

THE DARK SIDE OF MIMICRY: THE RELATIONSHIP BETWEEN
NONCONSCIOUS BEHAVIORAL MIMICRY AND BEHAVIORAL
CONFIRMATION

by

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ABSTRACT

The current research was designed to examine the relationship between behavioral confirmation and nonconscious behavioral mimicry within social interactions.

Behavioral confirmation occurs when perceivers treat target individuals in accord with their expectations, thus eliciting target behavior that is consistent with those expectations. Nonconscious behavioral mimicry refers to the unintentional imitation of the mannerisms of an interaction partner, and occurs due to the perception-behavior link, as well as for the purpose of building interpersonal rapport.

Mimicry and expectancy effects were expected to co-occur within social interactions. Across two studies, the current research employed a simulated interview paradigm in which participant-applicants interviewed for a hypothetical job. In Study 1, perceiver expectancy valence was manipulated, as confederate-interviewers asked participant-applicants either positively- or negatively-focused questions while engaging in a neutral physical mannerism (foot shaking). As predicted, mimicry and expectancy effects did co-occur under certain conditions. Greater applicant mimicry of interviewer foot shaking was associated with stronger interview performance when the interviewer asked positively-focused questions, yet was associated with weaker interview performance when the interviewer asked negatively-focused questions.

It was also anticipated that target mimicry of an inherently negative perceiver behavior would be possible, and would adversely affect target performance. In Study 2, confederate-interviewers asked negatively-focused questions in all interview sessions and

interviewer speech fluency was manipulated (stammering vs. non-stammering), such that interviewers either stammered (inherently negative behavior) or spoke clearly during their interview with applicants. Results did not support the hypotheses; applicants did not commit more speech errors or perform worse in the interviewer stammering condition than in the non-stammering condition.

The findings of Study 1 established a relationship between expectancy effects and nonconscious behavioral mimicry, and suggest that the imitation of an inherently neutral mannerism (e.g., foot shaking) can have positive or negative outcomes for the mimicker, depending upon the expectancy context established by the perceiver. Consequently, this is the first research to illustrate that nonconscious mimicry can have negative consequences for those who engage in imitation. Applied implications are discussed. The null findings of Study 2 are discussed with respect to experimental control, target awareness of perceiver behavior, and perceiver attractiveness.

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CHAPTER I

INTRODUCTION

Imagine the following hypothetical scenario, in which a young professional, Jason, engages in a personal interaction with his supervisor George. Suppose that George has developed moderately negative expectations of Jason across a variety of domains. It is quite possible that George may relay his negative expectancies to Jason in both obvious and subtle ways. For example, George may explicitly convey his negative expectancies to Jason by focusing on conversation topics relating to Jason's past struggles, or by offering him little time to verbally display his competence. Additionally, George may subtly relay his negative expectancies to Jason by engaging in a variety of verbal (e.g., stammering, stuttering) or non-verbal (e.g., standing far away from Jason) behaviors that are indicative of interpersonal discomfort (Word, Zanna, & Cooper, 1974).

Given George's obvious (i.e., question quality or tone) and subtle (i.e., stuttering) manifestations of negative bias, how might Jason respond? The answer to this question might depend upon Jason's desire to get along with George. Given that George is Jason's supervisor, Jason may be especially motivated to get George to like him. Consequently, in his affiliation attempts, Jason may nonconsciously imitate George's mannerisms (i.e., stuttering, fidgeting). If so, his resulting negative mannerisms and uncomfortable behavior might only solidify George's negative opinion of Jason. More specifically, the *more* Jason nonconsciously imitates George's stuttering, the *worse* he may objectively perform during the interaction.

This example highlights a potential relationship between two theoretical constructs of consequence in social psychology, namely nonconscious behavioral mimicry (i.e., imitation) and behavioral confirmation. Without awareness or intention, people may sometimes imitate the behaviors of their interaction partners. Research on nonconscious behavioral mimicry has focused on its positive consequences for strengthening affiliative bonds between interaction partners. However, as illustrated in the previous example, people often experience negative behaviors from others (e.g., stammering, fidgeting), especially when those others hold negative expectations about them. While nonconscious mimicry of such behaviors would not seem to be particularly beneficial, myriad independent research findings are consistent with the notion that mimicry of negative behaviors could occur.

If mimicry of negative interpersonal behaviors is possible, then mimicry may play a key role not only in positive social interactions, but in negative interactions as well. Of particular theoretical significance is the notion that the process of mimicry may provide insight into how behavioral confirmation (i.e., the self-fulfilling prophecy) occurs. In particular, mimicry could serve as a mechanism through which one person's expectancy-biased behavior leads another person to behave in a way that confirms the expectancy.

These issues are at the heart of the current research. The current research reflects an attempt to examine the relationship between nonconscious behavioral mimicry and behavioral confirmation. Because this relationship is likely to be complex, each theoretical construct of interest first will be examined individually.

Behavioral Confirmation

As perceivers in a social world, we often treat people in accord with our expectations, and thus elicit behavior from them that confirms those expectations (Neuberg, 1996). This outcome is known as the self-fulfilling prophecy (Merton, 1948) or as behavioral confirmation (e.g., Snyder, 1992). Behavioral confirmation first became of interest to experimental psychologists when Rosenthal and Jacobson (1968) offered evidence that teachers' expectations about their students could facilitate expectancy-consistent student performance. Since then, it has been shown to occur in many contexts, including teachers' expectations about their students (Jussim & Eccles, 1992), counselors' expectations of their clients (Copeland & Snyder, 1995), and interviewers' expectations about their applicants (Neuberg, 1989; Reich, 2004; Casa de Calvo & Reich, 2007).

Previous theorizing (e.g., Darley & Fazio, 1980; Miller & Turnbull, 1986; Snyder, 1992) suggests four steps through which the self-fulfilling prophecy occurs. First, a perceiver develops expectations about a target person. Second, the perceiver treats the target in a manner that is consistent with those expectations. For instance, perceivers with negative expectancies have been shown to gather information in a biased way by explicitly asking their targets negatively-toned and closed-ended questions (Neuberg, 1989; Reich, 2004). Additionally, perceivers behaviorally express their negative expectancies in more subtle ways (Jones, 1977), as negative expectancies are associated with reduced interpersonal warmth and sociability (Snyder, Tanke, & Berscheid, 1977), enhanced interpersonal distance (Word, Zanna, & Cooper, 1974), fewer expressions of

positive regard (Ickes, Patterson, Rajecki, & Tanford, 1982), and more speech errors (Word et al., 1974) by perceivers. Third, the target inadvertently behaves in a way that ultimately confirms the perceiver's expectations (behavioral confirmation). Finally, the perceiver may interpret the target's behavior as being consistent with his or her expectancies, above and beyond the evidence provided by the target's actual behavior (perceptual confirmation).

Moderators of the Behavioral Confirmation Process

Perceiver goals. Of course, behavioral confirmation is not an inevitable consequence when perceivers hold expectations about others. Previous research has shown that motivational variables, such as perceiver goals, can moderate behavioral confirmation effects (for reviews, see Neuberg, 1996; Snyder, 1992). More specifically, goals that reduce perceivers' tendencies to behave in a biased way toward targets may attenuate behavioral confirmation or lead to behavioral disconfirmation, while goals that enhance such tendencies enhance behavioral confirmation (Snyder, 1992). For instance, using a simulated interview paradigm, Neuberg (1989) found that interviewers induced with the motivation to form accurate impressions of their applicants were able to overcome their induced negative expectancies, and treated their applicants in a fair and evenhanded manner. Using a similar paradigm, Reich (2004) found that as interviewers' expectancies became more extreme, they became more aware of the potential biasing influence of their chronic expectations (and presumably more motivated to avoid bias) and deliberately engaged in effortful correction processes during their interactions with applicants. Similarly, Casa de Calvo and Reich (2006) found that interviewers with

sufficient cognitive resources and extreme expectancies exhibited both perceptual and behavioral correction, and did not elicit expectancy-consistent applicant behavior.

Behavioral confirmation is also less likely to occur if a perceiver with negative expectancies regarding a target desires to be liked or admired by that target (Neuberg, 1996; Neuberg, Judice, Virdin, & Carrillo, 1993).

Behavioral confirmation is more likely to occur if perceivers possess knowledge goals (Snyder, 1992). For instance, if perceivers attempt to collect information from targets for the purpose of forming an impression, behavioral confirmation is likely to be enhanced (Copeland & Snyder, 1995; Snyder & Haugen, 1994). This is particularly likely if perceivers are unconcerned with forming an accurate impression of targets.

Target goals. In addition to perceiver goals, target goals have been shown to moderate the behavioral confirmation process (Neuberg 1996). Any target goal that facilitates concession to perceivers' expectancy scripts should enhance behavioral confirmation, while any goal that facilitates resistance to perceivers' expectancies should attenuate behavioral confirmation (Snyder, 1992).

For instance, research has shown that behavioral confirmation effects are less likely to occur when targets are aware of perceivers' erroneous expectancies, because targets resist going along with the expectancies (Hilton & Darley, 1985; Stukas & Snyder, 2002). Additionally, behavioral confirmation is less likely when targets try to get to know perceivers better (Snyder, 1992; Snyder & Haugen, 1995). Finally, the process of expectancy confirmation also is less likely when perceivers' expectancies contradict a crucial aspect of targets' self-concepts. According to identity negotiation theory (Swann,

1987; Swann & Ely, 1984), in such a circumstance, targets will work to establish perceiver impressions that are more consistent with the manner in which they perceive themselves.

On the other hand, behavioral confirmation is more likely to occur when targets are of lower status or have less power in comparison to the perceiver (Copeland, 1994). In such circumstances, targets may feel obliged to act in a manner consistent with perceiver expectancies, in order to remain in good favor with the high-power perceivers. Additionally, behavioral confirmation is more likely to occur when targets attempt to get perceivers to like them, or when targets are motivated to have smooth interactions with perceivers (Neuberg, 1996). For instance, Snyder and Haugen (1995) enlisted male perceivers in a “getting acquainted” telephone conversation with female targets believed to be either obese or of normal weight. Targets were instructed to pursue either knowledge, affiliation, or no goals during their interactions with the perceivers. Results showed that when targets tried to get along well with their perceivers and to have smooth interactions, behavioral confirmation was more likely to occur. More specifically, targets thought to be obese behaved in a relatively unresponsive and cold manner during their interactions, whereas targets thought to be of normal weight behaved in a more responsive and enthusiastic manner. These results imply that targets with affiliation goals concede to the interaction scripts of perceivers for the purpose of being liked or “getting along”. In such circumstances, behavioral confirmation may be particularly likely, regardless of whether perceivers’ expectancies are positive or negative.

The “Chameleon Effect”: Nonconscious Behavioral Mimicry

The “chameleon effect” can be defined as nonconscious, unintentional mimicry of the mannerisms of an interaction partner (i.e., nonconscious behavioral mimicry; Chartrand & Bargh, 1999). Such mimicry occurs for a variety of behaviors, including gestures, postures, idiosyncratic movements, facial expressions, and speech-related variables, such as accents and tone of voice (for reviews, see Chartrand & Bargh, 1999; Chartrand, Maddux, & Lakin, 2005; Lakin, Jefferis, Cheng, & Chartrand, 2003). Before further discussing the circumstances in which the “chameleon effect” occurs, however, it is important to discuss *why* it occurs.

Why Does the “Chameleon Effect” Occur?

One of the primary explanations for the occurrence of the “chameleon effect” is the perception-behavior link. The perception-behavior link can be thought of as the human tendency to act in the same way as we see others act (Dijksterhuis & Bargh, 2001). More specifically, the mere perception of a target’s behavior, traits, or relevant characteristics activates corresponding mental representations of those constructs within a perceiver, causing the perceiver to engage in behaviors associated with those constructs. For instance, Bargh, Chen, and Burrows (1996) found that the mere perception of word primes (e.g., polite, bingo) can activate behavioral predispositions and/or stereotypes of the groups with which those words are associated, and can lead perceivers to engage in behaviors associated with those cognitively accessible constructs.

One domain in which the perception-behavior link is relevant to the “chameleon effect” is in the mimicry of facial expressions. For example, Zajonc, Pietromonaco, and

Bargh (1982) found that participants who tried to remember photographs that they were shown from a college yearbook spontaneously mimicked the facial expressions they viewed in each photograph. Similarly, Provine (1986) asked one group of participants to watch a five minute videotape of people yawning, and asked another group of participants to watch a five minute videotape of people smiling. Results showed that participants in the yawn video condition yawned significantly more than did the participants in the smiling condition. Finally, Zajonc, Adelman, Murphy, and Niedenthal (1987) found that relationship partners tended to look more like each other the longer they were in the relationship. The results of this study imply that the frequent perception of one partner's facial expressions causes the other partner to exhibit those facial expressions as well, thereby facilitating enhanced facial similarity.

The perception-behavior link has also been established in a series of studies that show evidence for behavior matching. In a hallmark study conducted by Chartrand and Bargh (1999; Experiment 1), participants interacted with a confederate during a picture description task. Results showed that participants were significantly more likely to engage in foot shaking or face touching behaviors when their interaction partner (i.e., the confederate) initiated those particular behaviors. Furthermore, a funneled debriefing suggested that participants were not aware that they were engaging in behavioral mimicry. In sum, this study suggests that the perception-behavior link can cause people to engage in subtle behavioral mimicry, and that this effect can occur outside of perceiver awareness.

Another domain of research has shown that people are just as capable of mimicking speech-related behavior as they are of mimicking more subtle physical behavior. For example, Levelt and Kelter (1982) have found that perceivers automatically engage in speech imitation of interaction partners for single words, phrases, and entire sentence formats. Additionally, Neumann and Strack (2000) have found that perceivers are capable of nonconsciously imitating the tone of voice of their interaction partners.

Of course, the “chameleon effect” may not occur due to the perception-behavior link alone. A second explanation for why we engage in nonconscious behavioral mimicry is that we are often interested in building affiliation or increasing rapport with our interaction partners. Recent reviews of the mimicry literature have concluded that nonconscious mimicry is an adaptive tendency that is associated with positive interpersonal outcomes (Chartrand, Cheng, & Jefferis, 2002; Lakin et al., 2003). It is thought to serve affiliative goals (Lakin & Chartrand, 2003) and to increase bonding between people. For instance, Lakin and Chartrand (2003) provided evidence that having an affiliation goal increases one’s tendency to engage in nonconscious mimicry, and that people are more likely to engage in nonconscious mimicry after failing to attain previous affiliation goals. Thus, mimicry may occur as a result of affiliation motives that arise from our need to belong (Baumeister & Leary, 1995), our desire for positive interpersonal outcomes (Cheng & Chartrand, 2003), or our survival needs (Lakin, et al., 2003).

The “Dark Side” of Mimicry

Given that mimicry is thought to be an adaptive process, is it possible that nonconscious mimicry could lead to negative outcomes for those who mimic? Most recent studies have examined the nonconscious mimicry of neutral behaviors (e.g., foot shaking) and have done so within neutral contexts, such as situations in which interaction partners describe pictures to one another (e.g., Chartrand & Bargh 1999). However, we do not only experience positive or neutral interpersonal behaviors from others; we may experience negative behaviors during social interactions as well, such as frowning facial expressions and unfriendly tones of voice. Furthermore, these negative behaviors may be exhibited by interaction partners with whom it is important to get along (e.g., supervisors), and may be encountered in consequential interactions (e.g., job interviews). Given the automatic, affiliative nature of behavioral mimicry, imitation might be particularly likely to occur whenever we are trying to create or maintain strong social ties – even when the behaviors in question are inherently negative in connotation. Unlike the imitation of neutral and positive behaviors, the mimicry of the negative behaviors of an interaction partner may have negative consequences.

Recent reviews imply that nonconscious mimicry would not occur under circumstances in which it would not be beneficial or adaptive for the mimicker (Chartrand et al., 2005; Lakin et al., 2003). Specifically, Dijksterhuis and Bargh (2001) have proposed and reviewed evidence for several theoretical conditions that make mimicry more likely to occur. Specifically, people should be less likely to mimic another person if they are self-focused, if they dislike their interaction partner, or if mimicry is

costly in some tangible way. These conditions would seem to guard against the mimicry of obviously negative behaviors, which would be likely to engender dislike or to be linked with high costs.

However, other empirical evidence suggests that the nonconscious process of mimicry *could* occur in the context of more negatively-toned interactions or behaviors. First of all, automatic processes in general may be applied to circumstances in which they are not entirely adaptive or beneficial (e.g., stereotype activation and use; for a review, see Bargh, 1999). Furthermore, the perception-behavior link, which is thought to be the basis for nonconscious behavioral mimicry, has been shown to lead to negative behaviors. For example, individuals have been shown to engage in more hostile behavior when primed with hostility (e.g., Bargh et al., 1996; Cheng & Bargh, 1997), to behave more rudely when primed with rudeness (Bargh et al., 1996), to perform more poorly on memory tasks when primed with negative terms related to the elderly (e.g., “senile”; Levy, 1996), and to engage in less intelligent behavior when primed with soccer hooligans or supermodels (Dijksterhuis & van Knippenberg, 1998; Dijksterhuis et al., 1998). The implication of these studies is that once negative constructs are activated, whether through priming or through the perception of a behavior, those activated constructs can lead to correspondingly negative behavior.

In addition, research within the mimicry literature itself is consistent with the notion that mimicry could occur in the context of negatively-toned interactions or behaviors. Mimicry can occur under artificial or contrived conditions where no interpersonal liking, rapport, or affiliation exists (for a review, see Chartrand et al., 2005).

Chartrand and Bargh (1999) found that participants engaged in mimicry of neutral behaviors when confronted with an unfriendly, unsmiling interaction partner, just as they did with a friendly, smiling interaction partner. There also is a limited amount of direct evidence that mimicry occurs for subtle negative behaviors. Specifically, individuals have been shown to mimic the sad tone of voice of another person (Neumann & Strack, 2000), to smile less with unsmiling interaction partners than with smiling interaction partners (Chartrand & Bargh, 1999), and to mimic yawning (Provine, 1986), which may communicate boredom or disinterest.

