus high degree of choice. This is because it is theoretically unclear how two sets of unfavorable person perceptions (low perceived warmth at low degree of choice (or no choice) versus low perceived competence at high degree of choice) compare with each other in shaping leadership evaluations.

EFFECTS OF CHOICE ON TRUST PERCEPTIONS

I next consider the effects of choice on interpersonal trust. Research on trust has identified common features of trust as well as distinguished the various ways it develops. A characteristic feature of trust is the willingness to make oneself vulnerable to the other person despite uncertainty regarding motives, intentions, and prospective actions (Kramer, 1999). In this spirit, Mayer, Davis, and Schoorman (1995) define trust as “a willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that party.”

Yet trust researchers have also identified different bases on which trust develops, ranging from affective feelings to cognitive calculations (Lewicki and Bunker, 1996; Lewis and Weigert, 1985). Many studies have found that a kind of trust arises from affective bonds and confidence in others develops along with concern for their welfare (Lewis and Weigert, 1985; Rempel, Holmes, and Zanna, 1985). This type of trust involves empathy, rapport and social support and is commonly referred to as affect-based
trust. On the other hand, another stream of research has found that trust develops from information about the other party’s competence and reliability (Bulter, 1991; Cook and Wall, 1980; Zucker, 1986). This type of trust tends to be cold, instrumental, and calculative and is often referred to as cognition-based trust. Affect- and cognition-based trust align with the basic dimensions of warmth and competence in social perception respectively.

There is substantial empirical evidence for the distinction between these two types of trust. In a study of American managers, McAllister (1995) found that a two-factor structure that distinguished between cognition- and affect-based trust fitted their trust measures better than a general one-factor structure of trust. In a more recent study of cognition- and affect-based trust, Chua, Ingram and Morris (2008) measured the two types of trust in American managers’ professional networks. Results indicated that although the two types of trust overlap considerably, they tend to develop in different kinds of relationships and are differentially associated with social network properties.

Drawing on this theoretical backdrop, I adopt the basic distinction between affect-versus cognition-based trust in the present research. I argue that degree of choice should be positively associated with affect-based trust but negatively associated with cognition-based trust. In other words, giving others discretion and freedom induces feeling of affective warmth and care, elements that are conducive to the development of affect-based trust. However, as discussed earlier, a high degree of choice may induce perceptions of incompetence in the choice giver, leading to lower cognition-based trust. These effects are depicted graphically in Figure 2B. Because the underlying basis for affect-based trust is socio-emotional in nature, it stands to reason that perceived warmth
could be the mechanism linking degree of choice and this type of trust. Conversely, cognition-based trust relies on perceptions of competence and reliability, thus perceived competence is a likely mechanism linking degree of choice and cognition-based trust.

*Hypothesis 3a (H3a):* The higher the degree of choice given, the higher the perceived affect-based trust in the choice giver.

*Hypothesis 3b (H3b):* The effect in hypothesis 3a is mediated by increased perception of warmth.

*Hypothesis 4a (H4a):* The higher the degree of choice given, the lower the perceived cognition-based trust in the choice giver.

*Hypothesis 4b (H4b):* The effect in hypothesis 4a is mediated by decreased perception of competence.

**PLAN OF STUDIES**

The present research consists of two sets of related predictions. First, I predict that there exists an inverted-U shape relationship between the degree of choice and leadership perceptions. More precisely, between moderate and high degrees of choice, the negative perceptions of low competence will mediate the relationship between choice and leadership perceptions. Between low and moderate degrees of choice, the negative perceptions of low warmth will mediate this relationship. Second, I predict that the degree of choice one gives to others also influence trust perceptions. Higher degree of choice will lead to higher affect-based trust but lower cognition-based trust. The former relationship is mediated by perceived warmth whereas the latter relationship is mediated by perceived competence.
These predictions are tested in a series of six experimental and survey studies. The pilot study and studies 1 to 3 examine the effects of the number of choice on leadership perceptions. Specifically, in the pilot study, I first demonstrate the predicted curvilinear relationship between choice and leadership perceptions. In Study 1, I replicate the effects in the pilot study and examine the underlying mechanisms using a person perception approach. Study 2 is designed to further show that the curvilinear effect applies to peers giving choice to each other and subordinates giving choice to their bosses. The objective is to rule out the alternative explanation that the curvilinear effect is a result of formal role expectations that one might have about one’s supervisor or boss. These first three studies are presented in Chapter 2. In Chapter 3, study 3 replicates the predicted curvilinear effect in a peer negotiation context in the MBA classroom. This study shows that the predicted effects can be obtained in a part-collaborative-part-competitive mixed motive context. The subsequent two studies operationalize degree of choice in different ways. Study 4 (Chapter 4) examines the effects of choice under constraints on both leadership and trust. Finally, study 5 (Chapter 5) investigates the effects of choice frequency on leadership and trust perceptions.

Throughout the studies in which the underlying social perception mechanisms are examined, I operationalized perceived warmth and competence using the agreeableness and conscientiousness dimensions from the Big-Five personality model. Recall that the warmth dimension of social perception encapsulates the extent to which the other is sociable, friendly, and sincere; these are traits which are well-captured by the measure of agreeableness. Conversely, the competence dimension of social perception reflects the other’s intelligence, skills, and industriousness (Wojciszke, et al 1998). These are key
indications of the other person’s effectiveness and efficiency in goal attainment that considerably overlap with the Big-Five conscientiousness measure which taps dependability, organization, and achievement-orientation.

Another reason for choosing the Big-Five personality model is that it is a well-established construct in social perception and personality research yet developed independently of research on warmth and competence. Using the Big-Five personality model, I can also examine effects of choice provision on other key interpersonal perceptions such as extraversion, emotional stability, and openness.
CHAPTER 2

In this chapter, I first examine how giving different number of choices influences leadership perceptions. Through three vignette-based experiments, I demonstrate that the number of choices provided during problem solving has an inverted-U relationship on leadership perceptions. A pilot study first demonstrates this effect. Study 1 further demonstrates the underlying mechanisms driving the predicted effects whereas study 2 rules out the alternative explanation that the effects were due to formal role expectations of the choice giver.

PILOT STUDY

In a pilot study, I conducted a vignette-based experiment to demonstrate that people’s leadership perceptions of their managers (i.e., supervisors) could be influenced by the number of choices given to them during joint problem solving. I chose a between-subject experimental approach in order to manipulate the choice variable so as to draw conclusions about the causality between the number of choices given and leadership perceptions.

Participants

A total of 60 students (75% males) from a large East Coast university participated in this study. Students (including both undergraduate and graduate) were recruited through flyers posted on campus and compensated $5 for completing the task designed for the current study as well as other unrelated questionnaires. 30% of the participants identified themselves as White, 47% as Asian (Indians, Chinese, and Koreans), 10% as African-American, and 8% as Hispanic. The average age was 25 (min =18, max=40, SD=5.26).
Task and Manipulations

Participants read about a scenario in which they were asked to imagine themselves as software engineers assigned to work on a new software project with a male senior project manager by the name of Mr. M. (see Appendix A for complete vignette). The degree of choice variable was manipulated by telling participants that the manager in question offered them zero, two, or six choices of programming languages from which they were supposed to have chosen one to complete the software project. Specifically, in the no choice condition, participants were told that the manager thought that a certain programming language was most suitable for the given project and simply asked the participant to use that language. In the low (high) degree of choice condition, participants were told that the manager thought that two (six) of the programming languages were more suitable than the others and then went on to offer the participants the flexibility of choice. Participants did not get to actually choose among the options. In all three conditions, they were told that they eventually chose and used the “APEX” programming language. After participants read the scenario, they completed a set of questions regarding their perceptions of the target manager.

Pre-test

To ensure that my manipulation of the choice variable would result in varying degrees of perceived flexibility, I conducted a pre-test with 76 participants. Essentially, participants read the stimulus materials and reported using a 7-point scale (1= Not at all, 7 = To a great extent) the level of flexibility they felt was given to them by the target. Results indicate that the degree of perceived flexibility in the no choice condition (M= 3.50, SD = 1.32) is significantly lower than that in the two choice condition (M = 4.67,
SD = 1.18) \( [p < 0.01] \). The degree of perceived flexibility in the two choice condition is also significantly lower than that in the six choice condition (M= 5.31, SD = 1.61) \([p<0.05]\).

**Dependent Measures**

The key measure in this study is participants’ general perceptions of the manager’s leadership ability. Leadership perception was measured using three items: (a) “To what extent do you think that Mr. M. possesses leadership qualities?”, (b) “To what extent do you think that Mr. M.’s leadership style is highly effective?”, (c) “To what extent do you trust that Mr. M. would be able to lead this project well?” All items were answered on a 7 point scale (1=Not at all, 4=To some extent, 7=To a great extent). The Cronbach’s alpha for this scale is 0.93.

**Analyses**

I conducted analyses of variance (ANOVA) to test the hypotheses. Demographic variables such as age, gender (“1” = male; “0” = female), and ethnicity (coded as either “1” for White or “0” for non-White) were entered as controls. I controlled for age and gender because past research has found that these factors could influence perceivers’ implicit leadership theories (e.g., Deal & Stevenson, 1998; Rush & Russell, 1988; Megargee, 1969). The control of ethnicity is also important because prior research suggests that perceivers’ cultural background could influence the way they make leadership evaluations (Schyns, 2006; House, Javidan, Hanges, & Dorfman, 2004; Ling, Chia, & Fang, 2000) and perceive the provision of choice (Chua & Iyengar, 2006; Iyengar & Lepper, 1999).
RESULTS: PILOT STUDY

Table 1 presents descriptive statistics, reliability coefficients, and correlations among the key variables. Table 2 presents the ANOVA results. First, I note that among the three control variables, only gender exerts a significant main effect on leadership perceptions $[F(1, 54) = 6.02, p<0.05, \text{partial } \eta^2 = 0.100]$. In general, females tend to give higher leadership ratings to the target than do males. Further analysis revealed no interaction between gender and choice in influencing leadership perceptions.

As I predicted, the number of choices a manager gave to his subordinate had a significant effect on the subordinate’s leadership perceptions of him $[F(2, 54) = 3.92, p<0.05, \text{partial } \eta^2 = 0.127]$. Specifically, participants rated the target who gave two choices as being more of a leader than the target who gave no choice [Two choices: $M=5.95, SD=1.03$; No choice: $M=4.89, SD=1.31$; $F(1,38)=8.01, p<0.01$]. Participants also rated the target who gave two choices as being more of a leader than the target who gave six choices [Two choices: $M=5.95, SD=1.03$; Six choices: $M=4.82, SD=0.89$; $F(1,37)=13.58, p<0.01$]. There was no significant difference in leadership perceptions for targets who gave no choice versus six choices. These results, depicted graphically in Figure 3, remain significant even if I do not control for ethnicity, gender, and age. Overall, the pilot study provides strong support for the key hypothesis H1.

STUDY 1

To unravel the psychological mechanisms underlying the inverted-U relationship between choice and leadership perceptions, I conducted a second study using the exact same vignette as in pilot study. The only difference is that I included the 10-item Big-Five personality measures developed by Gosling, Rentfrow, and Swann (2003). The sub-
dimensions of agreeableness and conscientiousness are used as operationalization of perceived warmth and competence respectively. As such, I predicted that the increase in leadership perceptions between no choice and two choices should be mediated by perceived agreeableness; conversely, the decrease in leadership perceptions between two choices and six choices should be mediated by perceived conscientiousness. A second objective of the present study is to replicate the effect in the pilot study.

Participants

A different sample of 83 students (46% males) from the same East Coast university participated in this study. Students (including both undergraduate and graduate) were recruited through flyers posted on campus and solicited in classrooms. They were compensated $4 for completing this study. 71% of the participants identified themselves as White, 18% as Asian (Indians, Chinese, and Koreans), 2% as African-American, and 4% as Hispanic. The average age was 26 (min =18, max =58, SD =7.94).

Dependent Measures

The same leadership perceptions measure from the pilot study was used. The Cronbach’s alpha for this variable in the present study is 0.90.

Analyses

I first conducted analyses of variance to test the key hypothesis. As in the pilot study, demographic variables such as age, gender (“1” = male; “0” = female), and ethnicity (coded as either “1” for White or “0” for non-White) were entered as controls. I then separately analyzed the effects of choice on personality perceptions and the effects of personality perceptions on leadership perceptions. Finally, I followed Baron and
Kenny's (1986) procedure of mediation analyses to examine the mechanisms underlying the results.

RESULTS: STUDY 1

Table 3 presents descriptive statistics, reliability coefficients, and correlations among the key variables. Table 4 presents the ANOVA results. Consistent with the pilot study, the results indicate that choice has a significant effect on leadership perceptions [F(2,77) = 4.84, p<0.01, partial η²=0.112]. Participants gave higher leadership ratings to targets who gave a moderate degree of choice (M=5.82, SD=0.82) than those who gave no choice (M=5.02, SD=1.18) [F(1,52)=11.21, p<0.01] or those who gave a high degree of choice (M= 5.23, SD=1.19) [F(1,51)=4.01, p=0.05]. These effects remain significant when control variables of age, gender, and ethnicity were excluded. Hence, I replicated the curvilinear effect I found in the pilot study.

How does the provision of choice affect social perceptions of the choice giver? I conducted a series of ANOVAs with choice as the predictor and each of the Big-Five personality measures as the dependent variables. The means are presented in Table 5. I found that the behavioral change from giving no choice to two choices leads to significantly increased perceptions of agreeableness, emotional stability, and openness. The change from two choices to six choices renders the choice giver to be perceived as less conscientious. The provision of choice did not significantly affect extraversion perceptions.

I also regressed leadership perceptions on the Big-Five personality measures to assess the effects of social perceptions on leadership. The results are presented in Table 6. For the sub-sample involving no choice and two choices conditions, leadership
perception is significantly associated with *agreeableness* \( (B=0.26, t=2.32, p < 0.05) \),

*conscientiousness* \( (B=0.44, t=4.13, p < 0.01) \), and *extraversion* \( (B=0.28, t=2.74, p < 0.01) \).