Overview of Research

Previous research has not explicitly examined the relationship between nonconscious behavioral mimicry and behavioral confirmation. However, these research areas share commonalities. First, the research methodology in both areas involves dyadic interactions in controlled settings to examine how the behavior of one person affects the behavior of an interaction partner. Additionally, both literatures have examined the influence of targets' affiliation goals, which have been shown to enhance both behavioral confirmation (for a review, see Neuberg, 1996) and nonconscious behavioral mimicry (Lakin & Chartrand, 2003). Ultimately, affiliation goals may enhance targets' general tendency to "go along with" both perceivers' specific behaviors and their broader interaction scripts. Furthermore, when examined closely, several studies appear to suggest that target mimicry can lead to behavioral confirmation (e.g., Snyder, Tanke, & Berscheid, 1977; Chen & Bargh, 1997; Word, Zanna, & Cooper, 1974).

Word, Zanna, and Cooper's (1974) hallmark study of the self-confirming nature of racial stereotypes is one such example. These researchers utilized a simulated interview paradigm. In Experiment 1, White interviewers interacted with both White and Black applicants. When interviewing Black applicants, the White interviewers sat further away from them, ended the interviews sooner, and committed significantly more speech errors than they did when talking to the White applicants. In other words, the White interviewers engaged in significantly more negative manifestations of bias when talking with the Black applicants than with the White applicants. Not surprisingly, the Black applicants were rated as performing worse during the interview than the White applicants.

In Experiment 2, White interviewers were trained to treat White applicants as if they were either White or Black. In the "treat-as-White" condition, interviewers were trained to treat the White applicants by sitting fairly close to them, speaking clearly, and extending the interview. However, in the "treat-as-Black" condition, interviewers were trained to sit farther away from the White applicants, to stammer and stutter frequently, and to cut the interview short. Results showed that the White applicants who were treated as the Black applicants were in Experiment 1 performed significantly worse in their interviews than the White applicants who were treated as the White applicants were in Experiment 1.

These studies (particularly Experiment 1) imply that when perceivers have negative expectations, they may transmit those expectations to targets via behavioral mannerisms (e.g., stammering, increasing physical distance). Furthermore, these

expressions of negative bias may somehow constrain targets to perform poorly. It is possible that applicants in the “treat-as-Black” condition (Experiment 2) performed poorly during the interviews because they engaged in behavioral mimicry of their interviewers, thereby stammering more than did the applicants in the “treat-as-White” condition. This is an intriguing possibility, given that applicants in the “treat-as-Black” condition should have been motivated to make a positive impression and to get the interviewer to like them, and may have engaged in nonconscious mimicry for the implicit purpose of building rapport. However, it is important to point out that Word et al. (1974) did not measure applicant mimicry of speech errors. So, there is no way to know from their study whether applicants’ poor performances in the “Black” and “treat-as-Black” conditions were partially accounted for by direct behavioral mimicry of the interviewers’ speech errors, or were solely accounted for by their actual failure to demonstrate qualifications for the job.

Research Questions

The primary aim of the current research was to examine the relationship between nonconscious mimicry and behavioral confirmation. Mimicry and expectancy effects were expected to co-occur within social interactions, particularly in contexts where a target affiliation motive is likely to be strong, thus supporting the notion that both processes reflect a general target concession to perceivers’ interaction scripts. The extent to which expectancy-targets mimic neutral behaviors was expected to moderate the effects of manifestations of perceivers’ expectations (e.g., positive or negative questions) on targets’ performance, with greater target mimicry being associated with greater

expectancy-consistent effects on performance. It is imperative to point out that mimicked behavior need not directly affect interpersonal outcomes in order for nonconscious behavioral mimicry and expectancy effects to be associated. For example, target imitation of perceiver foot shaking during an interaction may not directly impact the quality or content of the interaction at all. Yet, target mimicry of foot shaking may serve as a “bellwether” behavior by epitomizing the general process of a target going along with a perceiver’s general interaction script, even though the foot shaking behavior should not directly impact the content of the interaction *per se*.

Furthermore, mimicry should directly affect performance when the behavior being mimicked is inherently positive or negative. For example, a perceiver with positive expectancies may use a warm tone of voice, smile, or speak fluently (indicative of comfort), while a perceiver with negative expectancies may use a cold tone of voice, frown, or exhibit speech errors (indicative of discomfort). In their attempt to affiliate with perceivers, targets may nonconsciously mimic these subtle behaviors. If so, the mimicked behaviors may affect targets’ overall performance, and facilitate the confirmation of perceiver’s expectancies. Thus, nonconscious behavioral mimicry is expected to mediate the relationship between perceivers’ expectancy-colored behaviors and targets’ expectancy-consistent performance.

Thus, another aim of the current research was to determine whether inherently negative interpersonal behaviors (e.g., stammering) can be mimicked, and if so, whether the process of nonconscious behavioral mimicry of negative behaviors is associated with negative interpersonal outcomes. Most research within the mimicry literature has shown

that mimicry is associated with positive outcomes for interaction partners, including enhanced affiliation and liking (e.g., Chartrand & Bargh, 1999). However, research on behavioral confirmation has shown that perceivers with negative expectancies about their targets may exhibit subtle negative behaviors during their interactions (e.g., Word, Zanna, & Cooper, 1974). There is no evidence that mimicry is limited to the imitation of positive social behaviors. Hypothetically, if targets want to get along with perceivers, their increased tendency to engage in mimicry of the perceivers' behavior could potentially have deleterious consequences if the perceivers' behavior reflects manifestations of negative bias.

It is important to note that the aims of the current research focused on potential processes that may occur between steps two and three of the behavioral confirmation process. More specifically, the focus was on the manner in which the perceiver's expectancy-congruent behaviors actually translate into an expectancy-confirming overall outcome by the target. In the current research, confederate perceivers were trained to act as if they had negative or positive expectancies. So, step two, in which the perceiver treats the target in a manner that is consistent with the perceiver's expectations, was a given. The specific conceptual questions involved the process through which targets come to assimilate their behaviors to perceivers' expectancy cues (i.e., step three of behavioral confirmation process), the conditions under which this occurs, and whether mimicry is an important part of this process.

Brief Overview of Current Studies

Two studies were conducted to address the aforementioned theoretical questions. Both studies used a simulated interview paradigm similar to that employed in previous research (e.g., Neuberg, 1989; Reich, 2004). In each study, participants served as applicants interviewing for a hypothetical job. In Study 1, expectancy valence was manipulated, as confederate-interviewers asked participant-applicants either positively- or negatively-focused questions. In Study 2, interviewers asked negatively-focused questions in all interview sessions and interviewer speech fluency was manipulated (stammering vs. non-stammering), such that interviewers either stammered (inherently negative behavior) or spoke clearly during their interview with applicants. In both Studies 1 and 2, the interviewers also engaged in the neutral physical behavior of foot shaking throughout their interview sessions. Because applicants engaged in the interview with the incentive of a possible monetary reward, it is assumed that all applicants were motivated to get along well with their interviewers and make a positive impression (i.e., strong affiliation context). In both studies, applicants were videotaped during the interview, and their levels of mimicry and the quality of their performance subsequently were objectively coded.

CHAPTER II

STUDY 1

Study 1 utilized a modified version of the simulated interview design employed in previous research (e.g., Neuberg, 1989; Reich, 2004); participants served as job applicants and confederates served as interviewers. Interviewers exhibited obvious signs of bias by asking either negatively- or positively-focused questions. Additionally, interviewers engaged in a neutral physical mannerism throughout the interview that could be mimicked by the applicant (i.e., foot shaking). Foot shaking is an activity that has been utilized in previous nonconscious behavioral mimicry research (e.g., Chartrand & Bargh, 1999).

The purpose of Study 1 was to examine the relationship between expectancy effects and nonconscious behavioral mimicry. A first step in examining the relationship between these constructs was to examine whether both tend to co-occur in interactions in which targets should desire to affiliate or get along with perceivers. It was hypothesized that the mimicry of neutral behaviors (e.g., foot shaking) could have either positive or negative consequences for the mimicker, depending on whether perceivers constrain an interaction in a positive or negative way (e.g., by asking biased questions). More specifically, within a negatively-constrained interaction, greater mimicry should be associated with worse performance. However, in a positively-constrained interaction, mimicry should be associated with better performance. In this context, targets' mimicry of neutral behavior should serve as a "bellwether" by symbolizing targets' generalized

concession to perceivers' interaction scripts, even though foot shaking behavior should not *directly* impact the content of the interpersonal interaction.

Method

Participants

Participants were obtained from Texas Tech University's Introductory Psychology participant pool using a standard and approved protocol. In total, 50 female participants served as applicants across 50 interview sessions, with 25 in each condition (across two different interviewers). Participants were limited to females to eliminate the possibility that target gender could affect the interaction styles of confederate interviewers and targets' responsiveness to the interviewers.

Design

The goal of the current study was to examine whether mimicry enhances expectancy effects, regardless of the perceiver's expectancy valence. To that end, the current study manipulated interviewers' (i.e., perceivers') exhibited expectations about applicants (targets) via two separate interview question scripts (positively-focused vs. negatively-focused). Participants were randomly assigned to receive either the positive or negative question script from the interviewer. Additionally, interviewers engaged in foot shaking throughout the interview, regardless of expectancy valence.

In a modified interview paradigm (Neuberg, 1989; Reich, 2004), interviewers (i.e., confederates) interviewed applicants (i.e., participants) individually for a hypothetical student-job on campus. All interview sessions were face-to-face interactions, and applicant behavior was recorded on videotape. Two female

undergraduate research assistants were trained to conduct the interview sessions, and dressed in professional attire when conducting the interviews. Interviewers exhibited explicit manifestations of negative or positive bias by asking negatively- or positively-focused interview questions. Specifically, their question scripts included either several negatively-toned or positively-toned questions designed to indicate that they had negative or positive expectations about the applicant. The primary dependent variables included a) the percentage of overall interview time during which the applicants mimicked the interviewer's foot shaking behavior, and b) the quality of applicants' overall performances in the interviews, as rated by objective observers.

Procedure

Initially, an experimenter met with each participant, before the interview, to introduce the participant to the study (see Appendix B for the experimenter script used in Study 1). The experimenter explained the consent form and answered any questions (see Appendix C for the consent form used in Study 1).

Pre-Interview Questionnaire. After participants signed the consent form, the experimenter asked them to complete a brief questionnaire (see Appendix D for the pre-interview questionnaire used in Study 1). The questionnaire contained 13 items designed to give the appearance of a personality test (with items measuring participants' personality characteristics, favorite/least favorite courses, etc.). In reality, none of the measures on the pre-interview questionnaire were utilized in subsequent analyses. Rather, the purpose of the pre-interview questionnaire was to give participants the impression that the interviewer would see their responses, and base the interview

questions on those responses. In other words, the aim of the pre-interview questionnaire was to personalize the interview experience from the perspective of the applicant. When participants completed the questionnaire, the experimenter explained that he was going to give the questionnaire to the interviewer, and would return to the interview room shortly.

Pre-Interview. Upon returning to the interview room, the experimenter further explained the study. Participants received a description of a hypothetical job (see Appendix E for the hypothetical job description used in Study 1). This summary described Student Travel, Inc., as a company that provides inexpensive travel packages to students and that would be opening a local branch on campus for which they need to hire a student manager. As in Reich's (2004) procedures, participants were also informed that the applicant who performed the best in the interviews would receive \$50 as a substitute for getting the job. This was done to motivate applicants to do their best, as in a real job interview. Finally, participants were given 10 minutes to prepare for the interview.

After preparing, participants were given a sheet containing a description of the interview procedure (see Appendix F for the supplemental interview description form used in Study 1). They were told that their interviewer possessed the sole power to decide which applicant performed the best (and hence, which applicant won the \$50 prize). This was done to ensure that all participants were motivated to impress the interviewer. Finally, participants were told that a video camera would be used to record their interview, in order to provide more data for the "hiring" decision. The interview room contained an unhidden video camera, which was used to record participants' levels of behavioral mimicry (i.e., foot shaking) and performance during the interview. Before

the interview, participants were asked to give their verbal consent for the video camera to be used. If they declined, they were given credit for time served, thanked, and dismissed. If they accepted, they were reminded that they did not have to answer any questions they felt uncomfortable answering, and that they would be asked to complete a brief questionnaire packet following the completion of the interview. Participants also were told that the interviewer was basing the interview questions on the survey that the participants had completed at the beginning of the experiment. This was done to make the interview appear customized to the applicant.

Interview. Subsequently, the experimenter excused himself, and retrieved the interviewer to begin the interview session. When the participants were ready to begin, the interviewer asked them a series of 11 scripted questions that were either negatively- or positively-focused (see Appendix G for the interviewer materials used in Study 1). The negative-expectancy question script contained 6 negatively-toned questions, 3 neutral questions, and 2 positive questions. The positive-expectancy question script contained 6 positively-toned questions, 3 neutral questions, and 2 negative questions. The questions in each script were remarkably similar, varying only in accord with the emphasis of the expectancy valence.

Throughout all interview sessions, interviewers were trained to shake their feet at a relaxed, inconspicuous rate. They were also trained to behave in a relatively neutral manner; they only made eye contact with the applicants when asking them the scripted questions, but not when the applicants responded to the questions. While the applicants responded, interviewers pretended to be taking notes. Additionally, the interviewers did

not interject during the participants' (i.e., applicants') responses. When the participants asked a question or asked for clarification, interviewers were trained to respond as succinctly as possible, typically responding with one-word answers (e.g., "yes"; "no").

Post-Interview. After the interview, participants completed a packet including items covering demographics, a scale assessing participants' affiliation motives during the interview, and a measure assessing participants' perceptions of interviewer expectations (see Appendix H for the applicant questionnaires used in Study 1).

Each experiment session lasted approximately 45 minutes. Students received ½-hour credit for each 30 minutes of participation (or part thereof, in compliance with approved procedures). After finishing with the interview and the questionnaire packet, participants were funnel debriefed (e.g., Cheng & Chartrand, 2003) by the experimenter in order to assess awareness of the hypotheses and of the foot shaking behavior of the confederate (see Appendix I for the debriefing materials used in Study 1). Then, participants were fully debriefed. Lastly, participants were requested to sign a consent form allowing the researchers to keep and utilize their videotaped interviews for research purposes (see Appendix J for the videotape consent form used in Study 1). If a participant declined to sign the consent form, the experimenter erased the applicant's session in his or her presence; no participants actually declined. Subsequently, participants were thanked and dismissed.

Applicant Measures

Motivation During the Interview. In order to assess the degree to which participants were motivated to affiliate during their interviews, a retrospective measure of

their affiliation motivation during the interview was included in the questionnaire packet. Applicants' motivation was gauged on 5-point scales ranging from 1 (not at all) to 5 (very much) on items assessing affiliation (e.g., "To what extent were you trying to get the interviewer to like you?") motives. Applicants' responses on the three affiliation items were summed and averaged (Cronbach's $\alpha = .87$) to create an index of Affiliation, with higher scores indicating higher levels of motivation for affiliation.

Applicants' Perceptions of Interviewer Expectancies. In order to assess applicants' awareness of the interviewer's expectations of them during the interview, a retrospective measure of their perceptions of interviewer expectancies was included in the questionnaire packet. Applicants' perceptions were gauged on 7-point scales on two items assessing applicant awareness of interviewer expectancies (i.e., "How well do you think the interviewer expected you to do in the interview?", 1 = very poorly, 7 = very well; "What was the tone of most of the questions that you were being asked by the interviewer?", 1 = extremely negative, 7 = extremely positive). Applicants' responses on these two items were summed and averaged ($r = .71$) to create an Interviewer Expectancy index, with higher scores indicating more positive interviewer expectancies (from the perspective of the applicant).

Mimicry (Foot Shaking). Two undergraduate research assistants, unaware of the hypotheses and of each applicant's expectancy script condition, independently watched (but did not listen to) the interview sessions. They only watched the sessions so that they remained undistracted and unbiased by applicants' verbal responses to the interviewer's questions. The judges recorded the time each applicant spent moving her feet in a

repetitive motion both before (baseline measure) and during the interview, as done in previous research (Lakin & Chartrand, 2003). These measures were averaged across both judges ($r_s = .85$ and $.92$), thereby creating both baseline and interview measures of the percentage of time for which applicants engaged in foot shaking.

Interview Performance. It should be noted that since the performance and mimicry measures are conceptually distinct, they were coded separately. Indeed, two different undergraduate observers listened to the applicants' responses to the scripted questions, and completed evaluations of applicants' specific traits and overall performance. The coders only listened to the applicants; they did not see them. This was done in order to avoid the possibility that biases related to attractiveness and stereotypes would affect the judgments of the coders. Additionally, the coders only listened to the applicants' responses, not the interviewer's questions, to avoid being biased in their evaluations of the applicants' responses due to the valence of the interviewer's questions.

The coders evaluated the applicants based on 9-point Likert scales (see Appendix K for the applicant evaluation form used in Study 1). Applicants were rated on the same 4 general measures used by Neuberg (1989) and Reich (2004), including items assessing the applicant's performance in the interview (1 = Very Poorly, 9 = Very Well), the applicant's qualifications (1 = Not at all Qualified, 9 = Very Qualified), the likelihood that the undergraduate coder would hire the applicant (1 = Not at all Likely, 9 = Very Likely), and an overall evaluation of the applicant as a job candidate (1 = Very Weak Candidate, 9 = Very Strong Candidate). Responses on these 4 measures were averaged

for each coder (Cronbach's α s = .95 and .99). These two indexes ($r = .72$) were averaged to form an index of Applicant Interview Performance.

Results

Effects of Interviewer and Interviewer Expectancies on Applicant Performance

One participant reported awareness of the hypotheses of the study, and was excluded from all subsequent analyses. Subsequently, to determine the effects of both the interviewers and their expectancies (positive vs. negative) on objective observers' ratings of applicant performance, a 2 (Expectancy Script: Positive vs. Negative) X 2 (Interviewer: Interviewer A vs. Interviewer B) ANOVA was conducted on the index of Applicant Performance. This analysis revealed only a main effect of expectancy script, $F(1, 45) = 3.98, p = .052$ (remaining $ps > .25$). Applicants performed significantly better in the interview when their interviewers asked them positively-focused questions ($M = 5.66, SD = 1.92$) than when the interviewers asked them negatively-focused questions ($M = 4.61, SD = 1.78$). This finding is consistent with typical behavioral confirmation effects, as applicants performed demonstrably better in the interviews when they were asked positively-focused questions.

Effects of Interviewer and Interviewer Expectancies on Applicant Mimicry

Next, a 2 (Expectancy Script) X 2 (Interviewer) ANCOVA was conducted on the measure of applicant mimicry (i.e., foot shaking; $M = .22, SD = .23, Skewness = 1.49, Kurtosis = 1.74$; variable not transformed because the distribution of errors was normal in current analyses, after controlling for baseline foot-shaking), holding applicants' baseline levels of foot shaking constant. This analysis revealed no significant main effect of

expectancy script, interviewer, or their interaction (all $ps < .24$). So, levels of applicant mimicry of the interviewers' foot shaking behavior did not differ significantly as a function of who interviewed them, or the type of questions they were asked.

Effects of Interviewer and Interviewer Expectancies on Applicants' Impressions and Goals

A 2 (Expectancy Script) X 2 (Interviewer) ANOVA was conducted on the Interviewer Expectancy index; higher scores on this index indicated that applicants perceived their interviewers to have more positive expectancies. Analyses revealed a main effect of interviewer, $F(1, 45) = 8.80, p = .005$. Applicants interviewed by Interviewer A believed that the interviewer had significantly higher expectations regarding their performance ($M = 5.50, SD = .81$) in comparison to those interviewed by Interviewer B ($M = 4.64, SD = 1.16$), regardless of the actual valence of the questions asked by each interviewer.

Additionally, A 2 (Expectancy Script) X 2 (Interviewer) ANOVA was conducted on the Applicant Affiliation index; higher scores on this index indicated that applicants tried harder to get along with the interviewer during the interview. Analyses revealed a main effect of interviewer, $F(1, 45) = 6.81, p = .012$. Applicants interviewed by Interviewer A were significantly more diligent in their attempts to get along with her during the interview ($M = 4.44, SD = .57$), in comparison to those applicants interviewed by Interviewer B ($M = 3.87, SD = .91$).

Overall, then, compared to those interviewed by Interviewer A, applicants believed that Interviewer B had a relatively low opinion of them and applicants tried less

diligently to get along with Interviewer B, regardless of expectancy condition. Given that affiliation motivation and liking of the interaction partner may be necessary for mimicry to occur, these systematic differences in applicants' perceptions and goals regarding the two interviewers seemed potentially problematic. Due to a concern that mimicry would be attenuated amongst Interviewer B's applicants due to their lower affiliation motivation, each interviewer's data was analyzed separately. Consequently, for subsequent internal analyses examining the relationship between participants' tendencies to mimic and to perform in expectancy-consistent ways, each interviewer's data was analyzed and will be presented individually.

Mimicry and Applicant Performance

To further examine the relationship between mimicry and expectancy effects, a hierarchical regression analysis was conducted on the Applicant Performance index for Interviewer A. Because affiliation goals may enhance behavioral confirmation for reasons other than mimicry (e.g., Snyder & Haugen, 1995), goals were held constant in this analysis. Applicants' self-reported affiliation goals and baseline foot shaking percentages were entered as covariates at step one, and neither significantly predicted performance. In the second step, dummy-coded expectancy condition and centered mimicry percentage were included as predictors. In the third step, the interaction between these two variables was added. At the second step, this analysis yielded a significant main effect of expectancy script condition, $\beta = .44$, $t(19) = 2.20$, $p = .041$. However, this main effect was qualified by a marginally significant interaction between expectancy script condition and applicant mimicry at step three, $\beta = .70$, $t(18) = 2.04$, $p =$

.056, indicating that mimicry moderated the effect of interviewer script on applicant performance.

Simple slopes analyses revealed that the effect of interviewer script on applicant performance was significant for applicants who exhibited average, $\beta = .46, p < .03$ and high (+1 *SD*) levels of mimicry, $\beta = .91, p < .01$, but not for applicants who displayed low (-1 *SD*) levels of mimicry, $\beta = .01, p = .99$. Thus, for Interviewer A, expectancy effects occurred, and the more applicants engaged in mimicry of interviewers' foot shaking behavior, the more their overall interview performance was consistent with the valence of the interviewer's questions. The association between mimicry and performance was negative, $\beta = -.48, t(18) = -1.04, p = .31$, in the negative expectancy condition, and was positive in the positive expectancy condition, $\beta = .41, t(18) = 1.17, p = .26$. Although these slopes were not statistically significant, the interaction indicates that they are significantly different from each other. Refer to Figure 1.

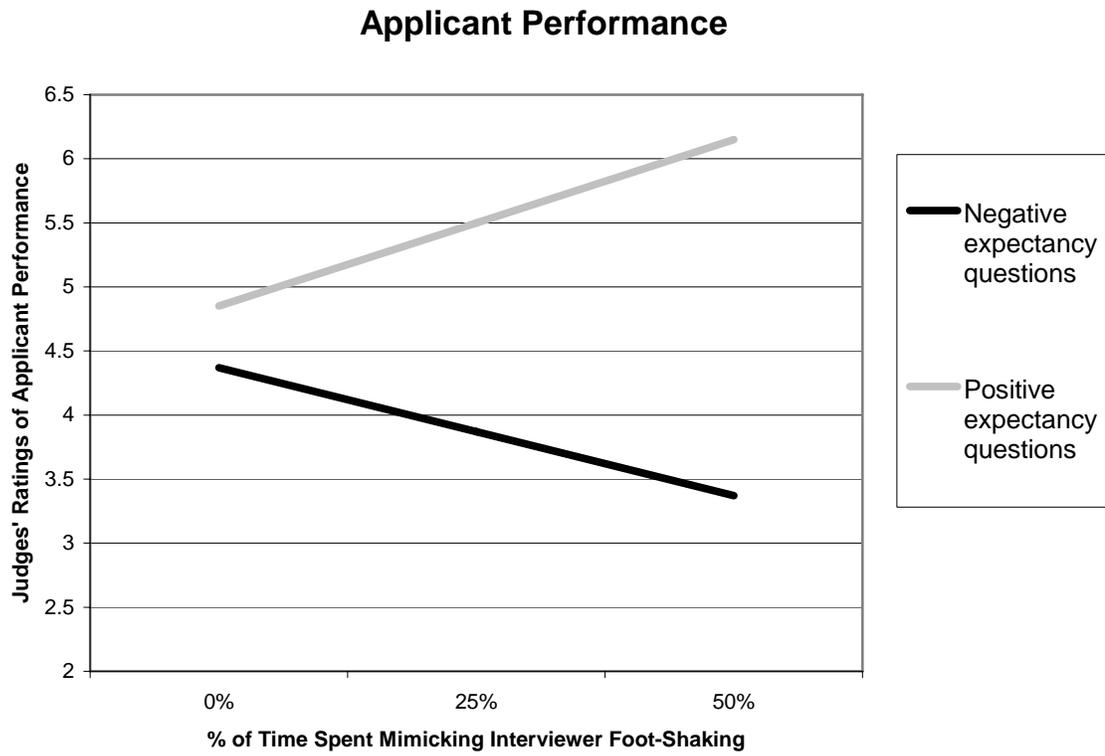


Figure 1. Applicant Performance as a Function of Expectancy Script and Applicant Mimicry.

Using the same steps used for Interviewer A, a hierarchical regression analysis was conducted on the Applicant Performance index for Interviewer B. None of the predictors attained significance at any steps of the analysis ($ps > .11$). Thus, for Interviewer B alone, the effect of expectancy script condition on performance (i.e., the expectancy effect) was not significant ($\beta = .12, p = .62$), and applicant mimicry was not significantly related to performance.

Discussion

As anticipated, the current study showed that, overall, applicants performed significantly better in their interviews when asked positively-focused questions than when asked negatively-focused questions. This finding is consistent with previous research on behavioral confirmation (e.g., Neuberg, 1989). Additionally, it is not surprising that applicants did not differ in their levels of mimicry (i.e., foot shaking) across interviewer and expectancy conditions, as such variables should be unlikely to influence the degree to which nonconscious mimicry occurs.

Perhaps most importantly, the current study found that applicants' mimicry of interviewer's behavior significantly predicted the applicants' level of performance (for Interviewer A). Greater applicant mimicry of foot shaking was associated with strong interview performance when the interviewer asked positively-focused questions, yet was associated with poor interview performance when the interviewer asked negatively-focused questions.

The results indicate that nonconscious behavioral mimicry and expectancy effects are indeed related and may co-occur. This supports the notion that both processes may

reflect the target's concession to the perceiver's interaction script. The current research also shows that nonconscious behavioral mimicry is not always associated with positive outcomes for the mimicker, if in fact the mimicry of a neutral mannerism occurs within a negatively-toned context. In this case, applicant mimicry of a neutral behavior (i.e., foot shaking) was associated with poor interview performance when the interviewer followed a negative-expectancy interaction script (via negatively-focused questions). Thus, as predicted, these results suggest that mimicry is positively related to expectancy effects, and that mimicry is not always associated with positive outcomes.

A concern worth addressing in Study 1 is the fact that the aforementioned effects only occurred for one interviewer – namely Interviewer A. Why were these effects non-significant for Interviewer B, and why did these interviewer differences exist? It is important to note that applicants perceived Interviewer A as having more positive expectations about their performance than Interviewer B, regardless of the valence of the question script the interviewer followed. Additionally, applicants expressed less motivation to get along with Interviewer B than with Interviewer A. According to previous theorizing, nonconscious mimicry should be less likely when a mimicry target dislikes an interaction partner (Dijksterhuis & Bargh, 2001). It is possible that in Study 1, applicants perceived Interviewer B's apparently negative expectations as personal slights, and developed some degree of dislike for Interviewer B, as indicated by their relative indifference toward affiliating with Interviewer B in an affiliation-appropriate context. It is also possible that, given Interviewer B's apparently negative interpersonal expectancies, applicants were less concerned with affiliation because they did not believe

that their affiliation attempts would be rewarded. Consequently, they may have been less prone to mimic Interviewer B overall. Although the difference between the overall mimicry levels of Interviewer A's and Interviewer B's applicants was not significant ($p = .31$), it is interesting to note that Interviewer B's applicants did mimic foot shaking less frequently ($M = .18$) than did Interviewer A's applicants ($M = .26$).

Also, consistent with the idea that applicants may have been less motivated to affiliate with Interviewer B is the finding that applicants were less likely to behave in expectancy consistent ways when interviewed by Interviewer B. In Interviewer A's interview sessions, expectancy condition significantly predicted applicant performance. This was not the case for Interviewer B's sessions, indicating that the applicants were less likely to go along with Interviewer B's expectancy script, but rather may have preferred to pursue their own agendas.

Despite the interesting and novel findings in Study 1, it did not address whether inherently negative interpersonal behaviors (e.g., stammering) can be mimicked, and whether the process of nonconscious behavioral mimicry of negative behaviors is associated with negative interpersonal outcomes. Study 2 was designed to address such issues.

CHAPTER III

STUDY 2

Study 1 illustrated that nonconscious behavioral mimicry and behavioral confirmation could co-occur in interpersonal interactions. Additionally, Study 1 showed that mimicry does not always have beneficial consequences for the mimicker, and that the direction of association between mimicry and interpersonal outcomes may depend in part on the context of the interaction.

The goal of Study 2 was to replicate and extend the findings of Study 1 for the negative expectancy script condition. More specifically, Study 2 was designed to show that the imitation of inherently negative behaviors (e.g., stammering) is possible and is associated with more negative interpersonal outcomes for mimickers in comparison to the imitation of neutral behaviors (i.e., foot shaking). When the interaction is negatively-constrained (e.g., via negative questions), it was predicted that greater mimicry of neutral behaviors would be associated with negative outcomes, replicating Study 1, but that greater mimicry of an inherently negative behavior would be associated with significantly more negative outcomes than mimicry of a neutral behavior. Finally, it was anticipated that mimicry of an inherently negative behavior would mediate the relationship between subtle manifestations of negative perceiver bias and poor target outcomes.

As in Study 1, a simulated interview paradigm (Neuberg, 1989; Reich, 2004) was used in Study 2. Confederate interviewers asked participant applicants negatively-focused questions while engaging in foot shaking. Interviewers' subtle manifestations of bias were manipulated by training interviewers to deliver the question script with or

without stammering. First of all, a main effect of interviewer stammering on applicants' own speech fluency was expected, such that applicants in the stammering condition would commit more speech errors than those in the non-stammering condition.

Consequently, it was anticipated that applicants in the stammering condition would perform worse overall in their interviews than those in the non-stammering condition.

Additional predictions for Study 2 were consistent with those for Study 1.

Greater levels of applicant foot shaking were expected to be associated with diminished interview performance regardless of interviewer speech condition, thereby directly replicating the results of Study 1 for the negative expectancy condition. Applicants who shook their feet more were expected to stammer more in the stammering condition and to speak more fluently in the non-stammering condition – thereby engaging in more mimicry in general, and conceding to interviewers' interaction scripts. Consequently, those applicants who stammer most in the stammering condition should perform the worst in the interview. Finally, applicant mimicry of foot shaking should not mediate the effect of interviewer speech fluency (stammering vs. no stammering) on interview performance, but applicant speech fluency should mediate this effect.

Method

Participants

Participants were obtained from Texas Tech University's Introductory Psychology participant pool using a standard and approved protocol. In total, 80 female participants served as applicants across 80 interview sessions, with 40 females in each condition (across two different interviewers; different interviewers than used in Study 1).

Design and Procedure

The design for Study 2 used interviewer “stammering” versus “no stammering” conditions, with interviewers engaging in foot shaking across all conditions. Participants were randomly assigned to either the stammering or non-stammering conditions (40 per condition across two interviewers). The interviewers’ question script was negatively-valenced in all conditions (see Appendix P for the interviewer materials used in Study 2); to manipulate perceiver stammering during the interview, interviewers either stammered at specific points in the question script (stammering condition), or did not stammer (non-stammering condition). The dependent variables included a) the percentage of overall interview time during which applicants mimicked the interviewer’s foot shaking behavior, b) the quality of applicants’ overall performances in the interviews, as rated by objective observers, and c) the ratio of applicant speech errors per interview minute, which served as an indicator of the frequency with which the applicants mimicked the interviewer’s stammering or fluent speech behavior.

The procedure and materials for Study 2 were nearly identical to those employed in Study 1. However, a few differences should be noted. First, the experimenter no longer emphasized to the applicants that the interviewer had the sole power to determine who did the best in the interviews (see Appendix L for the experimenter script used in Study 2). This change was made in order to de-emphasize status differences, since such differences may attenuate target mimicry (Tiedens & Fragale, 2003). Second, for this same reason, interviewers also were no longer required to wear professional attire. Third, participants rated the interviewer with regard to overall interview competence, and

indicated their impressions of the interviewer's treatment of them (see Appendix Q for the applicant questionnaires used in Study 2). These measures were added to ensure that applicants did not report feeling greater dismay when interviewed by a stammering interviewer than by a non-stammering interviewer. If significant speech condition differences were found, these measures could be accounted for in subsequent analyses.

Applicant Measures

As in Study 1, participants completed the affiliation index (Cronbach's $\alpha = .76$).

Applicants' Perceptions of Interviewer's Expectations. Applicants completed the same two measures used in Study 1 to assess their perceptions of the interviewer's expectations. In addition, a third item was added (i.e., "What type of expectations do you think the interviewer had about your skills or qualifications?", 1 = very negative, 7 = very positive;). Applicants' responses on all three items were summed and averaged (Cronbach's $\alpha = .68$) to create an Interviewer Expectancy index, with higher scores indicating more positive interviewer expectancies (from the perspective of the applicant).

Applicants' Perceptions of Interviewer's Competence. Applicants also completed retrospective measures of their perceptions of the interviewer's competencies, to make certain that applicants' perceptions of the interviewer were not adversely affected by interviewer stammering. Applicants' perceptions were gauged on 7-point scales ranging from 1 (Poor) to 7 (Excellent) on six items assessing applicants' perceptions of a variety of interviewer traits (i.e., intelligence, confidence). Applicants' responses on these six items were summed and averaged (Cronbach's $\alpha = .73$) to create an Interviewer

Competency index, with higher scores indicating applicant perceptions of greater interviewer competence.

Applicants' Expressions of Discomfort with the Interviewer. Applicants completed a single-item measure assessing the extent to which they were uncomfortable with the way the interviewer treated them. Applicants' perceptions were gauged on a 7-point scale (i.e., "Were you uncomfortable or upset about the way the interviewer treated you?"; 1 = Not At All, 7 = Very Much So), with higher scores indicating greater applicant discomfort with the interviewer.

Mimicry (Foot Shaking). Using the same procedures described in Study 1, two undergraduate research assistants recorded the time each applicant spent moving her feet in a repetitive motion both before (baseline measure) and during the interview. These measures were averaged across both judges ($r_s = .76$ and $.94$), thereby creating both baseline and interview measures of the percentage of time for which applicants engaged in foot shaking.

Mimicry (Speech Errors). Two different undergraduate research assistants, unaware of the hypotheses of the proposed research and of each applicant's stammering condition, independently listened to (but did not watch) the interview sessions. They only listened to the tapes so that they remained unbiased by applicants' appearance in their subsequent ratings of applicant performance. Also, the coders did not listen to the interviewer (they turned down the volume when the interviewer started speaking), so that they would not be biased by the interviewer's speech (stammering vs. non-stammering) condition. The coders noted each speech error made by each applicant, and the total

number of speech errors (e.g., stammering/stuttering, repetitions, hesitations, incoherent noises, and “filler” sounds) for each coder was summed. The summed scores for each coder were then averaged ($r = .69$) into a single Speech Error index. The Speech Error index was divided by the averaged total interview time ($r = .91$) of each interview session to equalize interviews of varying length. In sum, the Speech Error measure consists of the average number of applicant speech errors per interview minute, with larger numbers representing more frequent applicant speech errors.

Interview Performance. As in Study 1, all mimicry and performance measures were coded separately. Two undergraduate observers listened to the applicants’ responses to the interviewer’s scripted questions, and completed evaluations of applicants’ overall performance (see Appendix T for the applicant evaluation form used in Study 2). Responses on the 4 general performance measures were averaged for each coder (Cronbach’s $\alpha = .94$ and $.97$). These two indexes ($r = .63$) were averaged to form an index of Applicant Interview Performance.