For the sub-sample involving two choices and six choices conditions, leadership perception is significantly associated only with *conscientiousness* \( (B=0.45, t=3.22, p < 0.01) \). *Openness* and *emotional stability* did not predict leadership evaluations.

Taken together, these results suggest that the increase in leadership perceptions between no choice and two choices is likely to be driven by *agreeableness* perception whereas the decrease in leadership perceptions between two choices and six choices is likely to be driven by *conscientiousness* perception. The other personality measures are unlikely mediators of the relationship between choice and leadership perceptions because they either did not predict leadership (i.e., *emotional stability* and *openness*) or were not predicted by choice (i.e., *extraversion*).

In Figure 4, I graphically depict the relationships between choice and the two key personality measures, *agreeableness* and *conscientiousness*, by plotting their mean-centered values against each choice level. Interestingly, the relationship between choice and agreeableness is not linearly increasing; giving others some choices is likely to render one to be perceived as more agreeable, compared to not giving any choice at all; giving a high degree of choice however has diminishing returns on *agreeableness*.

Likewise, the relationship between choice and *conscientiousness* is not linearly decreasing. There did not seem to be any effect on *conscientiousness* perception when a moderate degree of choice is given. When a high degree of choice is given however, *conscientiousness* perception drops significantly.
More importantly, I noted that, at no choice, *agreeableness* perception is below mean level whereas at six choices, *conscientiousness* perception is below mean level. This is consistent with the negativity bias argument that at low and high degree of choice, the *negative* perceptions of low *agreeableness* and low *conscientiousness* respectively would dampen leadership perceptions, resulting in an inverted-U shape effect as shown in Figure 5.

**Mediation Analyses**

I next conduct separate mediation analyses to test the mediation effects between (a) no choice versus two choices and (b) two choices versus six choices. Following Baron and Kenny’s (1986) four-step procedure, I first show that choice significantly predicts leadership perceptions in the absence of any mediator. Second, I show that choice significantly predicts the appropriate mediators (*agreeableness* or *conscientiousness*). Third, I show that the mediator has a unique effect on leadership perceptions. Fourth, I show that the effect of choice on leadership perceptions disappears upon the addition of the appropriate mediator to the model. In addition, I conducted Sobel tests to show that the appropriate personality perception indeed carries the influence of choice to leadership perceptions. The results presented in Figure 6 support my arguments that the increase in leadership perceptions between no choice and moderate choice is mediated by *agreeableness* whereas the decrease in leadership perceptions between moderate choice and high choice is mediated by *conscientiousness*. Overall, in this study, hypotheses H1, H2a, and H2b are supported.
STUDY 2

One alternative explanation for the findings in the earlier two studies could be that the target being evaluated was a manager and hence participants had certain expectations about how a manager ought to behave (e.g., Shivers-Blackwell, 2004; Hales & Tamangani, 1996; Tsui, Ashford, St.Clair, & Xin, 1995; Hare, Koenigs, & Hare, 1997). For instance, people may expect managers in a business setting to provide employees with some degree of guidance or instruction at work (Anderson 1966). This might explain why the targets in the high (six) choice condition were evaluated less favorably as leaders than those in the moderate (two) choice condition. If the choice giver were not a supervisor, one might argue that the curvilinear effect would not be obtained because the choice receiver does not have expectations regarding the provision of guidance. To rule out this alternative explanation, I conducted a third study to demonstrate that the curvilinear relationship between choice and leadership perceptions extends beyond subordinate ratings of supervisors to peer evaluations and supervisor ratings of subordinates. The paradigm employed in this study is similar to that used in the pilot study but includes a new variable: formal organizational role of the choice giver. This gives rise to a 3 (supervisor, peer, subordinate) by 3 (no choice, 2 choices, 6 choices) factorial design.

Participants

A different sample of 220 students (44% males) from the same East Coast university participated in this study. Students (including both undergraduate and graduate) were recruited through flyers posted on campus and solicited in classrooms. They were compensated $2 for completing this study. 45% of the participants identified
themselves as White, 35% as Asian (Indians, Chinese, and Koreans), 5% as African-American, and 8% as Hispanic. The average age was 24 (min =18, max=46, SD=5.17).

**Task and Manipulations**

I used the same vignette as in Study 1, but modified it to suit the purpose of this study. Like in Study 1, the choice variable was manipulated by having the target offer zero, two, or six choices of programming languages from which the participant were supposed to have chosen one to complete the software project. The role of the choice giver was manipulated by varying the formal organizational roles of the target and the participant accordingly. When the target was a senior project manager (supervisor) or a co-worker (peer), the participant assumed the role of the software engineer. When the target was a subordinate, he was referred to as the software engineer while the participant assumed the role of the senior project manager.

Finally, I also made some minor adjustments to the wordings of the vignette and replaced the name of the target (previously “Mr. M”) to “Dan” so that it sounded less awkward in the scenarios wherein the target was a subordinate or a co-worker. Excerpts from the vignette involving the various choice givers are presented in Appendix B.

**Dependent Measures**

I used a slightly modified measure of leadership perceptions compared to that in the previous two studies. Specifically, I included an item measuring perceived charisma of the target; I also replaced the item on how well the target is perceived to be able to lead the project with an item asking whether the target fits the typical image of a leader. I introduced these new items to examine the effects of choice on perceived charisma and leadership image. However, in the present study, these items loaded onto the same factor
(factor loadings above 0.80) as the other two leadership items. Thus, I combined the four items into one single leadership perceptions measure. Overall, the four items are: (a) “To what extent do you think that Dan possesses leadership qualities?”, (b) “To what extent does Dan have the makings of an effective leader?”, (c) “What is the likelihood that Dan is a charismatic leader?”, and (d) “To what extent does Dan fit your image of a typical leader?” The Cronbach’s alpha for this scale is 0.85.

**Analyses**

I conducted analyses of variance to test the hypotheses. Like in the previous two studies, demographic variables such as age, gender (“1” = male; “0” = female), and ethnicity (coded as either “1” for White or “0” for non-White) were entered as controls.

**RESULTS: STUDY 2**

Table 7 presents descriptive statistics, reliability coefficients, and correlations among the key variables. Table 8 presents the ANOVA results. I first note that gender exerts a marginal effect on leadership perceptions [$F(1, 208) = 2.896, p<0.10$, partial $\eta^2 =0.014$] in that females tend to give higher leadership ratings ($M=4.76; SD=1.04$) to the target than do males ($M=4.57; SD=0.96$) in general. There is also a significant choice giver role effect [$F=(2, 208) = 3.970; p<0.05; partial \eta^2 = 0.037$] such that supervisor choice givers ($M=4.86; SD=0.98$) are more likely to be seen as leaders than peer choice givers ($M=4.49; SD=1.01$) and subordinate choice givers ($M=4.65; SD=1.01$); there is no significant difference in leadership perceptions of peer choice givers versus subordinate choice givers.

As I expected, the number of choices given to others has a significant effect on leadership perceptions [$ F(2, 208) = 14.78, p<0.01$, partial $\eta^2=0.124$], with means in the
The predicted directions (i.e., inverted-U pattern). The interaction between number of choices and role of choice giver is not significant [F(4, 208) =1.849; ns]. A graphical illustration of the means is presented in Figure 7.

I next conduct separate analysis for each type of choice giver to more closely examine these effects. In the sample where the choice giver is a manager/supervisor (N=83), targets who gave two choices (M=5.27; SD=0.83) were given significantly higher leadership ratings (p<0.05) than those who gave no choice (M=4.61; SD=1.08) or six choices (M=4.78; SD=0.84) [F(2,77) = 3.47, p<0.05, partial $\eta^2=0.083$]. There was no significant difference in leadership perceptions of targets who gave no choice versus six choices.

In the sample where the choice giver is a co-worker/peer (N=70), targets who gave two choices (M=5.09; SD=0.89) were again given significantly higher leadership ratings (p<0.05) than those who gave no choice (M=4.10; SD=1.00) or six choices (M=4.20; SD=0.82) [F(2,64) = 8.45, p<0.01, partial $\eta^2=0.209$]. There was no significant difference in leadership perceptions of targets who gave no choice versus six choices.

Finally, I found similar patterns of results for the sample whereby the choice giver is a subordinate (N=67). Targets who gave two choices (M=5.03; SD=1.06) received higher leadership ratings than those who gave no choice (M=4.75; SD=0.87) or six choices (M=4.04; SD=0.86) [F(2,61) = 5.92, p<0.01, partial $\eta^2=0.162$]. However, only the means between the two and six choice conditions differed significantly (p<0.05). The difference in means between no choice and two choice conditions, although not significant, was in the expected direction. Taken together, these results suggest that the
curvilinear relationship between the degree of choice and leadership perceptions does not appear to be driven by role expectations of the choice giver. Overall, three vignette-based experiments clearly demonstrated that giving other different number of choices can influence how managers are perceived as leaders.
CHAPTER 3

Thus far, the three reported studies are vignette-based and do not involve the evaluation of an actual target person. Although this methodology is prevalently used in contemporary leadership research (e.g., Scott & Brown, 2006; Ensari & Murphy, 2003), my findings would have greater external validity if they were based on evaluations of actual persons. Hence, one objective of the fourth study is to replicate the inverted-U shape relationship between choice and leadership perceptions in a paradigm that requires the evaluation of actual persons. A second objective is to replicate my findings in a context wherein choice receivers have to contemplate the actual options given, which is not the case in the previous three studies. Finally, given that the previous studies involve a primarily collaborative work setting (developing a computer program with a manager), it would be interesting to see if the same results could be obtained in a mix-motive setting such as a negotiation, where there are some elements of competition involved between the choice giver and choice receiver.

STUDY 3

In this study, I adopt a negotiation paradigm to examine the effects of choice on leadership perceptions. Specifically, I used the “El Tek” negotiation exercise (developed by Max Bazerman and Jeanne Brett) that is commonly used in MBA negotiation courses. This exercise involves a negotiation between two high-level divisional managers within a large electronics company by the name of “El Tek.” The negotiators are the president of a division called “Magnetic Advances” (“Magnetic” for short) and the president of a division called “Audio Components” (“Audio” for short). According to the case, the research department of “El Tek” developed a new magnetic material a few years ago and
approached “Magnetic” to produce and market the product. However, “Magnetic” passed on the offer and the technology was taken up by “Audio.” The new product proved to be extremely successful. “Magnetic” became interested in the technology and wanted to buy it from “Audio.” The negotiation essentially revolves around the two parties trying to come to terms on the transfer price and the level of restrictions on sale, should “Magnetic” buy over the technology.

I chose this negotiation exercise for three reasons. First, this exercise involves at least 11 potential agreements that could be forged between “Audio” and “Magnetic.” These 11 potential agreements are clearly presented in the pay-off chart given to each negotiator. This represents an opportunity for negotiators to present multiple equivalent offers to their partners during the negotiation. More importantly, it gives me the opportunity to manipulate the number of equivalent offers one party gives to the other. Second, the case involves two managers within the same company engaged in an inter-departmental negotiation. This represents a problem solving situation commonly encountered in organizations. It also provides the opportunity to ask each party to make leadership evaluations of his or her partner under the context that the company practices 360 degree appraisal. Third, a negotiation context invariably involves some elements of competition (i.e., to gain more value for oneself possibly at the expense of one’s opponent), thus offering the opportunity to see whether the predicted effects could be obtained in a mix-motive setting.

\(^3\) Multiple equivalent offers refer to two or more simultaneous offers presented by one negotiating party to another which differ in issue contents but are of the same value to the party offering them.
Participants

A total of 154 MBA and Executive-MBA students (57% males) from the same East Coast university participated in this study as part of their course in negotiation. 73% of the participants identified themselves as White, 23% as Asian (Indians, Chinese, and Koreans), and 2% as African-American. The average age was 31 (min =26, max=50, SD=3.55).

Task and Manipulations

I randomly assigned participants to the role of “Audio” or “Magnetic” and sent them via E-mail the appropriate role materials, their partners’ name and contact E-mail, and a set of pre-negotiation surveys. Participants were instructed to read the materials carefully and complete a pre-negotiation survey before beginning any actual negotiation. The negotiation was to be conducted mainly via E-mail outside class time. Participants could also use instant messaging or the telephone to communicate but they were instructed not to negotiate face to face. There was no time limit on the negotiation but participants were told that the exercise should take approximately 30 minutes of E-mail exchanges.

I manipulated choice by giving participants in the “Magnetic” role different instructions in the pre-negotiation instructions. In the no choice condition, I instructed these participants to formulate one proposal to present to their partner as their first offer. In the low and high choice conditions, I instructed participants to formulate two and five proposals respectively to present to their partner as their first offer. In these two latter conditions (two and five proposals), participants were also told that the proposals have to be of similar overall value to them such that they would be indifferent to whichever
proposal their partner eventually chose. Participants were advised to use a spreadsheet program to formulate these multiple equivalent offers and that they would benefit the most from continuing to present the same number of proposals to their partner through the entire negotiation. Regardless of condition, participants had to record their proposal(s) in their pre-negotiation survey. These instructions are presented in Appendix C.

No manipulation was administered to participants in the role of “Audio.” They were simply told to think about what their first offer to their partner would be and to record that down in the pre-negotiation survey. In effect, participants in “Audio” roles should be making only one proposal to their negotiation partner.

After participants completed the pre-negotiation survey, they could begin the negotiation. When the negotiation was completed, participants had to immediately complete a post-negotiation survey, containing essentially a series of questions asking them to evaluate their partner in various dimensions. Participants were specifically told to focus on their partners’ behaviors during the negotiation when answering these questions, as opposed to what they know about them outside the negotiation exercise.

**Dependent Measures**

I measured leadership perceptions with the same scale used in Study 2. Cronbach’s alpha is 0.92. I also asked participants to rate on a seven-point scale (1=very unlikely, 4=somewhat likely, 7=very likely) how likely they are to recommend their negotiation partner for a promotion within El Tek, under the context that El Tek has a 360 degree appraisal system that requires managers to rate each other after a major
internal deal is closed. This additional measure captures a behavioral intention that is closely related to leadership perceptions.

**Manipulation Checks**

I reviewed the pre-negotiation surveys and negotiation transcripts of participants in the “Magnetic” role to check whether they indeed formulated the right number of proposals to offer to their opponents as instructed. I found five participants who did not correctly follow the given instructions; they were thus excluded from analyses.