Results

Preliminary Analyses: Applicant Awareness of Speech Condition and Hypotheses

Initial analyses were conducted to examine participants’ awareness of the hypotheses and of the interviewers’ speech condition. For Interviewer D, only 2 of 40 participants indicated awareness of the study’s hypotheses, and no participants in the stammering condition indicated awareness of her stammering behavior. For Interviewer C, however, 7 of 40 participants indicated awareness of the study’s hypotheses, and 12 of 20 participants in the stammering condition indicated awareness of her stammering

behavior. These latter results suggest that the quality of Interviewer C's data may have been compromised. Therefore, several analyses were conducted for each interviewer individually, following the primary analyses for the full data set.

Effects of Interviewer and Speech Condition on Applicant Performance

A 2 (Speech Condition: Stammering vs. Non-Stammering) X 2 (Interviewer: Interviewer C vs. Interviewer D) ANOVA on the Applicant Performance index revealed no significant main effects or interaction (all $ps > .15$). So, contrary to hypotheses, interviewer speech did not adversely affect applicant performance in the interview.

Effects of Interviewer and Speech Condition on Applicants' Foot Shaking and Speech Errors

A 2 (Speech Condition) X 2 (Interviewer) ANCOVA on the applicant foot shaking ($M = .23$, $SD = .20$, Skewness = 1.31, Kurtosis = 1.56; again, variable not transformed because the distribution of errors was normal in current analyses, after controlling for baseline foot-shaking) index (holding baseline foot shaking constant) revealed no significant main effects or interactions (all $ps > .085$). However, a marginal main effect of condition was detected; applicants exhibited a non-significant tendency to shake their feet more in the stammering condition ($M = .26$, $SD = .22$) than in the non-stammering condition ($M = .20$, $SD = .18$), $F(1, 75) = 3.04$, $p = .085$.

Did targets imitate the inherently negative behavior of stammering? A 2 (Speech Condition) X 2 (Interviewer) ANOVA on the Speech Error index revealed no significant main effects or interaction (all $ps > .06$). So, contrary to hypotheses, interviewer stammering did not increase the preponderance of applicant speech errors. In fact,

applicants showed a tendency to make more speech errors in the non-stammering condition ($M = 5.36$, $SD = 1.78$) than in the stammering condition ($M = 4.64$, $SD = 1.59$), although this difference was of marginal significance, $F(1, 76) = 3.57$, $p = .06$. Neither an effect of interviewer nor an interviewer by condition interaction existed ($ps > .54$).

It was anticipated that applicants who shook their feet more would stammer more in the stammering condition and speak more fluently in the non-stammering condition, thereby engaging in more mimicry in general. More specifically, applicant foot shaking was expected to positively predict applicant speech errors in the interviewer stammering condition, yet negatively predict applicant speech errors in the non-stammering condition. Contrary to hypotheses, applicant speech fluency was not related to applicant imitation of foot shaking in either the non-stammering, $r(40) = .19$, $p = .25$, or the stammering, $r(40) = .06$, $p = .73$, condition.

Effects of Interviewer and Speech Condition on Applicants' Impressions

To determine the effects of both interviewer and speech condition (stammering vs. non-stammering) on applicants' impressions of their interviewers, three ANOVAs were conducted. First, a 2 (Speech Condition) X 2 (Interviewer) ANOVA on the index of Interviewer Competency revealed a main effect of speech condition, $F(1, 76) = 7.92$, $p = .006$, qualified by a significant interviewer by speech condition interaction, $F(1, 76) = 21.15$, $p < .001$. The effect of interviewer speech condition on applicants' perceptions of interviewer competency depended upon the interviewer. Planned comparisons revealed that Interviewer C was perceived as significantly more competent when she asked questions in the non-stammering condition ($M = 5.67$, $SD = .64$) than when she asked

questions in the stammering condition ($M = 4.10$, $SD = 1.03$), $t(76) = 5.97$, $p < .05$.

However, no such difference existed for Interviewer D when she asked questions in the non-stammering ($M = 4.60$, $SD = 1.16$) or stammering condition ($M = 4.98$, $SD = .93$), $t(76) = 1.14$, $p = .26$.

Next, a 2 (Speech Condition) X 2 (Interviewer) ANOVA was conducted on the Interviewer Expectancy index. This analysis revealed a significant main effect of interviewer, $F(1, 76) = 4.65$, $p = .034$. Interviewer C was perceived by applicants to possess significantly higher expectations for their interview performance ($M = 4.61$, $SD = .69$) than Interviewer D ($M = 4.20$, $SD = .97$).

Finally, a 2 (Speech Condition) X 2 (Interviewer) ANOVA was conducted on the measure of applicant discomfort with the interviewer. This analysis revealed a significant speech by condition interaction, $F(1, 76) = 9.28$, $p = .003$. The effect of interviewer speech condition on applicants' expressions of discomfort with their interviewer depended upon the interviewer herself. Planned comparisons revealed that the applicants in Interviewer C's stammering condition indicated significantly more discomfort with her ($M = 2.00$, $SD = 1.30$) than did her applicants in the non-stammering condition ($M = 1.25$, $SD = .44$), $t(76) = 2.44$, $p < .05$. For Interviewer D, on the other hand, applicants in her non-stammering condition tended to express more discomfort with her ($M = 2.10$, $SD = 1.55$) than applicants in the stammering condition ($M = 1.35$, $SD = .75$), although this difference was not statistically significant, $t(76) = 1.95$, $p = .12$.

In sum, Interviewer C was perceived by applicants as being significantly less competent in the stammering condition than in the non-stammering condition, and as

having more positive expectancies than Interviewer D. Additionally, applicants expressed significantly more discomfort with the way they were treated by Interviewer C in the stammering condition than in the non-stammering condition. Finally, as noted earlier, most of Interviewer C's applicants (12 of 20) reported that they were aware that she committed speech errors in the stammering condition (hence, the occurrence of *nonconscious* mimicry was not possible for these participants). In sum, these results suggest that the manipulation of stammering was confounded for Interviewer C, as it varied systematically with applicants' perceptions of the interviewer's competence and with applicant's feelings of discomfort. Therefore, subsequent internal analyses examining the relationship between participants' tendencies to mimic and to perform in expectancy-consistent ways were conducted individually for each interviewer.

Applicant Mimicry and Performance

Applicants who stammered most in the stammering condition were expected to perform the worst in the interviews. To test this prediction, two hierarchical regression analyses were conducted on the Applicant Performance index in the stammering condition – one for each interviewer. Applicants' affiliation goal index was entered as a covariate at step one (non-significant for both analyses) and Applicant Speech Errors were entered as a predictor at step two. Contrary to hypotheses, applicant speech errors did not predict performance in the stammering condition for Interviewer D or for Interviewer C ($ps > .26$).

It was hypothesized that greater levels of applicant foot shaking would predict diminished interview performance regardless of interviewer speech condition, thereby

directly replicating the results of Study 1 for the negative expectancy condition. To test this hypothesis, a hierarchical regression analysis was conducted on the Applicant Performance index for Interviewer D. In the first step, applicants' baseline foot shaking and affiliation goals were entered as covariates (as in Study 1), and neither covariate predicted performance. In the second step, applicants' foot shaking percentages were entered, and did not significantly predict performance ($p = .98$). The same hierarchical regression analysis was conducted for Interviewer C, and none of the variables achieved significance ($ps > .11$). So, contrary to hypotheses (and the results of Study 1), foot shaking was not associated with performance in either interviewer sample.

Finally, it was predicted that the mimicry of speech fluency would mediate the effect of interviewer speech condition on applicant performance, but that the mimicry of foot shaking would not. Because interviewer speech condition did not significantly predict applicant performance for either interviewer, controlling for affiliation goals, it was not possible to conduct the proposed test of mediation to examine whether applicant speech fluency or foot shaking mediated that relationship. However, it is interesting to note that, for Interviewer D, there was a marginal effect of speech condition on applicant performance, with those in stammering condition ($M = 5.79$) performing marginally better than those in non-stammering condition ($M = 4.98$), $F(1, 38) = 2.47$, $p = .125$.

Discussion

Many of the hypothesized effects for Study 2 were non-significant; contrary to hypotheses, applicants did not perform worse when they were in the stammering

condition in comparison to the non-stammering condition. It was hypothesized that applicants would stammer more in the interviewer stammering condition than in the non-stammering condition. This hypothesized association was non-significant; in fact, participants showed a non-significant trend toward making more speech errors in the *non-stammering* condition.

It was thought that the imitation of foot shaking would be significantly and negatively associated with performance, regardless of speech condition. If mimicry of the neutral behavior of foot shaking represents a general concession to the interaction script of a perceiver, then enhanced foot shaking should be associated with poor performance in a negatively-constrained context (as found in Study 1). However, the Study 1 results were not replicated here, as the relationship between foot shaking mimicry and performance was non-significant in either of the two samples (i.e., Interviewer D, Interviewer C). Applicant foot shaking was also expected to positively predict applicant speech errors in the interviewer stammering condition, yet negatively predict applicant speech errors in the non-stammering condition. Also contrary to hypotheses, correlations revealed that applicant foot shaking and applicant speech fluency were not significantly related, and that applicant speech errors did not significantly predict applicant performance in the stammering condition. And finally, neither foot shaking mimicry nor applicant speech fluency played a mediating role in this study because the relationship between interviewer speech condition and applicant performance was not significant in either interviewer's data set.

Why were the hypothesized effects of Study 2 non-significant? More specifically, why were the findings of Study 1, in which foot shaking imitation was associated with performance, not replicated in Study 2? This may have been a product of one of the key procedural differences between Studies 1 and 2. In Study 1, applicants were told that the interviewer had the *sole authority* to determine who would “get the job” in the hypothetical interview, which was not the case in Study 2. Furthermore, in Study 1, the interviewers dressed in business attire to emphasize the power differential, but in Study 2, they dressed in everyday clothing. Previous research has found that behavioral confirmation is more likely to occur when targets are of lower status or have less power in comparison to the perceiver (Copeland, 1994). It might be possible that this attenuation of perceiver (i.e., interviewer) power in Study 2 reduced targets’ tendency to engage in expectancy-consistent behavior, which may have left no expectancy effects that could be associated with enhanced mimicry. This possible interpretation is difficult to clarify with certainty in the absence of a positive expectancy comparison condition, but it remains a real possibility nonetheless.

Why did the interviewer stammering condition neither positively predict applicant speech errors nor negatively predict applicant performance? In short, several methodological issues may have contributed to these null results. Generally speaking, Study 2 suffered from low experimental control, as exemplified by the case of Interviewer C. Despite extensive training with the script, 60% (12 of 20) of Interviewer C’s applicants in the stammering condition indicated awareness of her speech errors. Once another’s behaviors or mannerisms are brought into the awareness of an interaction

partner, these behaviors can no longer be nonconsciously mimicked by said interaction partner; rather, these ostensibly contrived behaviors may be perceived by the interaction partner as direct or intentional attempts to influence, which may consequently attenuate the likelihood of interpersonal imitation (Polansky, Lippitt, & Redl, 1950). The data in fact support this possibility, as Interviewer C's applicants made significantly fewer speech errors in her stammering condition than in her non-stammering condition.

Additionally, applicants thought that Interviewer C was significantly less competent in the stammering condition than in the non-stammering condition, supporting the other data indicating that the applicants were aware of her stammering behavior. Applicants' awareness of Interviewer C's contrived attempts to influence them via stammering may have affected applicants' tendencies to imitate her foot shaking behavior as well. As a result, Interviewer C's data, and the overall sample of which her data are a significant part, must be regarded as highly suspect. This possibility is supported by the finding that applicants expressed significantly more discomfort with the manner in which they were treated by Interviewer C in the stammering condition than in the non-stammering condition. Consequently, the data from Interviewer C's sessions are nearly impossible to interpret.

Interviewer D's data are equally perplexing, and yet more complex. Why was foot shaking imitation not significantly associated with performance for Interviewer D's applicants? Why did the interviewer stammering condition neither positively predict applicant speech errors nor negatively predict applicant performance for Interviewer D? For Interviewer D, the possibility exists that these null results were due to a kind of

pratfall effect (Helmreich, Aronson, & LeFan, 1970; Aronson, Willerman, & Floyd, 1966), and that the attractiveness of the interviewer may have influenced the results to some extent. It is interesting to note that 3 *female* applicants spontaneously commented favorably on the attractiveness of the interviewer. In the opinion of this researcher, this is an unusually high number. No applicants commented on the appearance of Interviewer C and no applicant has commented on the appearance of any interviewer across several previous studies using this research paradigm (Casa de Calvo & Reich, 2005; Casa de Calvo & Reich, 2007; Study 1). Additionally, 35% (14 of 40) of Interviewer D's applicants commented that she was aloof during the interview, as compared to 7.5% (3 of 40) for Interviewer C. It seems entirely possible that Interviewer D's attractiveness, coupled with her seemingly aloof presentation, engendered a feeling of distance between herself and her applicants. The fact that applicants believed that Interviewer D had significantly lower expectations regarding their performances than Interviewer C, regardless of speech condition, supports this possibility.

However, applicants may have felt particularly alienated from Interviewer D in the *non-stammering* condition, where the attractive and aloof Interviewer D was possibly perceived as "perfect" by her applicants. Conversely, in the stammering condition, Interviewer D *made mistakes*; and these mistakes were not obvious to participants, and therefore were unlikely to be perceived as intentional. Remember, none of Interviewer D's applicants in the stammering condition were aware that she was stammering. Rather, Interviewer D's stammering may have made her seem more human and more likeable from the perspectives of the applicants. Consequently, applicants may have been more at

ease with her in the stammering condition, possibly engendering more positive performance.

Consistent with this speculation is the interesting finding that Interviewer D's applicants indicated less discomfort with the manner in which she treated them in the stammering condition than in the non-stammering condition, although this difference was non-significant. Additionally, although the difference between the levels of performance of Interviewer D's applicants was not significant across interviewer speech conditions, it is interesting to note that Interviewer D's applicants did perform marginally better in the stammering condition than in the non-stammering condition. Finally, consistent with the notion that Interviewer D was more "likeable" in the stammering condition and with the idea that disliking an interaction partner may attenuate mimicry, is the marginally significant ($p = .065$) finding that Interviewer D's applicants were more likely to mimic her foot shaking in the stammering condition ($M = .30$) than in the non-stammering condition ($M = .18$).

Another potential problem that may have existed in Study 2 was that the differences between experimental conditions may have been too subtle. In Study 1, the positive and negative expectancy script conditions were quite discrepant from each other and expectancy valence had a significant effect on applicant performance. In Study 2, however, only negative expectancy script conditions existed, with the stammering condition being only "more negative" than the non-stammering condition. So, essentially, the potential size of the difference in applicant performance scores between experimental conditions (i.e., effect size) was not as great in Study 2 as in Study 1. Study

2 may simply not have possessed enough power to accomplish its goals – due to a combination of a small sample size and small effect size.

CHAPTER IV
CONCLUSIONS

The primary aim of the current research was to examine the relationship between nonconscious mimicry and behavioral confirmation. Mimicry and expectancy effects were expected to co-occur within social interactions, thus supporting the notion that both processes reflect a general target concession to perceivers' interaction scripts. To this end, the current research used a simulated interview paradigm in which confederate-interviewers with valenced expectancy scripts (Study 1) or with a negative script and different speech proficiency patterns (Study 2) interviewed participant-applicants for a hypothetical job.

As anticipated, Study 1 showed typical "expectancy effects" in that applicants performed significantly better in their interviews when asked positively-focused questions than when asked negatively-focused questions. Most importantly, and consistent with hypotheses, Study 1 demonstrated that applicants' mimicry of an interviewer's neutral behavior significantly predicted the applicants' level of performance. Specifically, for Interviewer A, greater applicant mimicry of foot shaking was associated with strong interview performance when the interviewer asked positively-focused questions, yet was associated with poor interview performance when the interviewer asked negatively-focused questions. These results indicate that nonconscious behavioral mimicry and expectancy effects are indeed related.

Another aim of the current research was to determine whether inherently negative interpersonal behaviors (e.g., stammering) can be mimicked. To that end, Study 2's hypotheses were not empirically supported. Applicants did not commit significantly more speech errors in the interviewer stammering condition than in the non-stammering condition, nor did applicants perform significantly worse when they were in the stammering condition. Additionally, the Study 1 results were not replicated in Study 2, as foot shaking mimicry was not significantly associated with performance. Also contrary to hypotheses, applicant foot shaking and speech fluency were not significantly related, and applicant speech fluency did not significantly predict applicant performance.

Theoretical and Applied Implications

Importantly, the finding that applicants performed better in the positive expectancy condition in comparison to the negative expectancy condition in Study 1 is consistent with past behavioral confirmation research (e.g., Neuberg 1989; Reich, 2004). Additionally, the fact that differences in participant-applicants' behavior emerged as a product of interviewer expectancy script verifies, along with previous research (Casa de Calvo & Reich, 2005; Casa de Calvo & Reich, 2007), the success of the interviewer scripts in facilitating valence-consistent behavior from applicants, despite the fact that the applicants could not successfully infer the interviewers' expectancies themselves.

In Study 1, nonconscious behavioral mimicry was shown to co-occur with expectancy-related effects on performance (for Interviewer A's applicants). The association between mimicry and expectancy effects may in fact be a monumental finding in social psychology. To the author's knowledge, this is the first research to

explicitly test for a relationship between expectancy effects and nonconscious mimicry, and to find evidence that they may co-occur.

The finding that expectancy effects and nonconscious behavioral mimicry may co-occur contributes to our understanding of the process of behavioral confirmation. Firstly, mimicry may represent a process by which perceiver expectancies facilitate expectancy-consistent target behavior. Previous research has identified other processes, such as perceiver behaviors that limit or constrain the target's responses in an interaction (e.g., via question quality; Neuberg, 1989), or perceiver behaviors that are interpreted and responded to in kind by the target (e.g., Darley & Fazio, 1980). Mimicry may represent a more automatic, nonconscious process by which behavioral confirmation occurs. As such, it may be more difficult to control or prevent than other processes through which behavioral confirmation occurs. The idea that the process of nonconscious behavioral mimicry may account for the way in which expectancy-related perceiver behaviors actually affect target behaviors is also novel, in that previous research has typically focused on single perceiver behaviors or single target responses as mediators of behavioral confirmation.

Of course, statements about mediation await further research, since they cannot be made with certainty from the obtained associations in the current research. A mediational role for mimicry was not found in Study 2, and the correlational results of Study 1 do not warrant mediational conclusions. Additionally, Study 2 did not replicate Study 1's findings, in that applicant foot shaking was not negatively associated with performance. Finally, the association between performance and mimicry was non-significant for

Interviewer B's applicants in Study 1. However, the current research sets the stage for future experimental research that might continue to test mimicry as a potential mediator between perceiver expectancies and target behavior.

Secondly, a potential relationship between behavior confirmation and nonconscious behavioral mimicry may demand a reinterpretation of the process underlying behavioral confirmation effects in previous studies. For example, several classic studies (e.g., Snyder, Tanke, & Berscheid, 1977; Word, Zanna, & Cooper, 1974; Chen & Bargh, 1997) showing behavioral confirmation effects may need to be revisited and reinterpreted in light of this relationship. Perhaps target confirmation of perceiver expectations in these studies was partially a product of target imitation of perceiver behavior.

For example, nonconscious mimicry may have played a part in the behavioral confirmation finding of the classic Snyder, Tanke, and Berscheid (1977) research. These researchers examined whether the stereotypes male perceivers have about attractiveness would lead them to elicit stereotype-consistent behavior from female targets during a phone conversation. The alleged attractiveness level of the female targets was manipulated by leading the male perceivers to believe (via contrived photographs) that they were interacting with either a physically attractive or physically unattractive female. Results indicated that females who were perceived by the males as "physically unattractive" behaved in a significantly less friendly, sociable, and likeable manner than females perceived to be "physically attractive." However, ratings by objective observers indicated that when the males believed their female interaction partners to be "physically

unattractive”, they exhibited manifestations of that bias through a relatively unenthusiastic, unresponsive, and detached interaction style. As a consequence, the “unattractive” females may have detected those manifestations of bias, and may have mimicked that behavior by engaging in a similarly “unfriendly” interaction style. In other words, mimicry may have been responsible for the negative behaviors engaged in by the females in the “physically unattractive” condition. Likewise, mimicry of the male’s warm, responsive, and friendly interaction style may have been responsible for the positive behaviors engaged in by females in the “physically attractive” condition.

Thirdly, the current research is significant in that is the first research to explicitly show that nonconscious mimicry may have negative consequences for the mimicker in certain contexts. In this case, the findings of Study 1 suggest that even the imitation of an inherently neutral mannerism (i.e., foot shaking) may be associated with negative outcomes for imitators if it occurs within a negative-expectancy context. So, nonconscious mimicry need not involve inherently negative behaviors (e.g., stammering) in order for it to be associated with less positive or less adaptive outcomes. Other researchers (e.g., Chartrand et al., 2005; Lakin et al., 2003) have asserted that mimicry is inherently adaptive. However, the findings of Study 1 call into question the pervasiveness of that assertion. Consequently, the findings of Study 1, if replicated in future research, might warrant a revision of existing theory regarding the adaptive nature of nonconscious mimicry.

Finally, the current research has applied implications as well. It is important to note that students, job applicants, clients, or anyone engaging in consequential

interpersonal interactions may be particularly susceptible to the interaction scripts of their teachers, interviewers, counselors, or significant others if they inadvertently engage in the imitation of even the most benign of behaviors. When such expectations are negative, the social cost may be substantial (e.g., diminished course grade, poor interview performance, strained relationships).

Ultimately, the results of the current research may serve as a reminder for potential expectancy targets to actively avoid the behavioral confirmation of erroneous negative expectations in important social interactions. For example, job applicants should avoid inadvertently mimicking even the neutral behaviors of their interviewers when those interviewers appear to harbor negative expectancies, for this imitation may also suggest that the applicant is conceding to the negative interaction script established by the interviewer. In such a circumstance, applicants should consciously attempt to present themselves in a manner that is more consistent with their own more positive self-views during their interviews (Swann, 1987). Furthermore, romantic couples in the midst of conflict may be well advised to avoid mimicking their partner's mannerisms, so that this conflict may not escalate. For instance, if a romantic partner raises his or her voice during an argument, the other partner should avoid doing the same, and should avoid conceding to an argumentative interaction script.

Interviewer Effects as Possible Alternative Explanation

Some may regard the findings of Study 1 not as a demonstration of a potential association between expectancy effects and nonconscious mimicry at all, but rather simply as a demonstration of interviewer effects. After all, the aforementioned

association was only significant for Interviewer A, and non-significant for Interviewer B. Of course, the current findings of an association between expectancy effects and nonconscious mimicry for Interviewer A's applicants must be replicated with other interviewers and other neutral behaviors (e.g., face touching) in order to be held with confidence. However, multiple factors enhance the trustworthiness of these findings.

One of the boundary conditions necessary for the occurrence of mimicry is interpersonal liking; specifically, nonconscious mimicry should be less likely when a mimicry target dislikes an interaction partner (Dijksterhuis & Bargh, 2001). A reasonable possibility exists that Interviewer B's applicants simply did not care for her much, and this attenuated or affected their overall level of mimicry. Consequently, Interviewer B's null results may reflect what typically occurs when mimicry targets are indifferent toward or dislike their interaction partners. In Study 2, the null results for both interviewers in terms of expectancy effects, as well as the foot shaking and performance relationship, may have been a product of diminished perceiver power; applicants were no longer led to believe that the interviewer had the sole authority to determine who would "get the job" in the hypothetical interview (as was the case in Study 1). In terms of conducting future research, then, it is crucial to note that it may be important to pilot test how "likeable" a potential interaction partner is before actually conducting research, as well as to establish the interaction partner as a source of power or authority within the interaction context.

Another factor that may add credibility to the findings of Study 1 for Interviewer A's applicants is the fact that the video camera taping the interview sessions was quite

obtrusive (due to issues of limited finances and research space), and noticeable to the applicants. In other words, the applicants were *very* aware that their interview session was being videotaped. Another of the boundary conditions necessary for the occurrence of mimicry is lack of self-focus; specifically, people should be less likely to mimic another person if they are self-focused (Dijksterhuis & Bargh, 2001). The presence of an obtrusive video camera is certainly something that could enhance one's self-consciousness, and possibly attenuate the level of mimicry. In fact, several mimicry studies (e.g., Chartrand & Bargh, 1999; Lakin & Chartrand, 2003) have used hidden or unobtrusive cameras to record mimicked behavior, under the assumption that the obvious presence of a camera would diminish levels of target mimicry. Consequently, the level of mimicry that might occur in interpersonal interactions is most likely underestimated in the current research, rendering the mimicry-performance findings for Interviewer A's participants unlikely to be a product of chance. That being said, it would certainly be recommended that future research in this area employ the use of hidden or unobtrusive video cameras.

Methodological Contributions

Although the predictions of Study 2 were not supported by the data, the research questions that motivated the study were important and novel. The methodological problems that were encountered when conducting this study will undoubtedly contribute to this line of research by facilitating a more informed approach to these research questions in future studies.

One of the main problems of Study 2 was that the applicants were generally aware of Interviewer C's stammering behavior, possibly attenuating their imitation of her speech errors. In Study 2, it was anticipated that the interviewers would be able to unobtrusively and unnoticeably commit speech errors (as designated in the script) after extensive training and practice. This was the case with Interviewer D; in fact, it is reassuring to note that not one of Interviewer D's applicants was able to detect her stammering in the stammering condition, thus verifying that the stammering script itself was not "heavy-handed" or unreasonably error-prone. However, even after extensive training and practice, Interviewer C was simply not able to execute the stammering script without the speech errors becoming obtrusive.

In Study 2, interviewers were selected based their desire to perform the role, not necessarily on their ability to perform the role successfully. In the future, it is imperative that interviewers be subjected to an audition, and that interviewers be selected based on merit rather than desire. The interviewer role in the stammering condition is one that requires the precision and subtlety of a film actor, and it is crucial to select the proper individual for the role.

Another problem in the implementation of Study 2 may have involved the attractiveness of Interviewer D. In the current research, only female applicants and female interviewers took part, in order to avoid any influence that attractiveness could have on a mixed-gender interview session. However, it is clear, given the results of Study 2, that this measure was not enough. In future research, potential interviewers must be carefully pre-screened (via pilot testing) to ensure that they are of average

appearance in order to minimize the potentially complicated influence of attractiveness on mimicry.

Another potential problem that may have existed in Study 2 was that the differences between experimental conditions may have been too subtle, with the stammering condition being only “more negative” than the non-stammering condition. So, the potential size of the difference in applicant performance scores between experimental conditions (i.e., effect size) was not as great in Study 2 as in Study 1. Study 2 may simply not have possessed enough power to accomplish its goals – due to a combination of a small sample size and small effect size. In future research, it may be advisable to include a neutral expectancy script in order to facilitate differences between experimental conditions and increase power (e.g., neutral vs. negative question script).

Future Research

Although the results of Study 2 did not provide support for the notion that mimicry of negative behaviors could occur, these non-significant results should not dissuade further attempts to identify “negative mimicry”. It still seems theoretically possible for individuals to mimic inherently negative behavior (i.e., stammering). However, in order for the issue to be addressed, it must be tested properly.

In the future, the author would like to use a research paradigm similar to that used in Study 2 (i.e., simulated interview), but with enhanced experimental control and power. To that end, an additional expectancy script (i.e., neutral) would be added to the design to create more variance in applicants performance scores. Also, the proposed modification of Study 2 would involve carefully choosing interviewers based on auditions, and doing

pilot testing on attractiveness and speech error obtrusiveness to ensure that neither factor would systematically affect applicant mimicry or performance results. Additionally, the interviewers' rendering of the various question scripts would be pre-recorded; applicant-participants would watch the interviewer on a computer monitor or television screen, and answer into a microphone connected to a computer recording system. They would also be video-recorded surreptitiously. Previous research has shown that people are capable of imitating the mannerisms of artificially generated life forms (Bailenson & Yee, 2005), so it would seem likely that people would imitate a pre-recorded interaction partner. Such a design might minimize the experimental noise that existed in Study 2.

One of the difficulties in testing to determine whether negative behaviors can be mimicked, and in testing whether "negative mimicry" can mediate the relationship between perceiver expectancies and target outcome, lies in the operationalization of a negative behavior that is easily repeatable for confederate perceivers. Even for the best confederate "actors", it is an extraordinary challenge to repeat the stammering script consistently over time in exactly the same manner, particularly in the context of a "live" or "real time" interpersonal interaction. For this reason, if stammering is the negative behavior of choice in future research, it is suggested that perceiver confederates be pre-recorded, and that these recordings be thoroughly pilot tested (as described above).

However, it seems that it would be possible to keep the same basic design and procedure of Study 2 (or something similar if a neutral expectancy script was added), including the "live" interaction aspect of the paradigm, if a negative behavior was chosen that was easier for confederate perceivers to repeat and/or control. For instance, tone of

voice (i.e., depressed voice; Neumann & Strack, 2000) and backward lean (i.e., interviewer leans away from applicant; Word et al., 1974) are two examples of inherently negative behaviors used in mimicry and behavioral confirmation research that may be much more easily repeatable than stammering for confederate perceivers. Additionally, frowning is an inherently negative behavior that would seem to be more easily controlled than stammering. Although the use of frowning as a manipulated negative behavior has not been explicitly attempted in mimicry or behavioral confirmation research, people have been shown to smile less with non-smiling interaction partners than with smiling ones (Chartrand & Bargh, 1999), suggesting that the imitation of frowning may be possible in a “live” interaction. These behaviors, like stammering, could also be pre-recorded and pilot tested for maximum control.

However, it should be noted that the manipulation of almost *any* negative perceiver behavior is difficult, even if the behavior should seem more easily controlled than stammering. For example, the negative behavior of perceiver head shaking (i.e., moving one’s head from left-to-right in a repetitive motion) might instill dislike in an expectancy target, thus attenuating target mimicry. Additionally, if perceiver frowning were to be used, one would need to be very precise in differentiating between “frowning” behavior and “non-smiling” behavior in terms of the operationalization of those confederate behaviors. The key for any manipulation of negative perceiver behavior is that the behavior be subtle and easily repeatable; to that end, backward lean and tone of voice seem particularly promising.

Summary

Overall, the results of the current research are promising, as preliminary findings in Study 1 indicate the possibility of a relationship between nonconscious behavioral mimicry and behavioral confirmation. Such a relationship, if it in fact exists, would warrant a revision of theory in the research domains of both constructs. Although the findings of Study 2 were disappointing, the possibility of “negative mimicry” remains an open empirical question, due to the methodological and procedural difficulties encountered in Study 2. Improvements and modifications to the research design and procedures in future research could further illuminate the relationship between two of social psychology’s hallmark theoretical constructs.

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APPENDIX A

Expanded Literature Review and Historical Foundations

Imagine the following hypothetical scenario, in which a young professional, Jason, engages in a personal interaction with his supervisor George. Suppose that George has developed moderately negative expectations of Jason across a variety of domains. It is quite possible that George may relay his negative expectancies to Jason in both obvious and subtle ways. For example, George may explicitly convey his negative expectancies to Jason by focusing on conversation topics relating to Jason's past struggles, or by offering him little time to verbally display his competence. Additionally, George may subtly relay his negative expectancies to Jason by engaging in a variety of verbal (e.g., stammering, stuttering) or non-verbal (e.g., standing far away from Jason) behaviors that are indicative of interpersonal discomfort (Word, Zanna, & Cooper, 1974).

Given George's obvious (i.e., question quality or tone) and subtle (i.e., stuttering) manifestations of negative bias, how might Jason respond? The answer to this question might depend upon Jason's desire to get along with George. Given that George is Jason's supervisor, Jason may be especially motivated to get George to like him. Consequently, in his affiliation attempts, Jason may nonconsciously imitate George's mannerisms (i.e., stuttering, fidgeting). If so, his resulting negative mannerisms and uncomfortable behavior might only solidify George's negative opinion of Jason. More specifically, the *more* Jason nonconsciously imitates George's stuttering, the *worse* he may objectively perform during the interaction.

This example highlights a potential relationship between two theoretical constructs of consequence in social psychology, namely nonconscious behavioral mimicry (i.e., imitation) and behavioral confirmation. Without awareness or intention,

people may sometimes imitate the behaviors of their interaction partners. Research on nonconscious behavioral mimicry has focused on its positive consequences for strengthening affiliative bonds between interaction partners. However, as illustrated in the previous example, people often experience negative behaviors from others (e.g., stammering, fidgeting), especially when those others hold negative expectations about them. While nonconscious mimicry of such behaviors would not seem to be particularly beneficial, myriad independent research findings are consistent with the notion that mimicry of negative behaviors could occur.

If mimicry of negative interpersonal behaviors is possible, then mimicry may play a key role not only in positive social interactions, but in negative interactions as well. Of particular theoretical significance is the notion that the process of mimicry may provide insight into how behavioral confirmation (i.e., the self-fulfilling prophecy) occurs. In particular, mimicry could serve as a mechanism through which one person's expectancy-biased behavior leads another person to behave in a way that confirms the expectancy.

These issues are at the heart of the current research. The current research reflects an attempt to examine the relationship between nonconscious behavioral mimicry and expectancy effects. In doing so, it is anticipated that this research will show that mimicry and behavioral confirmation are related, such that they may co-occur in social interactions under certain conditions. Additionally, this research will attempt to show that the manner in which the mimicry of neutral behaviors (e.g., foot shaking) affects interpersonal outcomes may depend upon the positivity or negativity of the context in which the imitation occurs. Finally, it is anticipated that nonconscious behavioral

mimicry, which has typically been thought to enhance social interactions, may actually facilitate *substandard* performance by targets when the behavior being imitated is inherently negative (e.g., stammering). Because this relationship is likely to be complex, each theoretical construct of interest will first be individually examined.

Behavioral Confirmation and Identity Negotiation

As perceivers in a social world, we often treat people in accord with our expectations, and thus elicit behavior from them that confirms those expectations (Neuberg, 1996). This outcome is known as the self-fulfilling prophecy (Merton, 1948) or as behavioral confirmation (Snyder, 1992). The self-fulfilling prophecy may in fact be a product of either *interpersonal* (i.e., between-individual) or *intrapersonal* (i.e., within-individual) expectations that make particular behaviors, and corresponding outcomes, more likely to occur (Jones, 1977).

Behavioral confirmation first became of interest to experimental psychologists when Rosenthal and Jacobson (1968) offered evidence suggesting that teachers' expectations about their students could actually facilitate expectancy-consistent student performance. Most experimental research conducted on behavioral confirmation has focused on the relationship between interpersonal expectations and target outcome, and has shown behavioral confirmation to occur in many contexts, including teachers' expectations about their students (Jussim & Eccles, 1992; Rosenthal & Jacobson, 1968), counselors' expectations of their clients (Copeland & Snyder, 1995), and interviewers' expectations about their applicants (Neuberg, 1989; Reich, 2004; Casa de Calvo & Reich, 2007).

Previous theorizing (e.g., Darley & Fazio, 1980; Miller & Turnbull, 1986; Snyder, 1992) suggests four steps through which the self-fulfilling prophecy occurs. First, a perceiver develops expectations about a target person. Second, the perceiver treats the target in a manner that is consistent with those expectations. For instance, perceivers with negative expectancies have been shown to gather information in a biased way by explicitly asking their targets negatively-toned and closed-ended questions (Neuberg, 1989; Reich, 2004). Additionally, perceivers behaviorally express their negative expectancies in more subtle ways (Jones, 1977), as negative expectancies are associated with reduced interpersonal warmth and sociability (Snyder, Tanke, & Berscheid, 1977), enhanced interpersonal distance (Word, Zanna, & Cooper, 1974), fewer expressions of positive regard (Ickes, Patterson, Rajecki, & Tanford, 1982), and more speech errors (Word et al., 1974) by perceivers. Third, the target inadvertently behaves in a way that ultimately confirms the perceiver's expectations (behavioral confirmation). Finally, the perceiver may interpret the target's behavior as being consistent with his or her expectancies, above and beyond the evidence provided by the target's actual behavior (perceptual confirmation).