**Analyses**

I analyzed only responses from participants in the “Audio” role because those in the “Magnetic” role were the targets being evaluated. As in the previous studies, I conducted analyses of variance to test the hypotheses. Participants’ age, gender (“1” = male; “0” = female), and ethnicity (coded as either “1” for White, or “0” for non-White) were entered as controls. Four pairs of participants who did not reach a deal and five pairs who failed manipulation checks were excluded from analyses, resulting in a sample size of 136 (68 dyads).

**RESULTS: STUDY 3**

Table 9 presents descriptive statistics, reliability coefficients, and correlations among the key variables. Table 10 and 11 present the ANOVA results for leadership perceptions and promotion recommendation respectively. Let us first consider the results for leadership perceptions. Consistent with the previous three studies, I found that choice (number of proposals) has a significant effect on leadership perceptions with means in the predicted directions (i.e., inverted-U pattern) \[F=(2, 62) = 4.04; p<0.05; \text{partial } \eta^2 = \]

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4 Participants who did not reach a deal appeared to have overall more negative evaluations of each other.
Specifically, participants who gave their negotiation partner two choices of proposals (M=5.44; SD=0.74) were given significantly higher leadership ratings (p<0.05) than those who gave no choice (M=4.71; SD=1.00) or five choices (M=4.95; SD=0.83).

The same pattern of relationships is found for choice and promotion recommendation as shown in Table 11 [F=(2, 62) = 3.16; p<0.05; partial $\eta^2 = 0.093$]. Participants who gave their negotiation partner two choices of proposals (M=5.58; SD=1.02) were significantly more likely to be recommended for a promotion (p<0.05) than those who gave no choice (M=4.95; SD=0.97) or five choices (M=4.96; SD=0.93). These results are depicted graphically in Figure 8.

Could these results be influenced by the perceived value of the proposals given to “Audio”? In other words, “Audio’s” leadership perceptions of “Magnetic” could change depending on how “Audio” perceive the value of the given proposals. To rule out this potential confound, I derived the value of each proposal from “Audio’s” perspective (i.e., using “Audio’s” payoff chart). I next conducted a series of ANOVA’s with the maximum, minimum, and average value of the proposals$^5$ given to “Audios” as the dependent variable. I found that the number of choices did not have any significant effect on the value of the proposals from “Audio’s” perspective. I also conducted ANOVA with leadership perceptions and promotion recommendation as dependent variables, separately controlling for the maximum, minimum, and average value of the proposals. The hypothesized effects remained significant. Hence, it is unlikely that my results are driven by how “Audios” react to the value of the given proposals.

$^5$ When the number of offer is one, the maximum, minimum, and average values are the same.
Finally, I also analyzed responses from participants in the “Magnetic” role. The effects of choice on leadership perceptions and promotion recommendation were not significant. Overall, these results increase the external validity of the curvilinear effect I found in the previous three studies. Study 3 also replicates the curvilinear effect for peer choice givers.
CHAPTER 4

In the previous studies, I have examined how giving different number of choices influences leadership perceptions. However, degree of flexibility in choice decisions can manifest in other manners. In the fifth study, I extend my investigation of how the degree of choice influences perceptions of choice givers in two ways. First, I operationalize the degree of choice variable in terms of the level of constraint under which choice can be made (henceforth referred to as choice constraint). Examples of constraints include rules, requirements, and criteria that choice receiver must consider when making selections out of a choice set. The more constraints there are surrounding a choice decision, the lower is the degree of choice. Second, I begin to investigate the effects of choice on cognition- and affect-based trust perceptions.

Participants

A different sample of 134 students (50% males) from the same East Coast university participated in this study. Students (including both undergraduate and graduate) were recruited through flyers posted on campus and compensated $4 for completing this study. 39% of the participants identified themselves as White, 38% as Asian (Indians, Chinese, and Koreans), 9% as African-American, and 5% as Hispanic. The average age was 23 (min =18, max=57, SD=5.99).

Task and Manipulations

In a between subject experiment design, participants read about a scenario in which they were asked to imagine themselves as management executives assigned to work on a new corporate development project with a male vice-president by the name of Mr. M. The task was to assemble a cross-department task-force to look into cost-cutting
measures for the company. Members of this task-force had to carefully chosen to ensure success for the project (see Appendix C for complete vignette). Degree of choice was manipulated by telling participants that the vice-president gave them different requirements in the member selection process. Specifically, in the low degree of choice condition, participants were told that the vice-president required that they had to incorporate requirements regarding member selection stated by six other departmental managers in the company. In the moderate degree of choice condition, participants had to consider requirements given by two other departmental managers. In the high degree of choice condition, participants were told that they could assemble the task-force based solely on their own judgment and need not consult any of the departmental managers. These manipulations, in effect, create different levels of constraint under which choice (selection of task force members) can be made. The more requirements they had to take into consideration, the higher the level of choice constraint. After participants read the scenario, they completed a set of questions regarding their leadership and trust perceptions of the target manager.

Manipulation Checks

I checked my manipulations by asking participants to report the level of flexibility they perceived in the way that the target was managing the project using a 7-point scale (1= Not at all, 7 = To a great extent). Results indicate that level of choice constraint significantly predicts perceived flexibility [F(2, 131)=18.45, p<0.01]. Specifically, the degree of perceived flexibility in the low choice constraint (high degree of choice) condition (M= 5.13, SD = 1.67) is significantly higher than that in the moderate choice constraint (moderate degree of choice) condition (M = 4.02, SD = 1.42) [p < 0.01]. The
degree of perceived flexibility in the moderate choice constraint condition is also significantly higher than that in the high choice constraint (low degree of choice) condition (M= 3.29, SD = 1.22) [p<0.05].

**Dependent Measures**

The same leadership perceptions measure from the pilot study was used. The Cronbach’s alpha for this variable in the present study is 0.84. Measures of cognition- and affect-based trust were adopted from McAllister’s (1995) study to suit the current context. Specifically, I used the highest loading items (above 0.79) from each scale to derive three items for each trust construct. The items for cognition-based trust are: (a) “To what extent can you rely on Mr. M. on having the knowledge and competence for completing this project?” (b) “To what extent can you rely on Mr. M. to complete a task he said he would help you do?” and (c) “To what extent does Mr. M. approach this project with dedication and professionalism?” Cronbach’s alpha for this scale is 0.82. The items for affect-based trust are: “If necessary, to what extent do you feel comfortable sharing with Mr. M. your personal difficulties and problems?” (b) “If necessary, to what extent do you feel comfortable sharing with Mr. M. your hopes and dreams?” and (c) “To what extent do you think Mr. M. will respond constructively and caringly if you tell him your personal problems?” Cronbach’s alpha for this scale is 0.80.

As in study 1, I measured perceptions of competence and warmth using the *conscientiousness and agreeableness* dimensions of the Big-Five personality scale developed by Gosling et al (2003).
Analyses

I first conducted analyses of variance to test the key hypotheses. As in earlier studies, demographic variables such as age, gender (“1” = male; “0” = female), and ethnicity (coded as either “1” for White or “0” for non-White) were entered as controls. For the analyses on trust, I controlled for the other type of trust when one type of trust was the dependent variable because the two types of trust are correlated.

I then followed Baron and Kenny’s (1986) procedure of mediation analyses to examine the mechanisms underlying the results. Specifically, I first show that choice constraint significantly predicts leadership and trust perceptions in the absence of any mediator. Second, I show that choice constraint significantly predicts the appropriate mediator (agreeableness or conscientiousness). Third, I show that the mediator has a unique effect on leadership and trust perceptions. Fourth, I show that the effect of choice constraint on leadership and trust perceptions disappears upon the addition of the appropriate mediator to the model. In addition, I conducted Sobel’s tests to show that the appropriate personality perception indeed carries the influence of choice constraint to leadership and trust perceptions.

RESULTS: STUDY 4

Table 12 presents descriptive statistics, reliability coefficients, and correlations among the key variables. Table 13 presents the ANOVA results for leadership perceptions whereas tables 14 and 15 present the ANOVA results for cognition- and affect-based trust respectively. Let us first consider the leadership results before looking at those for trust.
Leadership perceptions

Consistent with earlier studies, the results in Table 13 indicate that choice has a significant effect on leadership perceptions \[F(2,127) = 4.26, p<0.05\], \[\text{partial } \eta^2 = 0.062\]. Participants gave higher leadership ratings to targets who gave a moderate degree of choice constraint (\(M=5.67, \text{SD}=0.92\)) than those who gave no choice constraint (\(M=5.12, \text{SD}=1.08\)) \[F(1,84)=6.12, p<0.05\] or those who gave a high degree of choice constraint (\(M=5.11, \text{SD}=0.94\)) \[F(1,51)=7.25, p<0.01\]. These effects remain significant when control variables were excluded. A graphical depiction of this pattern of results is shown in Figure 9.

Mediation analyses. I next conduct separate mediation analyses to test the mediation effects between choice constraint and leadership perceptions. The results presented in Figure 10 indicate that the increase in leadership perceptions between high and moderate choice constraint (i.e., low versus moderate degree of choice) is mediated by agreeableness (Sobel's test: \(z = 1.97, p < 0.05\)). Conversely, the decrease in leadership perceptions between moderate and low choice constraint (i.e., moderate versus high degree of choice) is mediated by conscientiousness (Sobel’s test: \(z = -2.69, p < 0.01\)). These results suggest that during choice provision, setting up high constraint surrounding that choice causes one to be perceived as less agreeable (decreased warmth perception) whereas presenting no constraint on that choice causes one to be perceived as less conscientious (decreased competence perception). Each of these decreased perceptions of warm and competence in turn dampens leadership perceptions, giving rise to an inverted-U shape effect of choice on leadership.
Trust perceptions

I next examine findings on trust perceptions. Results presented in tables 14 and 15 indicate that choice has differential influences on cognition- and affect-based trust. Specifically, table 14 shows that choice constraint significantly predicts perception of cognition-based trust \( [F(2, 127) = 5.36; \ p<0.01; \ \text{partial } \eta^2 =0.078] \). The specific pattern of result is depicted graphically in Figure 11. When there was no choice constraint (i.e., high degree of choice), participants reported significantly lower cognition-based trust in the target (M= 5.04 SD=1.21) compared to when there was moderate choice constraint (M=5.70 SD=0.83; F(1,83)=7.94; \ p<0.01; \ \text{partial } \eta^2 =0.087). Cognition-based trust perception in the moderate choice constraint and high choice constraint (i.e., low degree of choice) conditions (M=5.51 SD=1.01) did not significantly differ (F(1,83)=0.55; \ p>0.10).

As for affect-based trust, a different pattern of result is obtained. Table 15 shows that choice constraint significantly predicts affect-based trust perception \( [F(2, 127) = 3.72; \ p<0.01 \ \text{partial } \eta^2 =0.055] \). Compared to the case for cognition-based trust, choice constraint has an opposite effect on affect-based trust. The lower the choice constraint (i.e., higher degree of choice), the higher is the perceived affect-based trust. This pattern of result is graphically depicted in Figure 12. The increase in affect-based trust perception is significant between high and low choice constraint (high choice constraint: M=2.39 SD=1.11; low choice constraint: M=3.05 SD=1.36; F(1,84)=7.03; \ p<0.01; \ \text{partial } \eta^2 =0.077). Differences between moderate versus high and moderate versus low choice constraint conditions are not significant. Overall, these results provide evidence that higher degree of choice positively influences perceptions of affect-based trust but
negatively influences perceptions of cognition-based trust. These effects remain significant when control variables were excluded. Hence, hypotheses 3a and 4a are supported.

**Mediation analyses.** How do these effects of choice on trust perceptions come about? The results presented in Figure 13 further illuminates that the effect of choice constraint on affect-based trust runs through perceived *agreeableness* whereas the effect of choice constraint on cognition-based trust runs through perceived *conscientiousness.* Specifically, perceived *agreeableness* (but not perceived conscientiousness) fully mediates the effect of choice constraint on affect-based trust (*Sobel’s test: z = 3.02, p < 0.01*). Conversely, perceived *conscientiousness* (but not perceived *agreeableness*) fully mediates the effect of choice constraint on cognition-based trust (*Sobel’s test: z = -2.72, p < 0.01*). Thus, hypotheses H3b and H4b are supported.

**Supplementary Analyses**

I next conduct a series of additional analyses organized around two key questions that would arise from the present set of findings. First, do cognition- and affect-based trust operate as mediators for the effects of choice constraint on leadership perceptions? To address this question, I regressed leadership perceptions on choice constraint but included cognition- and affect-based trust separately as controls. I found that when cognition-based trust was included in the analysis, the drop in leadership perception between moderate choice constraint and low choice constraint (i.e. moderate versus high degree of choice) becomes insignificant (*p < 0.10*). Following Baron and Kenny’s (1986) mediation analyses procedures, I found that cognition-based trust fully mediates the effect of choice constraint on leadership between the moderate versus low choice
constraint conditions \((Sobel\text{'s test} = -2.79, p<0.01)\). Conversely, the inclusion of affect-based trust into the analyses did not have any effect on the relationship between choice constraint and leadership perceptions. Analyzing the high and moderate choice constraint conditions (i.e., low versus moderate degree of choice) where one would expect an effect, I found that the effect of choice constraint on leadership remained significant \((b=0.46, p<0.05)\) even when controlling for affect-based trust. Overall, these findings suggest that giving a high degree of choice lowers perceptions of competence in the choice giver which lowers cognition-based trust, in turn dampening leadership perceptions. Affect-based trust, however, did not mediate the effect between choice and leadership, suggesting that the increase in leadership perceptions between low and moderate degrees of choice is more driven by perceptions of warmth and agreeableness in general than trust per se.