Perceiver Goals as Moderators of the Behavioral Confirmation Process

Of course, behavioral confirmation is not an inevitable consequence when perceivers hold expectations about others. Previous research has shown that motivational variables, such as perceiver goals, can moderate behavioral confirmation effects (for reviews, see Neuberg, 1996; Snyder, 1992). More specifically, goals that reduce perceivers' tendencies to behave in a biased way toward targets may attenuate behavioral

confirmation or lead to behavioral disconfirmation, while goals that enhance such tendencies enhance behavioral confirmation (Snyder, 1992). This section will review the manner in which perceivers' accuracy, correction, affiliation, and knowledge goals can affect the behavioral confirmation process.

Accuracy goals. One perceiver goal that has been shown to reduce behavioral confirmation is an accuracy goal. For instance, using a simulated interview paradigm, Neuberg (1989) found that interviewers induced with negative expectancies gathered information from their applicants in a more negatively-biased fashion, elicited more negative behavior from their applicants, and perceived their applicants more negatively than did interviewers with neutral expectancies. However, when also induced with the motivation to form accurate impressions of their applicants, interviewers with negative expectancies utilized less biased information-gathering techniques. This "correction" for bias ultimately reduced both behavioral and perceptual confirmation by disrupting the process by which the self-fulfilling prophecy occurs.

Correction goals. Beside accuracy motivation, perceivers' motivation to correct for expectancies they perceive to be too extreme also can reduce behavioral confirmation. An examination of research in social cognition suggests that the extremity of accessible constructs may lead perceivers to engage in effortful correction processes in order to counteract their biases (Martin, Seta, & Crelia, 1990; Strack & Hannover, 1996; Thompson, Roman, Moskowitz, Chaiken, & Bargh, 1994). These correction processes often lead perceivers to form relatively unbiased or expectancy-inconsistent judgments (Herr, Sherman, & Fazio, 1983; Lombardi, Higgins, & Bargh, 1987; Moskowitz &

Skurnik, 1999; Stapel, Martin, & Schwarz, 1998; Weary, Tobin, & Reich, 2001; Wegener & Petty, 1995). Research by Bargh (1992) suggests that the extremity of perceivers' accessible constructs can lead to correction processes by enhancing perceivers' awareness of their potential biases. This extremity-induced awareness may allow motivated perceivers to employ correction strategies in an attempt to arrive at more even-handed conclusions regarding their targets (Strack & Hannover, 1996; Thompson et al., 1994).

Recent research from the behavioral confirmation literature supports the notion that extreme expectancies may facilitate evenhanded perceiver judgments and behaviors regarding targets via enhanced perceiver awareness. Using a paradigm similar to that of Neuberg (1989), Reich (2004) investigated the moderating role of extremity by examining interviewers who varied in their chronic levels of generalized future-event expectancies (i.e., optimism/pessimism). Although interviewers with non-extreme expectancies engaged in expectancy-biased information-gathering strategies and elicited expectancy-confirming behavior from applicants, interviewers with extreme expectancies did not. Further analyses and a follow-up study supported the idea that as extremity increased, interviewers became more aware of the potential biasing influence of their chronic expectations and deliberately engaged in effortful correction processes.

Using a paradigm similar to that of Neuberg (1989) and Reich (2004), Casa de Calvo and Reich (2006) also found that perceivers with sufficient self-regulatory resources engaged in awareness-based correction induced by extreme target expectancies. Interviewers with sufficient cognitive resources and extreme expectancies exhibited both perceptual and behavioral correction, and did not elicit expectancy-consistent applicant

behavior. However, interviewers lacking self-regulatory resources exhibited typical expectancy-consistent biases, and elicited behavioral confirmation from their applicants.

Affiliation goals. Behavioral confirmation is also less likely to occur if a perceiver with negative expectancies regarding a target desires to be liked or admired by that target (Neuberg, 1996). Using Neuberg's (1989) simulated interview paradigm, Neuberg, Judice, Virdin, and Carrillo (1993) manipulated interviewers' expectancies regarding an applicant (i.e., negative vs. neutral). Additionally, half of the interviewers were given motivational instructions to try to get the applicants to like them, while the other half were given no affiliation instructions. Results showed that the interviewers prompted with both affiliation motivation and negative expectancies regarding their applicants displayed warm behaviors toward and asked positively-toned questions of their applicants, thus facilitating positive interview performance. So, in this case, the perceivers' desire to be liked by the targets motivated expectancy-inconsistent behavior from the perceivers, thereby facilitating expectancy-inconsistent performance from the targets.

Knowledge goals. Behavioral confirmation is actually more likely to occur if perceivers possess knowledge goals (Snyder, 1992). For instance, if perceivers attempt to collect information from targets for the purpose of forming an impression of them, behavioral confirmation is likely to be enhanced. This is particularly likely if perceivers are unconcerned with forming an accurate impression of targets.

Copeland and Snyder (1995) examined how perceivers' knowledge and affiliation goals would affect the behavioral confirmation process. Participants were randomly

assigned to the roles of either counselor (i.e., perceiver) or client (i.e., target), and engaged in a videotaped, face-to-face interaction. Prior to the interaction, perceivers were given the expectation that their targets were either extraverted or introverted. Perceivers were either instructed to form a diagnosis of the client (a knowledge goal), instructed to build affiliation and rapport with the client, or given no interaction goal. Only perceivers in the “diagnostic” condition elicited behavioral confirmation from their targets, suggesting that the behavioral confirmation process is enhanced when perceivers attempt to arrive at conclusions about targets without accuracy concerns.

Snyder and Haugen (1994) have provided further evidence that behavioral confirmation is enhanced when perceivers pursue knowledge goals. By using bogus photographs, male perceivers were led to believe that they would be having a phone conversation with a woman of normal weight or an obese woman. When perceivers and targets conversed in this situation without further instruction, behavioral confirmation did not occur. In other words, targets believed to be obese and those believed to be of normal weight did not act any differently during the conversation. However, when perceivers were instructed to try to arrive at a stable conclusion regarding the targets (a knowledge goal), behavioral confirmation occurred, such that targets believed to be obese responded in a more unenthusiastic and unfriendly manner than did targets believed to be of normal weight. Behavioral confirmation did not occur when perceivers were instructed to attempt to get along with their interaction partners (an affiliation goal).

Target Goals as Moderators of the Behavioral Confirmation Process

In addition to perceiver goals, target goals have been shown to moderate the behavioral confirmation process (Neuberg 1996). Specifically, goals that increase targets' tendencies to conform to perceivers' expectancies enhance behavioral confirmation, whereas goals that decrease targets' tendencies to conform to perceivers' expectancies attenuate behavioral confirmation. This section will review the manner in which targets' non-deference, knowledge, deference, and affiliation goals can affect the behavioral confirmation process.

Non-deference goals. Any target goal that facilitates resistance to perceivers' expectancies should attenuate behavioral confirmation (Snyder, 1992). For instance, Hilton and Darley (1985) have provided evidence that behavioral confirmation effects are less likely to occur when targets are aware of perceivers' erroneous expectancies, because targets resist going along with the expectancies. These researchers manipulated perceivers' expectancies by informing some perceivers that they would be interacting in the future with a "cold" individual and giving others no such information. Next, Hilton and Darley manipulated target awareness by informing targets in one condition that the perceivers were expecting them to be "cold"; in another condition, targets were given no indication of perceivers' expectancies. Of the four conditions, results showed that expectancy confirmation occurred only when perceivers were given a "cold" expectation of their targets and targets were unaware of perceivers' expectancies. When targets were aware of perceivers' "cold" expectancies, they were able to overcome them by engaging in expectancy-inconsistent behavior, particularly when perceivers actually possessed

“cold” expectancies regarding targets. The findings of this study are consistent with those of Stukas and Snyder (2002), who found that expectancy targets were more likely to engage in expectancy-disconfirming behavior when they were made aware of perceivers’ dispositionally-attributed, negative expectancies.

Knowledge goals. Research has shown that behavioral confirmation is less likely to occur when targets try to get to know perceivers better (Snyder, 1992). For example, Snyder and Haugen (1995) enlisted male perceivers in a “getting acquainted” telephone conversation with female targets believed to be either obese or of normal weight. While the targets were unaware of the expectancies perceivers had of them, they were instructed with either knowledge, affiliation, or no goals for their interactions with the perceivers. Results showed that when targets possessed knowledge goals and therefore tried to gain information about the perceivers’ personality characteristics, behavioral confirmation was attenuated; targets did not present themselves differently depending on whether perceivers thought that they were obese or of normal weight. On the other hand, targets tended to behave in a manner consistent with perceivers’ erroneous beliefs when targets were in the affiliation or no goal conditions.

Deference goals. Any target goal that facilitates concession to perceivers’ expectancies should enhance behavioral confirmation (Snyder, 1992). For example, research has found that behavioral confirmation is more likely to occur when targets are of lower status or have less power in comparison to the perceiver (Copeland, 1994). In such circumstances, targets may feel obliged to act in a manner consistent with perceiver expectancies, in order to remain in good favor with the high-power perceivers. Low-

power targets may be more likely to accept social rules of conversational discourse (Grice, 1975) and less likely to challenge the expectancies of the perceiver (Jones, 1986), as such challenges may cause them to lose favor with high-status perceivers (Neuberg, 1996).

Affiliation goals. Additionally, behavioral confirmation is more likely to occur when targets attempt to get perceivers to like them, or when targets are motivated to have smooth interactions with perceivers (Neuberg, 1996). As previously discussed, Snyder and Haugen (1995) enlisted male perceivers in a “getting acquainted” telephone conversation with female targets believed to be either obese or of normal weight. Targets were instructed to pursue either knowledge, affiliation, or no goals during their interactions with the perceivers. Results showed that when targets tried to get along well with their perceivers and have smooth interactions, behavioral confirmation was more likely to occur. More specifically, targets thought to be obese behaved in a relatively unresponsive and cold manner during their interactions, whereas targets thought to be of normal weight behaved in a more responsive and enthusiastic manner. These results imply that targets with affiliation goals concede to the interaction scripts of perceivers for the purpose of being liked or “getting along”. In such circumstances, behavioral confirmation may be particularly likely, regardless of whether perceivers’ expectancies are positive or negative.

Identity Negotiation: When Perceiver Expectancies and Target Goals Clash

In addition to the interaction goals described above, another important goal that targets may pursue during social interactions is the goal of maintaining and verifying

their self-concepts. In fact, the process of expectancy confirmation is less likely when perceivers' expectancies contradict a crucial aspect of targets' self-concepts. According to identity negotiation theory (Swann, 1987; Swann & Ely, 1984), targets may be particularly motivated to establish their own identities if they detect perceiver expectancies that strongly contradict their own identities. In such circumstances, targets will work to establish perceiver impressions that are consistent with the manner in which they see themselves. For example, a job applicant who believes that she is highly qualified may be particularly motivated to demonstrate her qualifications when she interacts with an interviewer who exhibits negative expectations.

Identity negotiation theory is based on the notion that targets' self-concepts affect the way targets perceive information, and that targets are motivated to protect those self-views. The self-concept is an organized set of beliefs about oneself that determines how individuals process self-relevant information and affects individuals' motives, emotions, self-evaluations, and abilities (Klein, Loftus, & Burton, 1989; Van Hook & Higgins, 1988). Furthermore, individuals work hard to protect their self-images from threatening information (Sedikides & Green, 2000; Swann, 1987), and attempt to maintain consistency with their self-concepts whenever possible (Tschanz & Rhodewalt, 2001).

Individuals actively seek out information that confirms their self-concepts (regardless of whether the information is positive or negative), and also exhibit better recall for information that is consistent with their self-concepts (Swann & Read, 1981b). Furthermore, individuals have a cognitively-based tendency to regard information that confirms their self-conceptions as more accurate and compelling than information that

contradicts their self-conceptions (Swann & Read, 1981a). Individuals may cling to their self-concepts, fight to protect them, and prefer information that is consistent with them because stable self-conceptions may provide individuals with a sense of security; stable self-concepts play an important role in organizing experience, predicting future events, and guiding behavior (Lecky, 1945; Secord & Backman, 1961), so individuals are likely to think and behave in ways that promote the survival of their self-conceptions for the purpose of maintaining their subjective social world (Swann, 1987).

If targets receive information from perceivers that is not consistent with their self-concepts, they may seek to elicit self-verifying feedback by utilizing appropriate interaction strategies (Swann, 1987; Swann & Ely, 1984). For instance, in Swann and Read's (1981b) Study 2, targets who perceived themselves as likeable or unlikable interacted with perceivers. Some targets were led to believe that their perceivers might not like them, other targets were led to believe that their perceivers might like them, and others were not informed at all of potential perceiver impressions. Overall, results showed that targets who perceived themselves as likeable elicited more favorable reactions from perceivers than did targets who perceived themselves as unlikable. Results also showed a distinct pattern of self-verification; targets who perceived themselves as likeable elicited the *most* favorable responses from perceivers when they were led to believe that the perceivers might not like them, whereas targets who perceived themselves as unlikable elicited the *least* favorable responses from perceivers when they were led to believe that the perceivers might *like* them. So, targets were particularly adept at eliciting feedback from perceivers that was consistent with their own

self-concepts when they believed that perceivers' impressions were not consistent with those self-views.

Swann and Hill (1982) obtained results that conceptually replicated the findings discussed above. These researchers measured targets' subjective ratings of dominance, and had them interact with a confederate in a game. Each person (i.e., confederate and target-participant) alternated between assuming a dominant (i.e., leader) role or a submissive (i.e., assistant) role. Next, the experimenter asked the target and confederate to decide who would like to be the leader for the next set of games. At that point, the confederate offered that the target seemed either dominant or submissive, and that the target should fulfill the corresponding role in future games. Results indicated identity negotiation processes at work. If the confederate's impressions of the targets fit the targets' self-conceptions, the targets accepted the roles assigned to them. However, if the confederate's impressions contradicted the targets' self-concepts, the targets made effortful attempts to behave in a manner not conducive to their assigned roles for the purpose of establishing identities more consistent with their own self-concepts.

An important moderator of behavioral confirmation and identity negotiation processes is the confidence with which targets believe their self-concepts to be accurate. Specifically, the more certainty targets feel regarding particular aspects of their self-concepts, the more diligently they will work to establish their identities when they believe that perceivers hold inaccurate perceptions about their characteristics (Swann & Ely, 1984; Swann, 1987). For example, Swann and Ely (1984) had perceivers interview targets who were either certain or uncertain of their levels of extraversion. The

perceivers themselves were always given expectancies about the targets that contradicted the targets' self-concepts; for example, a perceiver interviewing a target who was highly certain that he or she was extraverted was led to believe that the target was not very extraverted. Accordingly, perceivers asked targets expectancy-consistent questions. When targets were *not* very certain of their extraversion levels, they answered in ways that confirmed perceivers' expectations (i.e., behavioral confirmation), even though the perceivers' expectancies contradicted their own self-views. However, when targets *were* highly certain of their extraversion levels, they actively resisted going along with the perceivers' leading questions and attempted to shape the discussion in a manner consistent with their own self-views (i.e., identity negotiation).

The studies described above imply that whether identity negotiation or behavioral confirmation occurs depends on a) the extent to which a perceiver's (false) expectancies contradict some important aspect of a target's self-concept, and b) the certainty with which a target holds a particular aspect of his or her self-concept to be true. Behavioral confirmation is likely to occur when perceivers hold expectations about targets within domains that are irrelevant to the target, or when targets are uncertain of their domain-specific qualities. In contrast, identity negotiation is likely to occur when perceivers hold expectancies inconsistent with targets' self-identities, particularly when targets are highly self-certain of their domain-relevant characteristics.

The "Chameleon Effect": Nonconscious Behavioral Mimicry

The "chameleon effect" can be defined as nonconscious, unintentional mimicry of the mannerisms of an interaction partner (i.e., nonconscious behavioral mimicry;

Chartrand & Bargh, 1999). Such mimicry occurs for a variety of behaviors, including gestures, postures, idiosyncratic movements, facial expressions, and speech-related variables, such as accents and tone of voice (for reviews, see Chartrand & Bargh, 1999; Chartrand, Maddux, & Lakin, 2005; Lakin, Jefferis, Cheng, & Chartrand, 2003).

Of course, the “chameleon effect” is not the first psychological construct to address the impact that others have on our own behaviors. Indeed, the phenomenon of social contagion has a long history in psychology. Social contagion (also known as behavioral contagion) may be thought of as unintentional transmissions of emotions or behaviors from one person to another (Levy & Nail, 1993; Redl, 1949). As with the “chameleon effect”, social contagion is thought to be relatively nonconscious and automatic, and is to be distinguished from direct, intentional attempts to influence or parrot others (Polansky, Lippitt, & Redl, 1950).

Social contagion effects have been identified for behaviors such as binge eating (Crandall, 1988), laughter (Freedman & Perlick, 1979), coughing (Pennebaker, 1980), applause (Freedman, Birsky, & Cavoukian, 1980), and verbal aggression (deCharms & Wilkins, 1963; Wheeler & Caggiula, 1966). Additionally, social contagion may include the transference of emotions, including emotional expressions (e.g., smiles, frowns; Hatfield, Cacioppo, & Rapson, 1992) and mood (Neumann & Strack, 2000). Furthermore, the likelihood of such contagions flourishing has been shown to be affected by the number of others engaging in the particular behavior, and how close in proximity individuals are to one another (e.g., coughing; Pennebaker, 1980), as well as the

preponderance of behavioral models (Bandura, 1978) and individual frustration level (e.g., with regard to aggressive behavior; Wheeler, 1966).

While the processes of social contagion and nonconscious mimicry superficially share similar characteristics (e.g., their automatic nature and their emphasis on shared behaviors), they are unique constructs. From a historical standpoint, social contagion usually refers to shared behaviors or emotions within group or crowd contexts (Levy & Nail, 1993), whereas mimicry quite often focuses on dyadic interactions (e.g., Chartrand & Bargh, 1999). Additionally, social contagion includes the transference of emotion, whereas mimicry primarily focuses on imitated behavior. Finally, some consider mimicry to be a subset of social contagion, in that physical mimicry and imitative behavior might be the first step in the contagion process (Neumann & Strack, 2000).

While the exact nature of the difference between social contagion and nonconscious mimicry is worthy of further examination, the current research focuses on the process of nonconscious behavioral mimicry, and the circumstances in which it occurs. Before discussing the circumstances in which the “chameleon effect” occurs, however, it is important to discuss *why* it occurs.

Why Does the “Chameleon Effect” Occur?