Second, how does choice constraint influence other person perception dimensions such as the Big-Five personality traits of openness, extraversion, and emotional stability? A series of regression analyses involving these personality dimensions as dependent variables revealed that higher degree of choice (i.e. lower choice constraint) is positively associated with perceived openness \((b=0.40, p<0.01)\) and emotional stability \((b=0.28, p<0.05)\) but not associated with extraversion \((b=0.00, p<0.10)\). These findings are largely consistent with those from study 1. By giving others more freedom in choosing, managers not only come across as more agreeable, but also as more open and emotionally stable individuals.
CHAPTER 5

The degree of flexibility by which managers give choice to others can manifest not only in specific choice decision episodes but also over time. For example, how frequently managers give choice to others can also influence how they are perceived. In a final study, I investigate the effects of choice frequency on leadership and trust perceptions. This study departs from the previous set of studies in two important ways. First, I focus not on specific episodes of choice provision but on managers’ chronic choice giving behavior – frequency. Second, my data involves evaluation of real-world managers, as opposed to fictitious characters in a vignette or a fellow classmate in a role play context. This should provide even greater external validity to my general thesis on how different degree of flexibility during choice provision can influence the way choice givers are perceived.

STUDY 5

Participants

A total 110 full-time MBA students (53% males) at a large East Coast university participated in this study. These participants typically have an average of 5.68 years of corporate work experience (SD=2.71) and completed a “leadership survey” on a voluntary basis. Those who participated were automatically entered into a lucky draw with a chance of winning an electronic gadget (an ipod shuffle). 59% of the participants identified themselves as White, 30% as Asian (Indians, Chinese, and Koreans), 5.5% as Hispanic and 2.7% as African-American. The average age was 29 years (SD=2.50).
Survey

In the beginning of the survey, I asked participants to identify two managers (ex-bosses) who have different leadership styles. These managers should be people with whom they had worked closely with in the past so that they can provide accurate evaluations of each manager. For each of the listed manager, I further asked participants to first briefly describe his or her leadership style and then indicate the key differences between the leadership styles of these managers in free text format. Subsequently, participants answered a series of questions for each of the managers.

The listed managers were largely males (68%) with an average age of 40.5 years. 76% of these managers were White and 12% Asians. Almost all of these managers held senior management positions. Job titles such as “vice-president,” “managing director,” “CEO,” and “partner,” were very common. These managers also came from a wide range of industries ranging from investment banking and consulting to marketing, information technology and entertainment.

Dependent Measures

Leadership effectiveness. A key outcome variable in this study is participants’ general perceptions of each manager’s leadership effectiveness. Participants indicated on a 7 point scale (1=Not at all, 4=To some extent, 7=To a great extent) the extent to which they agree with each of the following four statements: (a) “This manager leads a group that is effective,” (b) “This manager is effective in meeting organizational requirements,” (c) “This manager is effective in representing me to higher authority,” and (d) “This manager is effective in meeting my job-related needs.” These items were adapted from
the Multifactor Leadership Questionnaire that measures “outcomes of leadership” (Bass & Avolio, 1997). The Cronbach’s alpha for this scale is 0.87.

Trust. Measures of cognition- and affect-based trust were adapted from McAllister’s (1995) study to suit the current research context. Five items with the highest factor loadings were selected to represent each type of trust. Sample items of cognition-based trust include “I can rely on this manager to approach his/her work with professionalism and dedication,” and “I can rely on this manager to have the knowledge and competence to get tasks done.” Sample items of affect-based trust include “I can approach this manager to share my personal problems,” and “I can approach this manager to obtain constructive and caring feedback about problems I am facing.” The Cronbach’s alpha for cognition-based trust is 0.93 where as that for affect-based trust is 0.95.

Perceived competence and warmth. I operationalized perceptions of competence and warmth using the conscientiousness and agreeableness dimensions of the Big-Five personality scale developed by Gosling et al (2003).

Choice frequency. To assess frequency by which each listed manager gave choice to the participants, I asked the question “How often did each manager give you some form of choice or option (in terms of alternative ways of solving a problem) in your work?” Participants answered this question on a 7-point scale (1=not at all, 4=sometimes, 7=all the time).

Control variables

As in the previous studies, I controlled for participants’ age, ethnicity (White versus non-White) and gender in the regressions. For the analyses on trust, because the
two types of trust are correlated, I controlled for the other type of trust when one type of trust was the dependent variable.

Analyses

Because each participant listed and evaluated two managers (resulting in a total 220 observations), the observations are not independent. Specifically, two sets of observations are associated with a given participant. To take into consideration the non-independence nature of my data, I conducted random effects analysis (also known as random coefficient analysis in multilevel modeling). This approach allows for the analysis of variance in our dependent variables both within and between participants. Thus, I am able to estimate both participant effects (e.g., control variables such as gender of participant) on the outcome variables as well as within participant effects on the different managers. For robustness, I also conducted fixed effects analysis and found similar results.\(^6\)

RESULTS: STUDY 5

Leadership effectiveness

Table 16 presents the descriptive statistics for the present study. Let us first consider the effects of frequency of choice provision on leadership effectiveness. Table 17 presents the regression results for leadership effectiveness. Model 1 includes only the control variables. Model 2 adds the choice frequency variable and the result indicate a significant linear positive trend such the more frequently managers gave choice to others, the more likely they are perceived as effective leaders \((b = 0.26, p<0.01)\). Model 3 adds

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\(^6\)The results from fixed effects analyses were essentially identical as those from random effects analyses though somewhat less strong. This could be that there are only two observations associated with each participant, reducing the power of the analyses.
the squared term for choice frequency to test the proposed curvilinear effect. The results indicate a significant negative coefficient for the squared term \( b = -0.29, p<0.01 \), providing support for the curvilinear effect. To further examine the pattern of this curvilinear effect, I conducted a tertiary split of the choice frequency variable. The average leadership effectiveness rating for the moderate level of choice frequency (middle third mean = 5.46) was significant higher \( (p<0.05) \) than that for the low level of choice frequency (lowest third mean = 3.27). The average leadership effectiveness rating for the moderate level of choice frequency was also significantly higher \( (p<0.05) \) than that for the high level of choice frequency (highest third mean = 4.47). These patterns of results are depicted graphically in Figure 14.

Mediation analyses. Recall that I hypothesized that perceived warm would mediate the effect of choice on leadership perceptions for low to moderate degrees of choice whereas perceived competence would mediate the effect of choice on leadership perceptions for moderate to high degrees of choice. To test these effects, I further pursued separate mediation models for low to moderate and moderate to high levels of choice frequency. I first performed a median split on the choice frequency variable (at 5.0). Next, I conducted mediation analyses for two sub-samples of the data separately – below median and equal or above median. As indicated in Figure 15, for the subset of data below the median for choice frequency, perceived agreeableness partially mediated the effect of choice frequency on leadership effectiveness \( (Sobel’s\ test: \ z=3.03, \ p<0.01) \). Perceived conscientiousness was not a viable mediator \( (Sobel’s\ test: \ z=-1.37, \ p>0.10) \). Conversely, for the subset of data below the median for choice frequency, perceived conscientiousness partially mediated the effect of choice frequency on
leadership effectiveness \((\text{Sobel's test: } z = -3.21, p < 0.01)\) but perceived agreeableness was not a viable mediator \((\text{Sobel's test: } z = 1.04, p > 0.10)\). Overall, these findings provide further evidence for hypotheses H1, H2a, and H2b.

**Trust perceptions**

Next, I consider the effects of choice frequency on cognition- and affect-based trust. Table 18 shows the regression results for the trust analyses. Models 1 to 3 present results whereby affect-based trust was the dependent variable whereas models 4 to 6 present results whereby cognition-based trust was the dependent variable. Let us consider each model in turn.

Model 1 shows that there is a significant positive effect of choice frequency on affect-based trust \((b = 0.36, p < 0.01)\). Thus, there is again support for the hypothesis that higher degree of choice predicts affect-based trust. Model 2 adds perceived agreeableness whereas model 3 adds perceived conscientiousness. Results indicate that with the addition of perceived agreeableness, the effect of choice frequency on affect-based trust dropped significantly (coefficient decreases from 0.36 to 0.18, \(p < 0.01\)). The addition of perceived conscientiousness in model 3 also appeared to decrease the effect of choice frequency on affect-based trust but the drop is not significant (coefficient decreases from 0.36 to 0.30, \(p > 0.10\)). Perceived agreeableness has a positive effect on affect-based trust (model 2: \(b = 0.39, p < 0.01\)) but perceived conscientiousness has a negative effect (model 3: \(b = -0.16, p < 0.01\)).

Turning to cognition-based trust, model 4 shows a significant negative effect of choice frequency on this type of trust \((b = -0.10, p < 0.05)\). Upon adding the perceived conscientiousness in model 5, this negative effect disappear \((b = 0.05, p > 0.10)\) suggesting
that the influence of choice frequency on cognition-based trust runs through perceived conscientiousness. Conversely, adding perceived agreeableness in model 6 did not have any effect on the relationship between choice frequency and cognition-based trust.

Mediation analyses. Given these results, I next conducted mediation analyses for cognition- and affect-based trust separately, each time controlling for the other type of trust. The results are presented in Figure 17. As expected, perceived agreeableness mediates (partially) the positive effect of choice frequency on affect-based trust (Sobel’s test: \( z = 5.56, p < 0.01 \)) but perceived conscientiousness does not (Sobel’s test: \( z = -1.77, p > 0.05 \)). On the other hand, perceived conscientiousness mediates (fully) the positive effect of choice frequency on cognition-based trust (Sobel’s test: \( z = -2.34, p < 0.05 \)) but perceived agreeableness does not (Sobel’s test: \( z = 0.66, p > 0.10 \)). Hence, the hypotheses regarding the differential effects of choice frequency on cognition- and affect-based trust and the underlying mechanisms are supported. Overall, these findings provide evidence for hypotheses H3a, H3b, H4a, and H4b.

Supplementary Analyses

As in study 4, I conducted supplementary analyses to address two key questions: (a) Is the effect of choice on leadership mediated by trust? and (b) how does choice influence the other Big-Five personality dimensions of openness, emotional stability and extraversion? Results indicate that between low and moderate choice frequency, affect-based trust partially mediates the effect between choice and leadership perceptions (Sobel’s test: \( z = 2.73, p < 0.01 \)). Cognition-based trust does not function as a mediator in this context (Sobel’s test: \( z = 0.82, p > 0.10 \)). Between moderate and high choice frequency, neither cognition-based trust nor affect-based trust are viable mediators for the
relationship between choice frequency and leadership (cognition-based trust as mediator model: Sobel’s test \( z = -1.57, p > 0.10 \); affect-based trust as mediator model: Sobel’s test: \( z = 1.00, p > 0.10 \)). This pattern of results is somewhat different from that in study 4 where I found that cognition-based trust functioned as a mediator between choice and leadership between moderate and high degrees of choice (i.e., moderate and low choice constraint). This finding is interesting and I will take it up in the discussion section.

As for effects of choice frequency on other Big-Five personality dimensions besides agreeableness and conscientiousness, I found that choice frequency has positive associations with perceived emotional stability (\( b = 0.38, p < 0.01 \)) and openness (\( b = 0.32, p < 0.01 \)) of the choice giver but has no effect whatsoever on perceived extraversion (\( b = 0.08, p > 0.10 \)). These results are consistent with those found in studies 1 and 4. Hence, it seems that the effects of choice provision on personality perceptions are quite robust.
CHAPTER 6

DISCUSSION

Although organizational scholars have acknowledged choice, or self-determination, as one of the key ways to increase employee involvement at work (e.g., Chen, Kirkman, Kanfer, Allen, & Rosen, 2007; Srivastava, Bartol, & Locke, 2006), seldom have they asked whether giving others choice could also influence how the choice giver is perceived. Given that choice provision is very much an interpersonal process involving a choice giver directly engaging a choice receiver, giving choice to others not only influences the internal state of the choice receiver but can also reflect back on the choice giver. In this dissertation, I introduce the novel question – “how are choice givers perceived by choice receivers?” Specifically, I examined how providing different degrees of choice in a work context (operationalized in various ways such as the number of choices, choice frequency, or the degree of constraint surrounding choice decisions) influences the extent to which the choice giver is perceived as a leader as well as how the choice receiver trusts the choice giver. Through six studies, I found convergent evidence that the degree of choice one gives to others influences how the choice giver is perceived in terms of leadership and trust.

Summary of Findings

The first four studies of this research operationalized degree of choice as the number of choices provided during problem solving and examined its effect on leadership perceptions. A pilot study first showed that managers who gave subordinates a moderate number of choices received more favorable leadership evaluations than those who did not give choice, or those who gave a high number of choices. Study 1 replicated this effect
and further explicated the underlying mechanisms. Specifically, the increase in leadership perceptions between no choice and moderate choice was mediated by increased perceived agreeableness; the decrease in leadership perceptions between moderate choice and high choice, on the other hand, was mediated by decreased perceived conscientiousness.

Study 2 further showed that the inverted-U shape effect extends to contexts of peers giving choice to each other and subordinates giving choice to their supervisors. This rules out the alternative explanation that the observed effects were due to formal role expectations. Finally, Study 3 replicated the curvilinear effect in a peer negotiation context wherein participants evaluated actual persons instead of fictitious targets. The inter-department peer negotiation study also provides a somewhat different context, involving not only collaborative problem solving but also an element of competition. This further increases the scope by which the observed effects can be extended to.

Studies 4 and 5 took a different tack in operationalizing degree of choice compared to the earlier studies. In study 4, I examined how the degree of constraint that surrounds a given choice decision affects both leadership and trust perceptions. Consistent with the previous four studies, this study found an inverted-U curvilinear relationship between degree of choice and leadership perceptions. Leadership ratings are lower in low and high degrees of choice (i.e., high and low choice constraint respectively) compared to moderate degree of choice. In addition, lower choice constraint (i.e. higher degree of choice) has positive effect on affect-based trust but negative effect on cognition-based trust. In study 5, I investigated how choice frequency influences leadership and trust. Results indicated an inverted-U shape relationship between choice frequency and leadership perceptions. In the same vein as the findings in study 4, there is
a positive relationship between choice frequency and affect-based trust but a negative relationship between choice frequency and cognition-based trust. In both studies 4 and 5, perceived warmth (measured using the agreeableness scale from the Big-Five personality model) and perceived competence (measured using the conscientiousness scale from the Big-Five personality model) explained the predicted effects in ways consistent with my theoretical arguments.

Finally, I consistently found in my studies that higher degree of choice is positively associated with perceived openness and emotional stability but not extraversion. Although these effects are not explicitly theorized in my research, their discovery adds further richness to the answer to my research question of how choice givers are perceived. Besides leadership and trust evaluations, choice givers could be perceived differentially in terms of key personality traits, depending on the degree of choice given.

**Theoretical Contributions**

This dissertation makes several theoretical contributions. First, it calls attention to the link between choice provision and social perceptions of the choice giver. Although prior research has linked participative management style with managerial effectiveness (e.g., Piccolo & Colquitt, 2006; Yukl, Wall, & Lepsinger, 1990; Campbell, Bommer, & Yeo, 1993; Peterson, 1999; Heilman, Homstein, Cage, & Herschlag, 1984; Cotton et al, 1988; Manz & Sims, 1987), no study has directly examined the how giving others different degrees of choice influences leadership and trust perceptions. Hence, little is known about how giving others choice in their work could influence one’s leadership standing and trustworthiness evaluations in return. One major contribution of my
research is that it bridges this gap by demonstrating an inverted-U shape relationship between choice and leadership perceptions. My research also found that whereas higher degree of choice increases affect-based trust, it can reduce cognition-based trust when taken beyond a certain level. These findings highlight specific risks in the provision of choice – giving others higher degrees of choice in an effort to engage them could render one to be seen as a weak leader and less trustworthy. Interestingly, these findings are consistent with prior research by Peterson (1999) that found that giving teams a high degree of voice by implementing a consensus decision rule could lead to lower satisfaction with the leader.

Second, I found that the inverted-U shape relationship between choice and leadership perceptions seems independent of the formal organizational role assumed by the choice giver. Specifically, study 2 illustrates that the inverted-U shape relationship between choice and leadership perceptions holds even when the choice giver is a peer or a subordinate. Study 3 further shows this effect in the context of peers giving each other choice in a negotiation. These findings suggest that the curvilinear effect I found is more likely a function of people's implicit leadership theories, as opposed to formal role expectations. Thus, my results are applicable not only to boss-subordinate interaction, but also interaction between organizational actors of different ranks.

Third, the finding that giving choice to others could elicit differential effects on cognition- and affect-based trust is noteworthy. Prior organizational research often found that various form of empowerment (e.g., delegation, voice, participative management etc) are positively linked to trust (e.g., Locke & Schweiger, 1979; Ford & Fottler, 1995). By taking a more nuanced perspective regarding the basis by which trust develops, I found
that giving high degrees of choice to others could have the negative effect of lowering people’s cognition-based trust in the choice giver. Thus, my research probes at the boundary conditions by which sharing power and control with others (e.g., giving them choice) is beneficial for developing trusting relationships. It seems that sharing power and control can potentially cause one to be perceived as incompetent, unreliable, and less trustworthy.

Does trust account for the effects between degrees of choice and leadership perception? In study 4, I found that cognition-based trust mediates the relationship between choice constraint and leadership for the experimental conditions involving moderate and low levels of constraint (i.e., moderate and high degrees of choice). Affect-based trust is not a viable mediator. In study 5, I found a different effect. Affect-based trust mediates the relationship between choice frequency and leadership for the subset of data involving low and moderate choice frequency. Cognition-based trust is not a viable mediator. A partial explanation for this disparity could be that it is more difficult for affect-based trust to develop in a research context that involves a specific and fictitious social exchange (study 4) than one that involves interaction over time in a real-world relationship (study 5). Indeed, the average reported affect-based trust is noticeably lower in study 4 (M=2.76, SD=1.23) than in study 5 (M = 4.46, SD=1.90). It is unclear, however, as to why cognition-based trust did not feature as a mediator in study 5. It is plausible that this set of mixed results suggests that trust may not be the key mechanism underlying the relationship between choice provision and leadership perceptions. Rather, it could be that the effects of choice on leadership runs through more basic social
perceptions of warmth and competence as demonstrated in the present collection of studies.

Fourth, the present research elucidates the underlying psychological mechanisms that lead to the observed outcomes. Specifically, I found that interpersonal perceptions of warmth and competence appear to play central roles in shaping leadership and trust evaluations. These findings provide further support for the thesis that warmth and competence are basic dimensions of social judgments (Fiske et al. 2007). In organizations, warmth and competence are especially important dimensions of social perception during interpersonal interactions. A warm and friendly boss or co-worker is more likely to harbor good intention toward oneself, easier to work with, and more likely to offer a helping hand in times of need. A competent and capable boss or co-worker can give valuable task-advice and provide critical guidance or support necessary to complete work projects. In other words, whether one’s boss or colleague is warm and competent can have serious impact on one’s “survival” in the organization as well as career success. Hence, it makes sense that the two dimensions of warmth and competence were clearly taken into consideration when one evaluates choice givers in the work context.

In addition, it is worth noting that the present social perception approach toward understanding the relationship between choice and social perceptions of managers departs from many existing formulations linking employee empowerment to organizational outcomes. For instance, most prior research on empowerment has relied on control-mediated mechanisms (e.g., Arnold, Arad, Rhoades, & Drasgow, 2000; Srivastava et al., 2006). Employees exhibit higher performance and job satisfaction because they feel more in control of their work. Other past research in procedural justice suggests that
empowerment (mainly through voice) could carry symbolic implications for the empowered individual’s status in a given group or society, a theory referred to as the group-value model (e.g., Tyler, Rasinski, & Spodick, 1985). In contrast to these theories, the present research presents a different formulation linking empowerment to evaluations of managers through the lens of social perception judgments.

Last but not least, my research also speaks to the choice literature. Research on choice has, for the most part, focused on the internal motivational state of the choice receiver (Iyengar & Lepper, 1999, 2000; Kim, & Drolet, 2003; Iyengar, Jiang, & Huberman, 2004). Little attention has been paid to how the choice giver is perceived as a function of how he or she gives choice to others. Findings from studies 1, 4, and 5 suggest that besides perceptions of warmth and competence, giving others choice influences other personality perceptions such as openness, and emotional stability. These might in turn influence other relationship dynamics between choice givers and receivers. Hence, my research opens up a new line of inquiry that has been previously ignored in choice research.

**Practical Implications**

The present research also informs managerial practices. Popular managerial discourse is replete with advice touting the importance of empowerment (e.g., Hunton, Hall, & Price, 1998; Forrester, 2000; Conger, 1989; Bowen & Lawler, 1992). Amazon.com alone carries more than 54,000 titles on empowerment, many touting how increasing empowerment at the workplace can solve a myriad of organizational problems. Recent interviews with top business leaders also emphasize empowerment as a key ingredient of effective leadership (George & Sims, 2007). As managers embrace the
importance of empowerment, they need to be mindful that their efforts to empower others by giving them more choice more frequently not only potentially influences their job performance and motivation, but also could affect how they make leadership and trustworthiness evaluations of the managers themselves. However, the relationship between the degree of choice and these important social perceptions is not a straightforward one. Choice beyond a certain level may actually harm how one is evaluated as a leader. Choice also has positive impact on one type of trust (affect-based) but negative impact on another type of trust (cognition-based). Thus, even though giving others choice may lead to increased motivation and satisfaction as predicted by many management scholars (e.g., Thomas & Velthouse, 1990; Hackman & Oldham, 1980; Conger & Kanungo, 1988), there are clearly tradeoffs involved. Managers who attempt to engage employees by providing choice could face the unexpected consequences of being negatively evaluated.

In addition, understanding the mechanisms underlying the fluctuation of leadership perceptions across the degree of choice given can give managers further insights as to what constitutes an effective leader. The finding that the degree of choice that managers give to others can invoke varying perceptions of agreeableness and conscientiousness, in turn affecting leadership and trust perceptions, should be of particular interest. It reiterates the point that effective managers are expected to be not only competent, but also warm. Although this prescription may sound somewhat obvious, many managers still seldom excel in both. Hence, corporate leadership training programs should aim to help aspiring managers hone not only their technical skills but social ones as well.
Lastly, the present research also highlights an additional reason for managers to give employees choice at work - giving others the appropriate degree of choice may be a tactic for *impression management*. For instance, new managers are often anxious about how others see them as leaders. One way to increase others' leadership perceptions of oneself is by offering them an appropriate degree of choice at work. Such provision of choice may not stem from a genuine concern in increasing employee motivation or engagement but merely to improve one's leadership standing in the eyes of others.

**Limitations and Future Research**

The present research has certain limitations. First, my studies largely ignored the relationship between the perceiver and the target being evaluated. Some leadership researchers have argued that leadership perceptions could be influenced by the experience that followers have with their leaders (Lord & Maher, 1993; Lord, 1985). Thus, in my particular context, the quality of relationship that one has with the choice giver might well influence how one evaluates his or her leadership qualities and trustworthiness. For example, it is possible that when the relationship between the choice giver and choice receiver is close, the degree of choice given may matter less in affecting the choice receiver's leadership evaluation of the choice giver. Future research should explore this line of inquiry.

Second, although I have shown that giving others a moderate degree of choice yields the most favorable leadership perceptions, I did not pinpoint where this optimal level of choice might be. In the first four studies, I chose the number two as the intermediate level of choice in my research because it lies at the boundary between no choice and some choices. In studies 4 and 5, it was also somewhat unclear what the
optimal degree of constraint or the optimal frequency of choice provision might be. It is very likely that the optimal number of choice is not a constant and likely to vary according to domains and type of tasks. Future research might identify specific domain or task features and attempt to examine how they interact with the degree of choice to produce optimal leadership and trust perceptions.

Third, I did not explore gender differences in choice givers. Recent research by Scott and Brown (2006) found that perceivers had difficulty encoding leadership behaviors into their underlying prototypical leadership traits when the behavior implied an agentic trait but was enacted by a female. According to these researchers, this is because agentic traits are more closely associated with males than females; perceivers had greater difficulty encoding leadership behaviors when the behaviors were incongruent with the gender of the leader. To the extent that giving others choice reflects social consideration and sensitivity, male managers who offer others a high degree of choice might therefore be perceived as acting incongruently with their gender stereotype (Eagly & Johnson, 1990; Eagly & Karau, 1991; Nyquist, & Spence, 1986). This could explain why male targets in the high degree of choice conditions in most of the reported studies (pilot study, studies 1,2, and 4) were given less favorable leadership ratings. Future research should attempt to replicate my studies with female targets. It would be both interesting and important to see if the curvilinear effect I found in the present series of studies extends to female choice givers.

\[7\] In study 3 (negotiation study) and study 5 (MBA survey) I did not find an effects regarding the gender of the choice givers. This could be that most of the participants in study 3 and the identified bosses in study 5 were males.
Future research could also examine other factors that might potentially moderate the present set of findings. One important factor is culture. Various researchers have argued that culture plays an important role in leadership (Bass, 1990; Ensari & Murphy, 2003; House et al, 2004; Ling et al, 2000; Campbell et al, 1993; Gerstner & Day, 1994) and trust perceptions (Branzei, Vertinsky, & Camp II, 2007). Although I controlled for ethnicity (White versus non-White) in all the analyses and found no significant effect for this variable, this does not necessarily imply that culture does not matter. The present studies were not designed to test cultural differences, and many non-White participants in my studies have lived in the U.S. all their lives. Thus, their conception of choice may closely mirror that of European-Americans. A more appropriate test of cultural differences would be to employ participants residing in different countries. One speculation is that individuals from relatively more interdependent cultures may prefer decisions to be made for them by well-liked superiors (Iyengar & Lepper, 1999) and hence may give higher leadership ratings to managers who do not give them choice.

In addition, one might find cultural differences in the mechanisms linking choice to leadership perceptions. To the extent that Asians are less likely to make dispositional attributions than Westerners during interpersonal interactions, whether the social perception processes described in this research would materialize in an Asian context remains to be examined.

Another worthwhile direction for future investigation is to examine how choice givers are perceived as a function of the contents of the options they present to others. Research by Botti and Iyengar (2004) found that when faced with undesirable options, non-choosers are more satisfied with the decision outcome than choosers. This is because
when confronted by unattractive alternatives, choosers experience “choice-outcome aversion.” In other words, the act of choosing undesirable outcomes negatively affects choosers’ anticipated and experienced satisfaction as compared to non-choosers. It is plausible that this negative state experienced by choosers might cause them to make unfavorable evaluation of the choice givers. For example, managers who give employees undesirable options (e.g., choosing which of their subordinates to lay off or which days to work overtime) may be more negatively evaluated as leaders than managers who do not give any option at all. Another dimension of choice content could be how consequential or important the presented options are. Managers who frequently present inconsequential options to others (e.g., choosing the color of paper folders to use for binding a report) could be perceived as insincere or patronizing.

Finally, future research can go beyond the perceptions of choice givers to examine how choice provision affects the relationship between choice giver and receiver. Does giving choice to others increases or reduces interpersonal conflict and how does that affect the relationship between two persons? For example, if one were to extend the current arguments regarding how choice influences warmth and competence perceptions, it stands to reason that giving choice to others, depending on the degree of latitude involved, can reduce personal conflict but potentially increase task conflict.

Conclusion

In closing, I hope the present research calls to attention that giving others choice not only affects task performance and the intrapersonal experience of the choice receiver (e.g., motivation and satisfaction) as demonstrated by prior research, but can also influence how the choice giver is trusted and perceived as an effective leader. The present
line of work explicitly recognizes that choice provision is an interpersonal act and fleshes out the social perception dynamics underlying giving different degrees of choice to others. This enriches our existing understanding of the effects of choice provision at the workplace. The perennial question of how much power and control a manager should amass and how much of it to share at work has always been a difficult one. My research exposes an additional dimension worth considering when managers grant choice to others at work.
REFERENCES


Schyns, B. (2006). The role of implicit leadership theories in the performance appraisals


APPENDICES

APPENDIX A

VIKNETTE FOR PILOT STUDY AND STUDY 1

Imagine that you are a software engineer and you have been assigned to work on a new software project with Mr. M, a senior manager in your company. You have never worked with Mr. M. before and this was the first time that you met with him. During the meeting, Mr. M. gave you a thorough description of what the new project entails, the deadline involved, and client expectations. He also discussed with you the various programming languages that you could potentially use to complete this project.