One of the primary explanations for the occurrence of the “chameleon effect” is the perception-behavior link. The perception-behavior link can be thought of as the human tendency to act in the same way as we see others act (Dijksterhuis & Bargh, 2001). More specifically, the mere perception of a target’s behavior, traits, or relevant characteristics activates corresponding mental representations of those constructs within a

perceiver, causing the perceiver to engage in behaviors associated with those constructs. For instance, Bargh, Chen, and Burrows (1996; Experiment 1) primed participants with traits such as “rude” or “polite” to see if trait primes would have subsequent effects on participants’ behaviors. Results showed that participants primed with “rude” were more likely to later interrupt the experimenter’s conversation with another participant (i.e., confederate), while participants primed with “polite” were less likely to interrupt the experimenter’s conversation. In a similar vein, Bargh et al.’s (1996) Experiment 2 showed that mere perception of words can activate stereotypes of the groups with which those words are associated, and can lead perceivers to engage in behaviors associated with those stereotypes. More specifically, these researchers primed participants with stereotypes typically associated with the elderly (i.e., gray, Florida, bingo). Results showed that participants primed with these stereotypes walked significantly slower to the elevator than participants not exposed to the stereotypic primes. These studies show that mere perception of traits or stereotypes can activate one’s cognitive representation of those entities, causing one to behave in a corresponding manner.

One domain in which the perception-behavior link is relevant is in the mimicry of facial expressions. For example, Zajonc, Pietromonaco, and Bargh (1982) found that participants who tried to remember photographs that they were shown from a college yearbook spontaneously mimicked the facial expressions they viewed in each photograph. Similarly, Provine (1986) asked one group of participants to watch a five minute videotape of people yawning, and asked another group of participants to watch a five minute videotape of people smiling. Results showed that participants in the yawn

video condition yawned significantly more than did the participants in the smiling condition. Finally, Zajonc, Adelman, Murphy, and Niedenthal (1987) found that relationship partners tended to look more like each other the longer they were in the relationship. The results of this study imply that the frequent perception of one partner's facial expressions causes the other partner to exhibit those facial expressions as well, thereby facilitating enhanced facial similarity. In sum, these studies suggest that the mimicry of subtle facial expressions may occur via mere perception.

The perception-behavior link has also been established in a series of studies that show evidence for behavior matching. In a hallmark study conducted by Chartrand and Bargh (1999; Experiment 1), participants interacted with a confederate during a picture description task. Results showed that participants were significantly more likely to engage in foot shaking or face touching behaviors when their interaction partner (i.e., the confederate) initiated those particular behaviors. Furthermore, a funneled debriefing suggested that participants were not aware that they were engaging in behavioral mimicry. In sum, this study suggests that the perception-behavior link can cause people to engage in subtle behavioral mimicry, and that this effect can occur outside of perceiver awareness.

Another domain of research has shown that people are just as capable of mimicking speech-related behavior as they are of mimicking more subtle physical behavior. For example, Levelt and Kelter (1982) have found that perceivers engage in speech imitation of interaction partners for single words, phrases, and entire sentence formats. These speech imitation effects were found to be substantial when perceivers

were not under cognitive load, and cognitive load did not enhance perceivers' imitation behaviors. These results imply that the tendency to imitate speech is an automatic one that may be relatively unaffected by cognitive resources. Additionally, Neumann and Strack (2000) have found that perceivers are capable of imitating the tone of voice of their interaction partners. More specifically, participants were asked to listen to a speech given by an anonymous person, and they were asked to repeat parts of that person's speech out loud. Results showed that a speech prompt with a sad tone was likely to elicit a sad-toned response from the participants, whereas a happy-toned prompt was more likely to elicit a happy-toned response from the participants. In sum, these studies suggest that people perceive and mimic the speech patterns and tones of others (i.e., perception-behavior link), and may do so without awareness.

Of course, the "chameleon effect" may not occur due to the perception-behavior link alone. A second explanation for why we engage in nonconscious behavioral mimicry is that we are often interested in building affiliation or increasing rapport with our interaction partners. Recent reviews of the mimicry literature have concluded that nonconscious mimicry is an adaptive tendency that is associated with positive interpersonal outcomes (Chartrand, Cheng, & Jefferis, 2002; Lakin et al., 2003). It is thought to serve affiliative goals (Lakin & Chartrand, 2003) and to increase bonding between people.

For example, in Chartrand and Bargh's (1999) Experiment 2, confederate mimicry of participants' behaviors facilitated increased liking among both the participants and the confederates, and enhanced the smoothness of their interactions.

Additionally, Lakin and Chartrand (2003) provided evidence that having an affiliation goal increases one's tendency to engage in nonconscious mimicry, and that people are more likely to engage in nonconscious mimicry after failing to attain previous affiliation goals. Lastly, Cheng and Chartrand (2003; Experiment 1) found evidence that high self-monitors (who are chronically driven by affiliation motives) were particularly likely to mimic the mannerisms of in-group members (i.e., fellow Introductory Psychology students) rather than out-group members (i.e., graduate students), presumably because affiliation with peers may have more beneficial consequences in the future (e.g., due to the greater likelihood of future interaction). This research implies that mimicry may be a goal-driven behavior that is automatically engaged in when one's affiliation motive is strong.

So, if perceivers engage in mimicry for the purpose of enhancing affiliation, this implies that perceivers care about building rapport with their interaction partners. However, the question remains: Why are perceivers concerned with enhancing affiliation? There are both proximal and distal types of explanations for our desire to affiliate with others. One proximal explanation posits that we attempt to affiliate in order to enhance the likelihood of reaching a favorable outcome, to the extent that the outcome depends on our interaction partners (Cheng & Chartrand, 2003). Another proximal explanation is that we attempt to affiliate to satisfy our need to belong (Baumeister & Leary, 1995), which is our fundamental need to have quality relationships with others. Nonconscious mimicry therefore occurs because it increases the ability of perceivers to form or maintain lasting interpersonal bonds.

Additionally, there are more distal explanations for the motivation to affiliate. For example, evolutionary theory suggests that affiliation with others may be a necessary prerequisite for survival (Lakin, et al., 2003). In short, interpersonal affiliation increases the likelihood of survival. Throughout the history of humankind, it should have been fundamentally easier to defend oneself from predators and to provide food for oneself when one was affiliated with a social group. Isolation makes the acquisition of these fundamental needs (i.e., safety, food) less likely, thereby endangering one's survival (Lakin et al., 2003). So, affiliation enhances survival, and nonconscious behavioral mimicry may be evolutionarily advantageous to the extent that it enhances affiliation. Support for the evolutionary view of affiliation (and hence mimicry) is provided indirectly through research on animal mimicry. For example, birds (e.g., Nelson & Marler, 2005), dolphins (e.g., Rendell & Whitehead, 2001), and whales (e.g., Payne, 2000) have been observed to mimic songs within their respective social groups, elephants have been observed to imitate the vocal sounds of other elephants (e.g., Poole, Tyack, Stoeger-Horwath, & Watwood, 2005), and large groups of fish have been observed to swim in a unidirectional, synchronized fashion (e.g., Pitcher, 1979).

The "Dark Side" of Mimicry

Is it possible that nonconscious mimicry could lead to negative outcomes for those who mimic? Most recent studies have examined the nonconscious mimicry of neutral behaviors (e.g., foot shaking) and have done so within neutral contexts, such as situations in which interaction partners describe pictures to one another (e.g., Chartrand & Bargh 1999). However, we do not only experience positive or neutral interpersonal

behaviors from others; we may experience negative behaviors during social interactions as well, such as frowning facial expressions and unfriendly tones of voice. Furthermore, these negative behaviors may be exhibited by interaction partners with whom it is important to get along (e.g., supervisors), and may be encountered in consequential interactions (e.g., job interviews). Given the automatic, affiliative nature of behavioral mimicry, imitation might be particularly likely to occur whenever we are trying to create or maintain strong social ties with others – even when the behaviors in question are inherently negative in connotation. Unlike the imitation of neutral and positive behaviors, the mimicry of the negative behaviors of an interaction partner may have negative consequences.

Recent reviews imply that nonconscious mimicry would not occur under circumstances in which it would not be beneficial or adaptive for the mimicker (Chartrand et al., 2005; Lakin et al., 2003). Specifically, Dijksterhuis and Bargh (2001) have proposed and reviewed evidence for several theoretical conditions that make mimicry more likely to occur. Specifically, people should be less likely to mimic another person if they are self-focused, if they dislike their interaction partner, or if mimicry is costly in some tangible way. These conditions would seem to guard against the mimicry of obviously negative behaviors, which would be likely to engender dislike or to be linked with high costs.

However, there is other empirical evidence to suggest that the nonconscious process of mimicry could occur in the context of more negatively-toned interactions or behaviors. First of all, automatic processes in general may be applied to circumstances in

which they are not entirely adaptive or beneficial (e.g., stereotype activation; for a review, see Bargh, 1999). Furthermore, the perception-behavior link, which is thought to be the basis for nonconscious behavioral mimicry, has been shown to lead to negative behaviors. For example, individuals have been shown to engage in more hostile behavior when primed with hostility (e.g., Bargh et al., 1996; Cheng & Bargh, 1997), to behave more rudely when primed with rudeness (Bargh et al., 1996), to perform more poorly on memory tasks when primed with negative terms related to the elderly (e.g., “senile”; Levy, 1996), and to engage in less-intelligent behavior when primed with soccer hooligans or supermodels (Dijksterhuis & van Knippenberg, 1998; Dijksterhuis et al., 1998). The implication of these studies is that once negative constructs are activated, whether through priming or through the perception of a behavior, those activated constructs can lead to correspondingly negative behavior.

In addition, research within the mimicry literature itself is consistent with the notion that mimicry could occur in the context of negatively-toned interactions or behaviors. Mimicry can occur under artificial, contrived conditions where no interpersonal liking, rapport, or affiliation exists (for a review, see Chartrand et al., 2005). Chartrand and Bargh (1999) found that participants engaged in mimicry of neutral behaviors when confronted with an unfriendly, unsmiling interaction partner, just as they did with a friendly, smiling interaction partner. There also is a small amount of direct evidence that mimicry occurs for subtle negative behaviors. Specifically, individuals have been shown to mimic the sad tone of voice of another person (Neumann & Strack, 2000), to smile less with unsmiling interaction partners than with smiling interaction

partners (Chartrand & Bargh, 1999), and to mimic yawning (Provine, 1986), which may communicate boredom or disinterest.

Proposed Research

Previous research has not explicitly examined the relationship between nonconscious behavioral mimicry and behavioral confirmation. However, these research areas share commonalities. First, research methodology in both areas involves dyadic interactions in controlled settings to examine how the behavior of one person affects the behavior of an interaction partner. Additionally, both literatures have examined the influence of targets' affiliation goals, which have been shown to enhance both behavioral confirmation (for a review, see Neuberg, 1996) and nonconscious behavioral mimicry (Lakin & Chartrand, 2003). Ultimately, affiliation goals may enhance targets' general tendency to "go along with" both perceivers' specific behaviors and their broader interaction scripts. This idea of concession to the interaction script of a conversation partner may be the most basic link between expectancy effects and mimicry.

Furthermore, when examined closely, several studies appear to suggest that target mimicry can lead to behavioral confirmation. To demonstrate how previous studies indirectly suggest such a link, three commonly-cited studies on behavioral confirmation will be examined.

Snyder, Tanke, and Berscheid (1977) examined whether the stereotypes male perceivers have about attractiveness would lead them to elicit stereotype-consistent behavior from female targets during a phone conversation. The alleged attractiveness level of the female targets was manipulated by leading the male perceivers to believe (via

contrived photographs) that they were interacting with either a physically attractive or physically unattractive female. The female targets were not aware that the male perceivers possessed expectations regarding their appearances. Results indicated that females who were perceived by the males as “physically attractive” behaved in a significantly more friendly, sociable, and likeable manner than females perceived to be “physically unattractive.”

Ratings by objective observers indicated that when the males believed their female interaction partners to be “physically unattractive”, they exhibited manifestations of that bias through a relatively unenthusiastic, unresponsive, and detached interaction style. As a consequence, the possibility exists that the “unattractive” females may have detected those manifestations of bias, and may have mimicked that behavior by engaging in a similarly “unfriendly” interaction style. In other words, mimicry may have been responsible for the negative behaviors engaged in by the females in the “physically unattractive” condition. Likewise, mimicry of the male’s warm, responsive, and friendly interaction style (as rated by objective observers) may have been responsible for the positive behaviors engaged in by females in the “physically attractive” condition. However, the possibility that mimicry of the males’ interaction styles accounted for the expectancy-consistent behavior exhibited by the females cannot be directly addressed in this research, for Snyder et al. (1977) did not examine mimicry as a potential mediator of behavioral confirmation.

Chen and Bargh (1997) examined whether the automatic activation of African American stereotypes would produce behavioral confirmation effects. In their research

paradigm, pairs of White undergraduates engaged in a computerized visual task. For the participant designated as the perceiver, a photograph of either a young White or young Black male was presented subliminally to activate corresponding group stereotypes. Later, perceiver and target pairs interacted by playing a verbal game, and gave their impressions of each other after the game was complete. Results showed that perceivers who were subliminally primed with the photograph of the Black male elicited significantly more hostile behavior from their interaction partners than did perceivers primed with the photograph of the White male (as rated by objective observers). Additionally, the perceivers subliminally primed with the photograph of the Black male rated their interaction partners as being significantly more hostile than did those primed with the photograph of the White male.

Ratings by objective observers indicated that perceivers who were subliminally primed with the photograph of the Black male manifested their activated stereotype-based expectancies through more hostile behaviors toward their interaction partners, in comparison to those primed with the photograph of the White male. In turn, their interaction partners apparently reciprocated their hostile behavior by exhibiting hostile mannerisms themselves. More specifically, this research demonstrated that perceiver hostility and target hostility were positively correlated. Indirectly, these findings suggest the possibility that mimicry may have contributed to the hostile behaviors targets were exhibiting during their interactions. However, because Chen and Bargh (1997) did not manipulate perceiver behavior, they did not show for certain that perceiver hostility preceded and facilitated target hostility in every case, nor did they show that targets were

mimicking the exact behaviors of perceivers (mimicry was not directly assessed).

However, it certainly seems possible that targets' nonconscious behavioral mimicry of perceivers' hostile behaviors may have been responsible for behavioral confirmation in this circumstance, as targets' may have felt an obligation to concede to the perceivers' hostile scripts.

Word, Zanna, and Cooper's (1974) hallmark study examined the self-confirming nature of racial stereotypes. These researchers utilized a simulated interview paradigm. In Experiment 1, White interviewers interacted with both White and Black applicants. When interviewing Black applicants, the White interviewers sat further away from them, ended the interviews sooner, and committed significantly more speech errors than they did when talking to the White applicants. In other words, the White interviewers engaged in significantly more negative manifestations of bias when talking with the Black applicants than with the White applicants. Not surprisingly, the Black applicants were rated as performing worse during the interview than the White applicants.

In Experiment 2, White interviewers were trained to treat White applicants as if they were either White or Black. In the "treat-as-White" condition, interviewers were trained to treat the White applicants by sitting fairly close to them, speaking clearly, and extending the interview. However, in the "treat-as-Black" condition, interviewers were trained to sit farther away from the White applicants, to stammer and stutter frequently, and to cut the interview short. Results showed that the White applicants who were treated as the Black applicants were in Experiment 1 performed significantly worse in their interviews than the White applicants who were treated as the White applicants were

in Experiment 1. These applicants may have performed poorly, in part, because they engaged in mimicry of their interviewers' behaviors. Indeed, Word et al. (1974) found that applicants in the "treat-as-Black" condition exhibited marginally more speech errors and placed their chairs farther away from their interviewers when asked to switch chairs midway through the interview.

These studies (particularly Experiment 1) make it very clear that when perceivers have negative expectations, they may transmit those expectations to targets via behavioral mannerisms (e.g., stammering, increasing physical distance). Furthermore, these expressions of negative bias may somehow constrain targets to perform poorly. It is possible that applicants in the "treat-as-Black" condition (Experiment 2) performed poorly during the interviews because they engaged in behavioral mimicry of their interviewers, thereby stammering more than did the applicants in the "treat-as-White" condition. This is an intriguing possibility, given that applicants in the "treat-as-Black" condition should have been motivated to make a positive impression and get the interviewer to like them, and may have engaged in nonconscious mimicry for the implicit purpose of building rapport. However, it is important to point out that Word et al. (1974) did not measure applicant mimicry. So, there is no way to know from their study whether applicants' poor performances in the "Black" and "treat-as-Black" conditions were partially accounted for by direct behavioral mimicry of the interviewers' speech errors, or were solely accounted for by their actual failure to demonstrate qualifications for the job.

For example, the possibility exists that applicant performance decreased along with enhanced stammering because stammering actually impaired and limited applicants'

ability to portray themselves well in their responses to the interviewers' questions. Also, the possibility exists that the treat-as-White and treat-as-Black participants in Experiment 2 were actually similar in terms of their objective display of their qualifications, but they were *perceived* differently by the judges due solely to their stammering (i.e., mimicry).

It is crucial to note that mimicking another's behavior does not necessarily represent the same process as going along with another's interaction/expectancy script, and mimicry is not the only way to enhance liking and comfort between interaction partners. Rather, research suggests that mimicry might simply be one of myriad ways in which a person could go along with another's interaction/ expectancy script. For example, Tiedens and Fragale (2003) found evidence across two experiments for a process they termed "postural complementarity", when an individual displayed either dominant or submissive behavior within the context of an interpersonal interaction. More specifically, these researchers paired participants together with a confederate during a picture-description task. These experimenters then manipulated the postural dominance/submissiveness of the confederates. In one condition, the confederates engaged in postural expansion (i.e., dominance; the confederates extended their limbs far away from their torsos). In another condition, confederates engaged in postural constriction (i.e., submissiveness; they moved their limbs as close to their torsos as possible). Across both experiments, participants interacting with confederates engaging in postural expansion tended to constrict their own postures, and participants interacting with confederates engaging in postural constriction tended to exhibit postural expansion (i.e., postural complementarity). Additionally, postural complementarity was associated

with higher levels of interpersonal liking and comfort in both experiments, in comparison to behavior-matching (i.e., mimicry) between participants and confederates.