[No choice condition]

At the end of the meeting, Mr. M. said that out of the various programming languages available in the company, the APEX programming language is the most suitable and asked you to complete the project using this language.

[Low choice and High choice conditions]

At the end of the meeting, Mr. M. said that out of the various programming languages available in the company, two [six] of them are more suitable for the given project than the rest. However, he would like to give you the flexibility of choosing one programming language out of these two [six] options. You chose the APEX programming language.
APPENDIX B

VIGNETTES FOR STUDY 2

[Supervisor Choice Giver condition]
Imagine that you are a software engineer and you have been assigned to work on a new software project with Dan, a senior project manager in your company. During a project meeting, Dan gave you a thorough description of the requirements of the project, the deadline involved, and client expectations. He also discussed with you the various programming languages that you could potentially use to complete this project.

[Peer Choice Giver condition]
Imagine that you are a software engineer and you have been assigned to work on a new project with Dan, another software engineer in your company. Both Dan and you joined the company at about the same time and will contribute equally to this project. During a project meeting, Dan and you discussed the requirements of the new project, the deadline involved, and client expectations. The two of you also discussed the various programming languages that could be potentially used to complete this project.

[Subordinate Choice Giver condition]
Imagine that you are a senior project manager and you have been assigned to work on a new software project with Dan, a young software engineer who has recently joined your company. During a project meeting, you gave Dan a thorough description of the requirements of the project, the deadline involved, and client expectations. You also discussed with Dan the various programming languages that could be potentially used to complete this project.
APPENDIX C

STUDY 3: “EL TEK” NEGOTIATION ROLE INFORMATION

[One proposal offer condition]
In this exercise, think about and work out **ONE proposal** that you will use as your **first offer** in the negotiation. It is recommended that you use a spreadsheet to develop this proposal. Please record your proposal for the first offer in the table provided below.

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<th>Level of Restrictions</th>
<th>Transfer Price</th>
<th>Overall monetary value</th>
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During the **actual negotiation**, please present the above proposal to your partner. Be sure to ask for his or her reactions and note the responses. You will benefit most from continuing to deliver one proposal at a time throughout the negotiation. Use your spreadsheet to calculate the offer as you go along.

[Two proposal offers condition]
You should have noticed from the given chart that there are *at least* 11 possible agreements. This represents an opportunity to present **multiple simultaneous offers** to your partner during the negotiation. In this exercise, think about and work out **TWO proposals** to deliver *simultaneously* as your **first offer** in the negotiation. These two proposals should have very similar total values (i.e., outcome profit) such that you will be indifferent to whichever proposal your partner chooses. It is recommended that you use a spreadsheet to develop these proposals. Please record your **two proposals** for the first offer in the table provided below:
During the **actual negotiation**, please present these **two proposals at the same time** when making your first offer to your partner. Be sure to ask your partner about his or her preferences among these two proposals and note the responses. You will benefit most from continuing to deliver two proposals simultaneously throughout the negotiation. Use your spreadsheet to calculate these as you go along.

**Five proposal offers condition**

You should have noticed from the given chart that there are *at least* 11 possible agreements. This represents an opportunity to present **multiple simultaneous offers** to your partner during the negotiation. In this exercise, think about and work out **FIVE proposals** to deliver *simultaneously* as your first offer in the negotiation. These five proposals should have very similar total values (i.e., outcome profit) such that you will be indifferent to whichever proposal your partner chooses. It is recommended that you use a spreadsheet to develop these proposals. Please record your **five proposals** for the first offer in the table provided below:

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During the **actual negotiation**, please present these **five proposals at the same time** when making your first offer to your partner. Be sure to ask your partner about his or her preferences among these five proposals and note the responses. You will benefit most from continuing to deliver five proposals simultaneously throughout the negotiation. Use your spreadsheet to calculate these as you go along.
Imagine that you are a management executive and you have been assigned to work on a new corporate development project with Mr. M, a vice-president in your company. You have never worked with Mr. M. before and this was the first time that you met with him. The task is to assemble a cross-department task-force to look into cost-cutting measures for your company. Currently, the company has a total of 8 departments, each led by a different departmental manager.

During the meeting, Mr. M. gave you a thorough description of what the project entails and the deadline involved. He also discussed with you the process of assembling the task-force. It is important that the members of this task-force are carefully chosen to ensure the success of the project.

*Low degree of choice / High Choice Constraint*

Specifically, Mr. M. said that in assembling the task-force, you must consider the strengths and weaknesses of each member. You must also incorporate all the requirements regarding member selection stated by 6 other departmental managers in the company. Each manager gave one requirement. Mr. M. proceeded to give you a list of the requirements provided by these 6 specific managers during a previous meeting.

*Moderate degree of choice / Moderate Choice Constraint*

Specifically, Mr. M. said that in assembling the task-force, you must consider the strengths and weaknesses of each member. You must also incorporate all the requirements regarding member selection stated by 2 other departmental managers in the
company. Each manager gave one requirement. Mr. M. proceeded to give you a list of the requirements provided by these 2 specific managers during a previous meeting.

*High degree of choice / Low Choice Constraint*

Specifically, Mr. M. said that in assembling the task-force, you must consider the strengths and weaknesses of each member. Other than that, you can assemble the task-force based solely on your own judgment and need not consult any of the departmental managers.
FIGURES

FIGURE 1

Relationships Between Choice and Person Perceptions

Person Perceptions

Perceived Warmth

Perceived Competence

Degree of Choice
FIGURE 2A
Relationship between Choice and Leadership Perceptions

Leadership Perceptions

Perceived Warmth

Perceived Competence

Degree of Choice

FIGURE 2B
Relationships Between Choice and Trust Perceptions

Trust Perceptions

Affect-based trust
(Perceived Warmth)

Cognition-based trust
(Perceived Competence)

Degree of Choice
FIGURE 3
PILOT STUDY: Graphical Depiction of the Effects of Number of Choices Offered on Leadership Perceptions
FIGURE 4

STUDY 1: Effects of Choice on Warmth and Competence Perceptions

![Graph showing the effects of choice on warmth and competence perceptions. The x-axis represents the number of choices, and the y-axis represents mean-centered personality ratings. Agreements and Conscientiousness are represented by different lines. The graph illustrates a trend where fewer choices lead to higher warmth perceptions and lower competence perceptions.]
FIGURE 5
STUDY 1: Effects of Choice on Leadership Perceptions

Leadership Perceptions

No choice   2 choices   6 choices
Number of Choices
FIGURE 6

STUDY 1: Mediation Analyses

No Choice versus Low Choice

Agreeableness as Mediator

Choice

Agreeableness

Without Agreeableness
B=0.38, t=3.01
p<0.01

With Agreeableness
B=0.25, t=1.94
p>0.05

Leadership

With Choice
B=0.43, t=3.50
p<0.01

p<0.05

Sobel test: z=1.97, p < 0.05

Conscientiousness as Mediator

Choice

Conscientiousness

Without Conscientiousness
B=0.63, t=5.96
p<0.01

With Choice
B=0.59, t=2.94
p<0.01

Leadership

Without Conscientiousness
B=0.38, t=2.99
p<0.01

With Conscientiousness
B=0.29, t=2.93
p<0.01

Sobel test: z = 0.99, p = 0.32
Low Choice versus High Choice

Agreeableness as Mediator

Without Agreeableness
B = -0.29, t = -2.20
p < 0.05

With Agreeableness
B = -0.30, t = -2.39
p < 0.05

Leadership

Sobel test: z = 0.38, p = 0.70

Conscientiousness as Mediator

Without Conscientiousness
B = -0.28, t = -2.10
p < 0.05

With Conscientiousness
B = -0.13, t = -1.15
p > 0.05

Leadership

Sobel test: z = 1.95, p = 0.05

Choice
STUDY 2: Graphical Depiction of the Effects of Number of Choice Offered and Choice Giver Role on Leadership Perceptions

![Graphical Depiction of the Effects of Number of Choice Offered and Choice Giver Role on Leadership Perceptions](image)
FIGURE 8

STUDY 3: Graphical Depiction of the Effects of Number of Choice on Leadership Perceptions and Promotion Recommendations (Negotiation Context)
FIGURE 9

STUDY 4: Graphical Depiction Of Effects Of Choice Constraint on Leadership Perceptions

High Choice Constraint (low degree of choice)  Moderate Choice Constraint (moderate degree of choice)  No Choice Constraint (high degree of choice)
FIGURE 10

STUDY 4: Mediation Analyses for Leadership Perceptions

High to Moderate Choice Constraint (Low to Moderate Degree of Choice)

Agreeableness as Mediator

Agreeableness

B=0.30, t=2.93
p<0.01

Choice Constraint

Without Agreeableness
B=0.29, t=2.78
p<0.01

With Agreeableness
B=0.20, t=1.90
p>0.05

Leadership

Without Choice
B=0.35, t=3.51
p<0.01

With Choice
B=0.29, t=2.83
p<0.01

Sobel test: z=1.97, p < 0.05
(Full mediation)

Conscientiousness as Mediator

Conscientiousness

B=0.02, t=-0.20
p>0.10

Choice Constraint

Without Conscientiousness
B=0.29, t=2.78
p<0.01

With Conscientiousness
B=0.28, t=2.89
p<0.01

Leadership

Without Choice
B=0.36, t=3.59
p<0.01

With Choice
B=0.35, t=3.67
p<0.01

Sobel test: z=0.22, p > 0.10
Moderate to Low Choice Constraint (Moderate to High Degree of Choice)

**Agreeableness as Mediator**

- B = 0.06, t = 0.56, p > 0.10
- Without Choice: B = 0.27, t = 2.57, p < 0.05
- With Agreeableness: B = -0.26, t = -2.54, p < 0.01
- With Agreeableness: B = -0.28, t = -2.81, p < 0.01

Sobel test: z = 0.55, p > 0.10

**Conscientiousness as Mediator**

- B = -0.32, t = -3.12, p < 0.01
- Without Conscientiousness: B = -0.26, t = -2.54, p < 0.01
- With Conscientiousness: B = -0.10, t = -1.06, p > 0.10

Sobel test: z = -2.69, p < 0.01

(Full mediation)
STUDY 4: Graphical Depiction of Effects of Choice Constraint on Cognition-Based Trust
FIGURE 12

STUDY 4: Graphical Depiction of Effects of Choice Constraint on Affect-Based Trust

High Choice Constraint (low degree of choice) | Moderate Choice Constraint (moderate degree of choice) | No Choice Constraint (high degree of choice)
FIGURE 13

STUDY 4: Mediation Analyses for Trust

Affect-based Trust

Agreeableness as Mediator

Agreeableness

Choice Constraint

Without Agreeableness

B = 0.25, t = 2.91
p < 0.01

With Agreeableness

B = 0.10, t = 1.25
p > 0.10

Affect-based Trust

Without Choice

B = 0.47, t = 5.98
p < 0.01

With Choice

B = 0.43, t = 5.23
p < 0.01

Sobel test: z = 3.02, p < 0.01
(Full mediation)

Conscientiousness as Mediator

Conscientiousness

Choice Constraint

Without Conscientiousness

B = -0.25, z = -2.95
p < 0.01

With Conscientiousness

B = 0.25, t = 2.85
p < 0.01

Affect-based Trust

Without Choice

B = -0.05, t = -0.47
p > 0.10

With Choice

B = 0.00, t = 0.02
p > 0.10

Sobel test: z = 0.00, p > 0.10
Cognition-based Trust

Agreeableness as Mediator

- Without Choice: $B=0.17$, $t=1.73$, $p>0.05$
- With Choice: $B=0.23$, $t=2.39$, $p<0.05$

Choice Constraint

Without Agreeableness: $B=-0.22$, $t=-2.52$, $p<0.05$

With Agreeableness: $B=-0.26$, $t=-3.01$, $p<0.05$

Sobel test: $z=1.87$, $p>0.05$

Conscientiousness as Mediator

- Without Choice: $B=0.59$, $t=8.37$, $p<0.01$
- With Choice: $B=0.57$, $t=7.84$, $p<0.01$

Choice Constraint

- Without Conscientiousness: $B=-0.22$, $t=-2.52$, $p<0.05$
- With Conscientiousness: $B=-0.07$, $t=-0.89$, $p>0.10$

Sobel test: $z=-2.72$, $p<0.01$

(Full mediation)
FIGURE 14

STUDY 5:
Graphical Depiction of Effects of Choice Frequency on Leadership Effectiveness

Note: Low, moderate, and high levels of choice frequency are derived from tertiary split of the Choice Frequency continuous variable.
FIGURE 15

STUDY 5: Mediation Analyses for Leadership Effectiveness

Below Median Choice Frequency

Agreeableness as Mediator

Agreeableness

Without Choice
B=0.57, z=4.53
p<0.01

With Choice
B=0.45, z=3.82
p<0.01

Without Agreeableness
B=1.01, z=4.84
p<0.01

Leadership

Choice Frequency

Without Agreeableness
B=0.83, z=4.17
p<0.01

Choice

Sobel test: z=3.03, p < 0.01
(Partial mediation)

Conscientiousness as Mediator

Conscientiousness

Without Choice
B=0.30, z=2.57
p<0.01

With Choice
B=0.41, z=4.21
p<0.01

Without Conscientiousness
B=1.01, z=4.84
p<0.01

Leadership

Choice Frequency

With Conscientiousness
B=1.16, z=6.07
p<0.01

Leadership

Sobel test: z = -1.37, p > 0.10
Agreeableness as Mediator

Conscientiousness as Mediator

Above Median Choice Frequency

Agreeableness

Without Choice

B=0.32, z=3.80
p<0.01

With Choice

B=0.36, z=4.71
p<0.01

Without Agreeableness

B=-0.80, z=-5.13
p<0.01

With Agreeableness

B=-0.85, z=-5.77
p<0.01

Leadership

Without Conscientiousness

B=-0.80, z=-5.13
p<0.01

With Conscientiousness

B=-0.46, z=-3.51
p<0.01

Choice Frequency

Without Choice

B=0.56, t=10.02
p<0.01

With Choice

B=0.50, z=9.03
p<0.01

Leadership

Sobel test: z = -3.21, p < 0.01

(Partial mediation)
STUDY 5: Graphical Depiction of Effects of Choice Frequency on Perceived Agreeableness and Conscientiousness

Note: Low, moderate, and high levels of choice frequency are derived from tertiary split of the Choice Frequency continuous variable.
FIGURE 17

STUDY 5: Mediation Analyses for Trust

Affect-based Trust

Agreeableness as Mediator

Without Choice
B=0.47, z=9.64

p<0.01

With Choice
B=0.38, z=3.42

p<0.01

Choice Frequency

Without Agreeableness
B=0.36, z=6.76

p<0.01

With Agreeableness
B=0.19, z=7.20

p<0.01

Affect-based Trust

Sobel test: z= 5.56, p < 0.01

(Partial mediation)

Conscientiousness as Mediator

Without Conscientiousness
B=0.36, z=6.76

p<0.01

With Conscientiousness
B=0.31, z=5.34

p<0.01

Choice Frequency

Without Choice
B=-0.28, z=-4.83

p<0.01

With Choice
B=-0.16, z=-2.69

p<0.01

Affect-based Trust

Sobel test: z = -1.77, p > 0.05
Cognition-based Trust

**Agreeableness as Mediator**

- Without Choice
  - B=0.01, z=0.11
  - p>0.05

- With Choice
  - B=0.04, z=0.73
  - p>0.05

**Conscientiousness as Mediator**

- Without Choice
  - B=-0.19, z=-2.43
  - p<0.05

- With Conscientiousness
  - B=-0.12, z=-2.11
  - p<0.05

Sobel test: z=0.66, p>0.10

Choice Frequency

**Without Agreeableness**

- B=-0.10, z=1.99
- p<0.05

**With Agreeableness**

- B=-0.12, z=-2.11
- p<0.05

**Sobel test:**

(Full mediation)
# TABLES

## TABLE 1

PILOT STUDY: Descriptive Statistics, Cronbach’s Alpha, and Correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>s.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership Perception&lt;sup&gt;a&lt;/sup&gt;</td>
<td>5.20</td>
<td>1.19</td>
<td>0.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choice&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.98</td>
<td>0.83</td>
<td>-0.02</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender&lt;sup&gt;c&lt;/sup&gt;</td>
<td>0.75</td>
<td>0.44</td>
<td>-0.39**</td>
<td>0.04</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity&lt;sup&gt;d&lt;/sup&gt;</td>
<td>0.30</td>
<td>0.46</td>
<td>0.14</td>
<td>-0.03</td>
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<td></td>
</tr>
<tr>
<td>Age</td>
<td>25.01</td>
<td>0.49</td>
<td>0.04</td>
<td>-0.24&lt;sup&gt;†&lt;/sup&gt;</td>
<td>0.23&lt;sup&gt;†&lt;/sup&gt;</td>
<td>0.36**</td>
<td>--</td>
</tr>
</tbody>
</table>

**<sup>**</sup>p < 0.01    *<sup>*</sup>p < 0.05    †<sup>†</sup>p < 0.10

<sup>a</sup>n = 60

<sup>b</sup>0 = No Choice; 1 = Two Choices; 2 = Six Choices

<sup>c</sup>0 = Female; 1 = Male

<sup>d</sup>0 = Non-white (Asian, African-American, Hispanic, etc); 1 = White (Caucasian)
<table>
<thead>
<tr>
<th>Variable and Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Partial $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choice $^a$</td>
<td>2</td>
<td>4.393</td>
<td>3.921*</td>
<td>0.127</td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>0.383</td>
<td>0.342</td>
<td>0.006</td>
</tr>
<tr>
<td>Gender $^b$</td>
<td>1</td>
<td>6.745</td>
<td>6.020*</td>
<td>0.100</td>
</tr>
<tr>
<td>Ethnicity $^c$</td>
<td>1</td>
<td>0.075</td>
<td>0.067</td>
<td>0.000</td>
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<tr>
<td>Error</td>
<td>54</td>
<td>1.120</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Squared = 0.276 (Adjusted R Squared = 0.209)

* $p < 0.05$

$^a$ 0 = No Choice; 1 = Low Choice; 2 = High Choice

$^b$ 1 = Male, 0 = Female

$^c$ 0 = Non-white (Asian, African-American, Hispanic, etc); 1 = White (Caucasian)
TABLE 3

STUDY 1: Descriptive Statistics, Cronbach’s Alpha, and Correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Leadership Perceptions</td>
<td>5.38</td>
<td>1.11</td>
<td>0.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Choice</td>
<td>0.98</td>
<td>0.80</td>
<td>0.08</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Agreeableness</td>
<td>4.45</td>
<td>1.06</td>
<td>0.29**</td>
<td>0.34**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Conscientiousness</td>
<td>5.34</td>
<td>1.02</td>
<td>0.60**</td>
<td>-0.11</td>
<td>0.04</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Openness</td>
<td>4.10</td>
<td>1.23</td>
<td>0.18</td>
<td>0.25**</td>
<td>0.28**</td>
<td>0.19</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>6. Emotional Stability</td>
<td>4.83</td>
<td>1.05</td>
<td>0.38**</td>
<td>0.22**</td>
<td>0.48**</td>
<td>0.29**</td>
<td>0.25*</td>
<td>0.08</td>
</tr>
<tr>
<td>7. Extraversion</td>
<td>4.67</td>
<td>0.93</td>
<td>0.46**</td>
<td>-0.03</td>
<td>0.00</td>
<td>0.48**</td>
<td>0.08</td>
<td>0.08</td>
</tr>
<tr>
<td>8. Gender</td>
<td>0.46</td>
<td>0.50</td>
<td>-0.04</td>
<td>0.11</td>
<td>-0.03</td>
<td>0.03</td>
<td>-0.09</td>
<td>-0.05</td>
</tr>
<tr>
<td>9. Ethnicity</td>
<td>0.71</td>
<td>0.46</td>
<td>-0.05</td>
<td>0.12</td>
<td>0.03</td>
<td>-0.21†</td>
<td>-0.24*</td>
<td>-0.15</td>
</tr>
<tr>
<td>10. Age</td>
<td>26.37</td>
<td>7.94</td>
<td>-0.14</td>
<td>0.13</td>
<td>-0.12</td>
<td>-0.04</td>
<td>-0.14</td>
<td>-0.22†</td>
</tr>
<tr>
<td>Variable</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td></td>
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<td>-----</td>
<td>-----</td>
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</tr>
<tr>
<td>7. Extraversion</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>8. Gender (^c)</td>
<td>-0.12</td>
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<tr>
<td>9. Ethnicity (^d)</td>
<td>-0.17</td>
<td>-0.11</td>
<td>-</td>
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<tr>
<td>10. Age</td>
<td>-0.05</td>
<td>0.06</td>
<td>0.23*</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

\(\bullet \text{** } p < 0.01 \quad \bullet \text{* } p < 0.05 \quad \dagger \text{ } p < 0.10\)

\(^a\) \(n = 83\)

\(^b\) 0 = No Choice; 1 = Two Choices; 2 = Six Choices

\(^c\) 0 = Female; 1 = Male

\(^d\) 0 = Non-white (Asian, African-American, Hispanic, etc); 1 = White (Caucasian)
TABLE 4

STUDY 1: ANOVA Results for Effects of Choice on Leadership Perceptions with Age, Gender, and Ethnicity as Control (n=83)

<table>
<thead>
<tr>
<th>Variable and Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Partial $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choice $^a$</td>
<td>2</td>
<td>5.505</td>
<td>4.840**</td>
<td>0.112</td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>2.919</td>
<td>2.566</td>
<td>0.032</td>
</tr>
<tr>
<td>Gender $^b$</td>
<td>1</td>
<td>0.045</td>
<td>0.843</td>
<td>0.001</td>
</tr>
<tr>
<td>Ethnicity $^c$</td>
<td>1</td>
<td>0.504</td>
<td>0.443</td>
<td>0.006</td>
</tr>
<tr>
<td>Error</td>
<td>77</td>
<td>1.137</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Squared = 0.13 (Adjusted R Squared = 0.07)

** $p < 0.01$

$^a$ 0 = No Choice; 1 = Low Choice; 2 = High Choice

$^b$ 1 = Male, 0 = Female

$^c$ 0 = Non-white (Asian, African-American, Hispanic, etc) ; 1 = White (Caucasian)
<table>
<thead>
<tr>
<th>Big-Five Personality</th>
<th>No Choice</th>
<th>Two Choices (Low)</th>
<th>Six Choices (High)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreeableness</td>
<td>3.89 (1.00)_{a,b}</td>
<td>4.67 (0.95)_{a}</td>
<td>4.77 (1.03)_{b}</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>5.33 (1.01)</td>
<td>5.60 (0.90)_{c}</td>
<td>5.04 (1.09)_{c}</td>
</tr>
<tr>
<td>Extraversion</td>
<td>4.57 (1.00)</td>
<td>4.92 (0.85)</td>
<td>4.50 (0.92)</td>
</tr>
<tr>
<td>Emotional-Stability</td>
<td>4.41 (1.13)_{d,e}</td>
<td>5.08 (0.94)_{d}</td>
<td>4.96 (0.86)_{e}</td>
</tr>
<tr>
<td>Openness</td>
<td>3.61 (1.24)_{e,f}</td>
<td>4.28 (1.17)_{e}</td>
<td>4.38 (1.19)_{f}</td>
</tr>
</tbody>
</table>

Notes:

1. Number in bracket denotes standard deviation.
2. Cells across row sharing same subscript are different at $p \leq 0.05$
TABLE 6

STUDY 1: Regression of Leadership Perceptions on Big-Five Personality Measures

<table>
<thead>
<tr>
<th></th>
<th>Full Sample (n=83)</th>
<th>Sample with No Choice and Low Choice conditions only (n=57)</th>
<th>Sample with Low Choice and High Choice conditions only (n=56)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>F(5,77)=14.69, p&lt;0.01</td>
<td>F(5,51)=13.04, p&lt;0.01</td>
</tr>
<tr>
<td></td>
<td>Std Coeff.</td>
<td>t</td>
<td>p-value</td>
</tr>
<tr>
<td>Intercept</td>
<td>-0.27</td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td>0.26</td>
<td>2.75</td>
<td>0.01</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>0.23</td>
<td>2.41</td>
<td>0.02</td>
</tr>
<tr>
<td>Conscientious</td>
<td>0.44</td>
<td>4.45</td>
<td>0.00</td>
</tr>
<tr>
<td>Emotion Stability</td>
<td>0.14</td>
<td>1.41</td>
<td>0.16</td>
</tr>
<tr>
<td>Openness</td>
<td>-0.06</td>
<td>-.68</td>
<td>0.50</td>
</tr>
<tr>
<td>Adjusted R-Sq</td>
<td>0.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td>Mean</td>
<td>s.d.</td>
<td>1</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>------</td>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>1. Leadership Perceptions</td>
<td>4.67</td>
<td>1.01</td>
<td></td>
</tr>
<tr>
<td>2. Choice</td>
<td>0.87</td>
<td>0.82</td>
<td>-0.02</td>
</tr>
<tr>
<td>3. Role of Choice Giver</td>
<td>1.07</td>
<td>0.82</td>
<td>0.10</td>
</tr>
<tr>
<td>4. Gender</td>
<td>0.44</td>
<td>1.16</td>
<td>-0.09</td>
</tr>
<tr>
<td>5. Ethnicity</td>
<td>0.45</td>
<td>0.49</td>
<td>-0.02</td>
</tr>
<tr>
<td>6. Age</td>
<td>23.6</td>
<td>5.17</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**p < 0.01  *p < 0.05  †p < 0.10**

* a n = 220

b 0 = No Choice; 1 = Two Choices; 2 = Six Choices

c 0 = Subordinate Choice Giver; 1 = Peer Choice Giver; 2 = Supervisor Choice Giver

d 0 = Female; 1 = Male

e 0 = Non-white (Asian, African-American, Hispanic, etc); 1 = White (Caucasian)
TABLE 8

STUDY 2:
ANOVA Results for Effects of Choice and Choice Giver Role on Leadership Perceptions with Age, Gender, and Race as Control (n=220)

<table>
<thead>
<tr>
<th>Variable and Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Partial $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Predictors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choice $^a$</td>
<td>2</td>
<td>12.910</td>
<td>14.778**</td>
<td>0.124</td>
</tr>
<tr>
<td>Choice Giver Role $^b$</td>
<td>2</td>
<td>3.468</td>
<td>3.970*</td>
<td>0.037</td>
</tr>
<tr>
<td>Choice x Choice Giver Role</td>
<td>4</td>
<td>1.615</td>
<td>1.849</td>
<td>0.034</td>
</tr>
<tr>
<td><strong>Controls</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>0.086</td>
<td>0.098</td>
<td>0.000</td>
</tr>
<tr>
<td>Gender $^c$</td>
<td>1</td>
<td>2.530</td>
<td>2.896†</td>
<td>0.014</td>
</tr>
<tr>
<td>Ethnicity $^d$</td>
<td>1</td>
<td>0.074</td>
<td>0.085</td>
<td>0.000</td>
</tr>
<tr>
<td>Error</td>
<td>208</td>
<td>0.874</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Squared = 0.182 (Adjusted R Squared = 0.138)

** $p < 0.01$  * $p < 0.05$  † $p < 0.10$

$^a$ 0 = No Choice; 1 = Low Choice; 2 = High Choice

$^b$ 0 = Subordinate Choice Giver; 1 = Peer Choice Giver; 2 = Supervisor Choice Giver

$^c$ 1 = Male, 0 = Female

$^d$ 0 = Non-white (Asian, African-American, Hispanic, etc); 1 = White (Caucasian)
### TABLE 9: Descriptive Statistics, Cronbach's Alpha, and Correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Leadership Perception</td>
<td>5.05</td>
<td>0.90</td>
<td>0.92</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Promotion Recommendation</td>
<td>5.18</td>
<td>1.01</td>
<td>0.65**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Number of offers</td>
<td>2.03</td>
<td>0.81</td>
<td>0.10</td>
<td>-0.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Gender</td>
<td>0.54</td>
<td>0.50</td>
<td>0.07</td>
<td>0.04</td>
<td>0.00</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>5. Ethnicity</td>
<td>0.75</td>
<td>0.44</td>
<td>0.05</td>
<td>-0.03</td>
<td>0.02</td>
<td>-0.05</td>
<td></td>
</tr>
<tr>
<td>6. Age</td>
<td>30.9</td>
<td>4.16</td>
<td>-0.18</td>
<td>0.10</td>
<td>0.01</td>
<td>0.34**</td>
<td>0.02</td>
</tr>
</tbody>
</table>

- **p < 0.01  *p < 0.05  + p < 0.10
- a n = 68
- b 1 = One offer (no choice); 2 = Two offers; 3 = Five offers
- c 0 = Female; 1 = Male
- d 0 = Non-white (Asian, African-American, Hispanic, etc); 1 = White (Caucasian)
TABLE 10

STUDY 3:
ANOVA Results for Effects of Choice on Leadership Perceptions with Age, Gender, and Race as Control (n=68 dyads)

<table>
<thead>
<tr>
<th>Variable and Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Partial $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Predictor</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of offers $^a$</td>
<td>2</td>
<td>3.006</td>
<td>4.04$^*$</td>
<td>0.115</td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>1.533</td>
<td>2.061</td>
<td>0.032</td>
</tr>
<tr>
<td>Gender $^b$</td>
<td>1</td>
<td>0.009</td>
<td>0.915</td>
<td>0.000</td>
</tr>
<tr>
<td>Ethnicity $^c$</td>
<td>1</td>
<td>0.024</td>
<td>0.033</td>
<td>0.001</td>
</tr>
<tr>
<td>Error</td>
<td>62</td>
<td>0.744</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Squared = 0.146 (Adjusted R Squared = 0.078)

$** p < 0.01\; * p < 0.05\; ^t p < 0.10$

$^a$ 1 = One offer (no choice) ; 2 = Two offers; 3 = Five offers

$^b$ 0 = Female; 1 = Male

$^c$ 0 = Non-white (Asian, African-American, Hispanic, etc) ; 1 = White (Caucasian)
### TABLE 11

**STUDY 3:**

ANOVA Results for Effects of Choice on Promotion Recommendations with Age, Gender, and Race as Control (n=68 dyads)

<table>
<thead>
<tr>
<th>Variable and Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Partial $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Predictor</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of offers</td>
<td>2</td>
<td>3.104</td>
<td>3.161*</td>
<td>0.093</td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>0.622</td>
<td>0.633</td>
<td>0.010</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>0.009</td>
<td>0.009</td>
<td>0.000</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1</td>
<td>0.226</td>
<td>0.230</td>
<td>0.004</td>
</tr>
<tr>
<td>Error</td>
<td>62</td>
<td>0.982</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Squared = 0.103 (Adjusted R Squared = 0.031)

** p < 0.01  * p < 0.05  † p < 0.10

a n = 136

b 1 = One offer (no choice) ; 2 = Two offers; 3 = Five offers

c 0 = Female; 1 = Male

d 0 = Non-white (Asian, African-American, Hispanic, etc) ; 1 = White (Caucasian)
<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Leadership Perceptions</td>
<td>5.29</td>
<td>1.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Cognition-based trust</td>
<td>5.41</td>
<td>1.06</td>
<td>0.59**</td>
<td>0.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Affect-based trust</td>
<td>2.76</td>
<td>1.23</td>
<td>0.28**</td>
<td>0.11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Choice constraint</td>
<td>1.00</td>
<td>0.82</td>
<td>0.00</td>
<td>-0.18*</td>
<td>0.22*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Conscientiousness</td>
<td>5.88</td>
<td>0.98</td>
<td>0.43**</td>
<td>0.59**</td>
<td>0.03</td>
<td>-0.25**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Agreeableness</td>
<td>3.91</td>
<td>1.20</td>
<td>0.31**</td>
<td></td>
<td>0.18*</td>
<td>0.47**</td>
<td>0.29**</td>
<td>-0.01</td>
</tr>
<tr>
<td>7. Gender</td>
<td>0.50</td>
<td>0.50</td>
<td></td>
<td>-0.14</td>
<td></td>
<td>-0.11</td>
<td></td>
<td>-0.15†</td>
</tr>
<tr>
<td>8. Ethnicity</td>
<td>0.39</td>
<td>0.49</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Age</td>
<td>23.06</td>
<td>5.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01, † p < .10, ‡ p < .05, § p < .01
<table>
<thead>
<tr>
<th>Variable</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Gender ( ^c )</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Ethnicity ( ^d )</td>
<td>-0.03</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>9. Age</td>
<td>0.21*</td>
<td>0.08</td>
<td>--</td>
</tr>
</tbody>
</table>

**p < 0.01   * p < 0.05   † p < 0.10

\( ^a \) n = 134

\( ^b \) 0 = high choice constraint (low degree of choice); 1 = moderate choice constraint (moderate degree of choice); 2 = low choice constraint (high degree of choice).

\( ^c \) 0 = Female; 1 = Male

\( ^d \) 0 = Non-white (Asian, African-American, Hispanic, etc); 1 = White (Caucasian)
TABLE 13

STUDY 4: ANOVA Results for Effects of Choice Constraint on Leadership Perceptions with Age, Gender, and Ethnicity as Control (n=134)

<table>
<thead>
<tr>
<th>Variable and Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Partial $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choice constraint</td>
<td>2</td>
<td>4.001</td>
<td>4.26*</td>
<td>0.062</td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>0.022</td>
<td>0.023</td>
<td>0.000</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>3.551</td>
<td>3.771 †</td>
<td>0.029</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1</td>
<td>2.591</td>
<td>2.751 †</td>
<td>0.021</td>
</tr>
<tr>
<td>Error</td>
<td>127</td>
<td>0.942</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Squared = 0.11 (Adjusted R Squared = 0.08)

* $p < 0.01$  ** $p < 0.05$  † $p < 0.10$

*a* 0 = high choice constraint (low degree of choice); 1 = moderate choice constraint (moderate degree of choice); 2 = low choice constraint (high degree of choice).

*b* 1 = Male, 0 = Female

*c* 0 = Non-white (Asian, African-American, Hispanic, etc); 1 = White (Caucasian)
TABLE 14

STUDY 4:

ANOVA Results for Effects of Choice Constraint on Cognition-based Trust
with Affect-based Trust, Age, Gender, and Ethnicity as Control (n=134)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Partial ( \eta^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choice constraint a</td>
<td>2</td>
<td>5.582</td>
<td>5.362**</td>
<td>0.078</td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affect-based Trust</td>
<td>1</td>
<td>2.204</td>
<td>2.117</td>
<td>0.016</td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>1.209</td>
<td>1.161</td>
<td>0.009</td>
</tr>
<tr>
<td>Gender b</td>
<td>1</td>
<td>1.579</td>
<td>1.517</td>
<td>0.012</td>
</tr>
<tr>
<td>Ethnicity c</td>
<td>1</td>
<td>0.028</td>
<td>0.026</td>
<td>0.000</td>
</tr>
<tr>
<td>Error</td>
<td>127</td>
<td>1.041</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Squared = 0.12 (Adjusted R Squared = 0.07)

** p < 0.01  * p < 0.05  † p < 0.10

a 0 = high choice constraint (low degree of choice); 1 = moderate choice constraint (moderate degree of choice); 2 = low choice constraint (high degree of choice).

b 1 = Male, 0 = Female

c 0 = Non-white (Asian, African-American, Hispanic, etc); 1 = White (Caucasian)
TABLE 15

STUDY 4:

ANOVA Results for Effects of Choice Constraint on Affect-based Trust
with Cognition-based Trust, Age, Gender, and Ethnicity as Control (n=134)

<table>
<thead>
<tr>
<th>Variable and Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Partial $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Predictor</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choice constraint $^a$</td>
<td>2</td>
<td>5.069</td>
<td>3.720**</td>
<td>0.055</td>
</tr>
<tr>
<td><strong>Controls</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognition-based Trust</td>
<td>1</td>
<td>2.884</td>
<td>2.117</td>
<td>0.016</td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>2.416</td>
<td>1.773</td>
<td>0.014</td>
</tr>
<tr>
<td>Gender $^b$</td>
<td>1</td>
<td>0.028</td>
<td>0.021</td>
<td>0.000</td>
</tr>
<tr>
<td>Ethnicity $^c$</td>
<td>1</td>
<td>11.480</td>
<td>8.425</td>
<td>0.062</td>
</tr>
<tr>
<td>Error</td>
<td>127</td>
<td>1.363</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Squared = 0.15 (Adjusted R Squared = 0.10)

** $p < 0.01$  * $p < 0.05$  † $p < 0.10$

$^a$ 0 = high choice constraint (low degree of choice); 1 = moderate choice constraint (moderate degree of choice); 2 = low choice constraint (high degree of choice).

$^b$ 1 = Male, 0 = Female

$^c$ 0 = Non-white (Asian, African-American, Hispanic, etc); 1 = White (Caucasian)
TABLE 16

STUDY 5: Descriptive Statistics, Cronbach’s Alpha, and Correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Leadership Effectiveness *</td>
<td>4.62</td>
<td>1.77</td>
<td>0.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Cognition-based trust a</td>
<td>5.38</td>
<td>1.55</td>
<td>0.71**</td>
<td>0.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Affect-based trust a</td>
<td>4.46</td>
<td>1.90</td>
<td>0.63**</td>
<td>0.70**</td>
<td>0.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Choice frequency b</td>
<td>5.05</td>
<td>1.59</td>
<td>0.23**</td>
<td>0.23**</td>
<td>0.45**</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Conscientiousness</td>
<td>5.19</td>
<td>1.86</td>
<td>0.48**</td>
<td>0.59**</td>
<td>0.23**</td>
<td>-0.16*</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>6. Agreeableness</td>
<td>4.75</td>
<td>1.81</td>
<td>0.45**</td>
<td>0.48**</td>
<td>0.68**</td>
<td>0.51**</td>
<td>0.06</td>
<td>--</td>
</tr>
<tr>
<td>7. Gender c</td>
<td>0.53</td>
<td>0.50</td>
<td>-0.02</td>
<td>-0.09</td>
<td>-0.04</td>
<td>0.02</td>
<td>-0.02</td>
<td>-0.06</td>
</tr>
<tr>
<td>8. Ethnicity d</td>
<td>0.59</td>
<td>0.49</td>
<td>-0.07</td>
<td>0.01</td>
<td>0.05</td>
<td>0.08</td>
<td>0.01</td>
<td>-0.02</td>
</tr>
<tr>
<td>9. Age</td>
<td>29.00</td>
<td>2.50</td>
<td>-0.06</td>
<td>-0.09</td>
<td>-0.06</td>
<td>0.02</td>
<td>-0.01</td>
<td>-0.04</td>
</tr>
<tr>
<td>Variable</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td></td>
<td></td>
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<tr>
<td>----------------</td>
<td>---</td>
<td>----</td>
<td>----</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>7. Gender c</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Ethnicity d</td>
<td></td>
<td>0.14*</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Age</td>
<td>0.31**</td>
<td>0.01</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

** p < 0.01  * p < 0.05  † p < 0.10

a n = 110 (220 observations)

b 1=not at all, 4=sometimes, 7=all the time

c 0 = Female; 1 = Male

d 0 = Non-white (Asian, African-American, Hispanic, etc); 1 = White (Caucasian)
### TABLE 17: Random Effects Regressions Results for Leadership Perceptions

<table>
<thead>
<tr>
<th>Key predictors</th>
<th>Leadership Effectiveness</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td><strong>Choice Frequency</strong></td>
<td></td>
<td>-</td>
<td>0.26**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.08)</td>
<td>(0.40)</td>
</tr>
<tr>
<td><strong>Choice Frequency (Squared)</strong></td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
<td>-0.04</td>
<td>-0.04</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.05)</td>
<td>(0.05)</td>
</tr>
<tr>
<td><strong>Participant’s age</strong></td>
<td></td>
<td>-0.06</td>
<td>-0.06</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.26)</td>
<td>(0.25)</td>
</tr>
<tr>
<td><strong>Participant’s gender</strong></td>
<td></td>
<td>0.28</td>
<td>0.21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.25)</td>
<td>(0.24)</td>
</tr>
<tr>
<td><strong>Participant’s ethnicity</strong></td>
<td></td>
<td>0.01</td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.99</td>
<td>11.84**</td>
</tr>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Note:** Chi-square change for model 1 is with respect to a constant only model whereas chi-square change for model 4 is with respect to model 2.

*a* 1 = Male, 0 = Female  
*0* = Non-white (Asian, African-American, Hispanic, etc); 1 = White (Caucasian)
<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>Affect-based Trust</th>
<th>Cognition-based Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td><strong>Choice Frequency</strong></td>
<td>0.36**</td>
<td>0.18**</td>
</tr>
<tr>
<td></td>
<td>(0.05)</td>
<td>(0.06)</td>
</tr>
<tr>
<td><strong>Mediators</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Agreeableness</td>
<td>-</td>
<td>0.39**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.05)</td>
</tr>
<tr>
<td>Perceived Conscientiousness</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognition-based trust</td>
<td>0.77**</td>
<td>0.60**</td>
</tr>
<tr>
<td></td>
<td>(0.06)</td>
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<td>N.A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant’s age</td>
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<td>0.00</td>
</tr>
<tr>
<td></td>
<td>(0.04)</td>
<td>(0.03)</td>
</tr>
<tr>
<td>Participant’s gender</td>
<td>0.01</td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td>(0.18)</td>
<td>(0.16)</td>
</tr>
<tr>
<td>Participant’s ethnicity</td>
<td>0.04</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>(0.17)</td>
<td>(0.16)</td>
</tr>
<tr>
<td>Overall model R-squared</td>
<td>0.59</td>
<td>0.67</td>
</tr>
<tr>
<td>Chi-square change</td>
<td>300.12*</td>
<td>51.66*</td>
</tr>
</tbody>
</table>

Note: Chi-square changes for models 1 and 4 are with respect to a constant only model. Chi-square changes for models 2 and 3 are with respect to model 1 whereas chi-square changes for models 5 and 6 are with respect to model 4.
a 1 = Male, 0 = Female

b 0 = Non-white (Asian, African-American, Hispanic, etc) ; 1 = White (Caucasian)