Research Questions

The primary aim of the current research was to examine the relationship between nonconscious mimicry and behavioral confirmation. Mimicry and expectancy effects are expected to co-occur within social interactions, particularly in contexts where an affiliative motive is likely to be strong, thus supporting the notion that both processes reflect a general target concession to perceivers' interaction scripts. The extent to which expectancy-targets mimic neutral behaviors is expected to moderate the effects of manifestations of perceivers' expectations (e.g., positive or negative questions) on targets' performance, with greater target mimicry being associated with greater expectancy-consistent effects on performance. It is imperative to point out that mimicked behavior need not directly affect interpersonal outcome in order for nonconscious behavioral mimicry and expectancy effects to be related or associated. For example, target imitation of perceiver foot shaking during an interaction may not directly impact the quality or content of the interaction at all. In such a circumstance, target mimicry of foot shaking may serve as a "bellwether" behavior by epitomizing the general process of a target going along with a perceiver's general (e.g., positive) interaction script, even though the foot shaking behavior should not directly impact the content of the interaction *per se*.

Furthermore, mimicry should directly affect performance when the behavior being mimicked is inherently positive or negative. For example, a perceiver with positive

expectancies may use a warm tone of voice, smile, or speak fluently (indicative of comfort), while a perceiver with negative expectancies may use a cold tone of voice, frown, or exhibit speech errors (indicative of discomfort). In their attempt to affiliate with perceivers, targets may nonconsciously mimic these subtle behaviors. If so, the mimicked behaviors may affect targets' overall performance, and facilitate the confirmation of perceiver's expectancies. Thus, nonconscious behavioral mimicry is expected to mediate the relationship between perceivers' expectancy-colored behaviors and targets' expectancy-consistent performance.

Thus, another aim of the current research was to determine whether inherently negative interpersonal behaviors (e.g., stammering) can be mimicked, and whether the process of nonconscious behavioral mimicry of negative behaviors is associated with negative interpersonal outcomes. Most research within the mimicry literature has shown that mimicry is associated with positive outcomes for interaction partners, including enhanced affiliation and liking (e.g., Chartrand & Bargh, 1999). However, research on behavioral confirmation has shown that perceivers with negative expectancies about their targets may exhibit subtle negative behaviors during their interactions (e.g., Word, Zanna, & Cooper, 1974), and that these subtle manifestations of negative bias may be extremely difficult for perceivers to control (Jones, 1977). There is no evidence that mimicry is limited to the imitation of positive social behaviors. Hypothetically, if a target wants to get along with a perceiver who is exhibiting negative behaviors due to negative expectations, their increased tendency to engage in mimicry of the perceivers' behavior could potentially have deleterious consequences.

Evidence for the nonconscious mimicry of negative behaviors within social interactions would mandate a reevaluation of existing theory regarding the adaptive and beneficial nature of nonconscious mimicry. Importantly, this evidence also could prompt the study of nonconscious mimicry as a process underlying not only harmonious interactions, but also detrimental interaction patterns. For example, nonconscious mimicry could help to explain conflict patterns within close relationships, as well as the escalation of aggressive behavior between individuals.

It is important to note that the aims of the current research focused on potential processes that may occur between steps two and three of the behavioral confirmation process. More specifically, the focus was on the manner in which the perceiver's expectancy-congruent behaviors actually translate into an expectancy-confirming overall outcome by the target. In the current research, confederate perceivers were trained to act as if they had negative or positive expectancies. So, step two, in which the perceiver treats the target in a manner that is consistent with the perceiver's expectations, was a given. The specific conceptual questions involved the process through which targets come to assimilate their behaviors to perceivers' expectancy cues (i.e., step three of behavioral confirmation process), the conditions under which this occurs, and whether mimicry is an important part of this process.

Brief Overview of Current Studies

Two studies were conducted to address the aforementioned theoretical aims. Both studies utilized a simulated interview paradigm similar to that employed in previous research (e.g., Neuberg, 1989; Reich, 2004). In each study, participants served as

applicants interviewing for a hypothetical job. In Study 1, expectancy valance was manipulated, as confederate-interviewers asked participant-applicants either positively- or negatively-focused questions. In Study 2, interviewer speech was manipulated (stammering vs. non-stammering), such that interviewers either stammered (inherently negative behavior) or spoke clearly during their interview with applicants. Furthermore, in Study 2, interviewers asked negatively-focused questions in all interview sessions. In both Studies 1 and 2, the interviewers also engaged in the neutral physical behavior of foot shaking throughout their interview sessions. Because applicants engaged in the interview with the incentive of a possible monetary reward, it is assumed that all applicants were motivated to make a positive impression (i.e., strong affiliation context). In both studies, applicants were videotaped during the interview, and their levels of mimicry and the quality of their performance subsequently were objectively coded.

APPENDIX B

Experimenter Script for Study 1

Experimenter Script – Simulated Interview, Study 1

“Thank you for coming in today. I’m Mario, and I’ll be running the first part of the experiment. The study you are participating in today is investigating different aspects of the interview process. More specifically, we’re interested in the way that people act during face-to-face interviews. You have been assigned to be the applicant in this simulated interview situation. First, you’ll complete a brief questionnaire. Then, you will have time to prepare. Next, you’ll talk with a research assistant who will serve as the interviewer. Finally, you’ll complete a brief questionnaire packet. The whole procedure should take about 45 minutes, and you will receive 1 experimental credit for your participation. Do you have any questions before we begin?”

“OK, if the procedure sounds alright to you, I’ll need to get your consent or agreement to be in this experiment. This form basically says that:

- you give your consent to be in the study
- you understand that Dr. Reich is responsible for the study
- we have explained the purpose and procedures of the study to you and answered any questions you might have
- you know that the study takes about 1 hour
- all of your data will be kept strictly confidential
- if you have concerns about the study, there are people on campus you can contact

- you can quit the study at any time
- Give participant consent form to sign. “Thank you.”

“OK. The first thing I’d like to ask you to do is complete this brief questionnaire (give applicant “pre-interview questionnaire”). Please respond to the questionnaire by circling the number that corresponds with your answer. Please do not write your name on the survey. Please take a few minutes to answer these questions. You can go ahead and get started. If you have any questions, or if you’ve finished, go ahead and let me know.”

WHEN APPLICANT IS FINISHED: “OK. I’ll go ahead and take that, thank you. I’m going to give this survey to the interviewer. I’ll be back very shortly.”

STEP OUT OF THE ROOM FOR A MINUTE OR SO.

UPON RETURN TO ROOM: “OK, thank you very much. As I mentioned earlier, today we’ll be asking you to be an applicant in a simulated interview situation. At this point, I’d like to tell you a little bit about the procedure.”

“You and some of the other applicants in this study will be interviewed for a job as the Customer Service Coordinator for a student travel agency. In order to increase the realism and impact of this interview situation, the applicant who does the best in the interviews will receive \$50 as a substitute for getting the job. This should provide you

with an extra incentive to perform well in the interview. Like most interview situations, your performance will be compared to the performances of other applicants who interviewed for this job to determine which of you receives the \$50 at the end of the semester.”

“Here is a profile of the company and the job that you will be interviewing for. Please take some time now to prepare for the interview. Also keep in mind that during the interview, you certainly should feel free not to answer any question if you do not feel comfortable answering. Do you have any questions?”

Give applicant company profile.

“OK, please take 10 minutes to prepare for the interview, and then we’ll proceed to the next stage of the experiment.”

When 10 minutes is up...

“OK, at this point, I would like to give you some information about the interview procedure. Please read this carefully, and let me know when you have finished reading it.”

GIVE APPLICANT INTERVIEW DESCRIPTION SHEET

WHEN APPLICANT IS FINISHED:

“Before I get the interviewer so that you can begin your interview, there are a few final items that I’d like to go over with you. As you can see, there is a video camera set up in this interview room. If possible, I was wondering if it would be ok if we taped your interview. Taping the interview provides more data for making the final “hiring” decision. The tape will be kept confidential and will not be seen by anyone other than Dr. Reich, myself and our research assistants. Is it ok if your interview session is taped?”

(If Yes) “Thank you.” (If No) “OK. Thanks anyway for coming in. Since our main hypotheses must be tested from data on the videotape, we will not continue further. However, you will get credit for the time you’ve spent in the study (.5 credits). Thank you very much for coming in today. ”

(If Yes) “OK, in just a few minutes you’ll begin the interview, and the interviewer will ask you a series of questions that pertain to the Customer Service Coordinator position. The interviewer will ask you questions based on your responses to the survey that you completed when you first began the experiment. I just wanted to remind you that you should feel free not to answer any question if you do not feel comfortable doing so, and that you may quit this interview session at any time without penalty.”

“I also wanted to tell you that you’ll be asked to complete a VERY brief questionnaire packet after the interview is complete. Do you have any questions at this point?”

“OK, I’ll go get the interviewer so that you can begin your interview.”

AFTER INTERVIEW:

“Hi. OK, at this point, I’d like to ask you to complete this brief questionnaire packet.”

Give Questionnaire Packet to Applicant

“If you have any questions about the packet, please feel free to let me know. When you’re finished with the packet, you can simply let me know that you’re done and we’ll move on to the last stage of the experiment.”

WHEN PARTICIPANT IS FINISHED WITH PACKET, COLLECT IT AND MOVE ON TO DEBRIEFING SCRIPT.”

APPENDIX C

Consent Form for Study 1

**Consent Form – Simulated Interview, Study 1
Consent to Participate**

We are asking you to participate in a study called **SIMULATED INTERVIEW**.

Here is what you need to understand about the study:

1) The person in charge of this project is Dr. Darcy Reich (806-742-3711 x237). She works in the Department of Psychology at TTU. You can contact her if you have questions about the research.

2) You'll be asked to prepare for and engage in a face-to-face interview with a research assistant. You will also be asked to complete several brief questionnaires. The purpose of this study is to examine the way people interact during an interview.

3) Your participation is appreciated. You will get experiment credit for your Psychology course (PSY 1300). You should also learn about the research.

4) The study should take about 45 minutes to complete. You will get 1 experiment credit. No one but Dr. Reich and her assistants will see your data. They will be kept in a locked research lab at TTU. Your data will be recorded without your name. So, your names will not be associated with your data in any way.

5) Doing this study is completely up to you. You won't lose anything if you don't do it. You can quit anytime. You will still get experiment credit for the time you put in. You do not give up any legal rights by signing this form.

6) Dr. Reich or one of the experimenters will answer any questions you have about the study. For questions about your rights as a subject or about injuries caused by this research, contact the Texas Tech University Institutional Review Board for the Protection of Human Subjects, Office of Research Services, Texas Tech University, Lubbock, Texas 79409. Or you can call (806) 742-3884.

You certify that you are (please check one):

_____ 18 years of age or older

_____ under age 18 and presented the appropriate Parental Consent form to the experimenter.

_____ (initials of experimenter, verifying inspection of appropriate Parental Consent form).

I agree to participate in this research. I have read this form. Any questions have been answered.

Signature of Subject

Printed Name

Date

APPENDIX D

Pre-Interview Questionnaire for Study 1

**Pre-Interview Questionnaire –
Simulated Interview, Study 1**

Please answer the following questions by circling the appropriate number on the survey below.

1.) How old are you?

0) 22 or younger

1) Older than 22

2.) What is your current class standing at TTU?

0) Freshman

1) Sophomore

2) Junior

3) Senior

4) Other

3.) Which type of class have you performed the best in during high school and college?

Please select only one.

0) Liberal Arts (Examples - History, English, Philosophy)

1) Fine Arts (Examples - Painting, Theater, Design)

2) Behavioral Sciences (Examples – Psychology, Sociology)

3) Natural Sciences (Examples – Biology, Chemistry, Physiology)

4) Foreign Language (Examples – French, Spanish, German)

5) Computer Sciences (Example – Computer Programming)

6) Mathematics (Examples – Statistics, Calculus, Trigonometry)

4.) Which type of class have you most enjoyed during high school and college? Please select only one.

0) Liberal Arts (Examples - History, English, Philosophy)

1) Fine Arts (Examples - Painting, Theater, Design)

2) Behavioral Sciences (Examples – Psychology, Sociology)

3) Natural Sciences (Examples – Biology, Chemistry, Physiology)

4) Foreign Language (Examples – French, Spanish, German)

5) Computer Sciences (Example – Computer Programming)

6) Mathematics (Examples – Statistics, Calculus, Trigonometry)

5.) Which type of class have you performed the worst in during high school and college? Please select only one.

0) Liberal Arts (Examples - History, English, Philosophy)

1) Fine Arts (Examples - Painting, Theater, Design)

2) Behavioral Sciences (Examples – Psychology, Sociology)

3) Natural Sciences (Examples – Biology, Chemistry, Physiology)

4) Foreign Language (Examples – French, Spanish, German)

5) Computer Sciences (Example – Computer Programming)

6) Mathematics (Examples – Statistics, Calculus, Trigonometry)

6.) Which type of class have you least enjoyed during high school and college? Please select only one.

0) Liberal Arts (Examples - History, English, Philosophy)

1) Fine Arts (Examples - Painting, Theater, Design)

2) Behavioral Sciences (Examples – Psychology, Sociology)

3) Natural Sciences (Examples – Biology, Chemistry, Physiology)

4) Foreign Language (Examples – French, Spanish, German)

5) Computer Sciences (Example – Computer Programming)

6) Mathematics (Examples – Statistics, Calculus, Trigonometry)

7.) Which of the following do you consider to be your greatest strength? Please select only one.

0) Interpersonal skills / Communication skills

1) Motivation / Willingness to work hard

2) Intelligence / Common sense

3) Leadership skills

4) Sense of humor

8.) Which of the following do you most need to work on? Please select only one.

0) Interpersonal skills / Communication skills

1) Motivation / Willingness to work hard

2) Intelligence / Common sense

3) Leadership skills

4) Sense of humor

9.) Which personality type best describes you?

0) Outgoing, talkative

1) Quiet, reserved

10.) Which personality type best describes you?

0) Anxious, nervous

1) Calm, relaxed

11.) Which personality type best describes you?

0) Open to new experiences

1) Conservative, prefer consistency

12.) Which personality type best describes you?

0) Sociable, get along well with others

1) Reflective, like to do my own thing

13.) Which of the following personality characteristics would you most like to have or improve on?

- 0) Outgoing, talkative
- 1) Calm, relaxed
- 2) Open to new experiences
- 3) Sociable, get along well with others
- 4) Concerned about the welfare of others and/or your environment

APPENDIX E

Description of Hypothetical Job for Study 1

**Description of Hypothetical Job –
Simulated Interview, Study 1**

Student Travel, Inc.

Student Travel, Inc. is a national travel agency that specializes in providing students with travel packages over spring, fall, and winter breaks, as well as during the summer months. These packages typically consist of transportation and accommodations for periods ranging from 4-5 days to six-week trips during summer vacation. Student Travel offers vacations to the beaches of Florida, Mexico, and the Caribbean; ski trips to the mountains of Colorado, Utah, California, Switzerland, and Austria; and more extended travel opportunities to Western Europe, the Middle East, and the Orient. The prices of these trips are kept low by booking large numbers of students and by utilizing charter transportation services and relatively inexpensive housing accommodations, although more expensive trips are also offered. Most of Student Travel's income comes from the less expensive of its trips.

Student Travel has its headquarters in Fort Lauderdale, Florida, as well as small "branch offices" at over 60 colleges and universities in the U. S. and Canada. The branch offices are run by students at the colleges under the supervision and guidance of managers from the main office. Each branch office is headed by a student manager who oversees a student staff that ranges in size from one other employee at small schools to 5 other employees at larger schools. Most of the vacation packages originate from the main office, in which case the role of the branch office is promotion, sales, and some logistics. Other packages, however, are created by the branch office specifically to

accommodate the needs of its own students. In these cases, most of the work originates from the branch office with only minimal support from the main office. In recent years, these specialized trips have accounted for approximately 20% of the total business.

JOB DESCRIPTION: SERVICE COORDINATOR

Student Travel has decided to expand its operations to Texas Tech University, and thus, needs to hire a Service Coordinator. The new student coordinator will be responsible for selecting and supervising three assistants, handling customers in all aspects of service (complaints, etc.), and maintaining relations with the main office. Since the Service Coordinator will be starting largely from scratch, he or she will have to hire and supervise a group of student employees, and will also be largely responsible for promotion of travel packages and maintaining customer satisfaction. The job requires maintaining staff morale, and working very closely with superiors as the office becomes established.

APPENDIX F

Supplemental Interview Description for Study 1

**Supplemental Interview Description –
Simulated Interview, Study 1**

Hello, and welcome to the simulated interview study!

You and some of the other applicants in this study will be interviewed for a job as the Customer Service Coordinator for a student travel agency. In order to increase the realism and impact of this interview situation, the applicant who does the best in the interviews will receive \$50 as a substitute for getting the job. This should provide you with an extra incentive to perform well in the interview.

You will be talking with an interviewer who will have the sole power to decide which applicant has performed the best. So, this interviewer ultimately determines who will win the \$50 prize at the end of the semester.

Thank you for your participation, and good luck in the interview.

APPENDIX G

Interviewer Materials for Study 1

Interviewer Script – Simulated Interview, Study 1

“Hi, and thanks for coming in! My name is {name}, and I’ll be interviewing you today. Please have a seat.”

“Are you ready to begin? OK.... let me go turn on the video camera...and we’ll get started.”

IN “POSITIVE EXPECTANCY” CONDITION: TURN ON CAMERA, SAY INTO CAMERA: “THIS IS APPLICANT NUMBER: INSERT PARTICIPANT NUMBER HERE”, FILL IN “TIME STARTED” ON RUN SHEET, RETURN TO SEAT, AND ASK QUESTIONS FROM “PE” SCRIPT. (SPEAK CLEARLY AND PRECISELY! REMEMBER TO SHAKE FOOT THROUGHOUT INTERVIEW!)

IN “NEGATIVE EXPECTANCY” CONDITION: TURN ON CAMERA, SAY INTO CAMERA: “THIS IS APPLICANT NUMBER: INSERT PARTICIPANT NUMBER HERE”, FILL IN “TIME STARTED” ON RUN SHEET, RETURN TO SEAT, AND ASK QUESTIONS FROM “NE” SCRIPT. (SPEAK CLEARLY AND PRECISELY! REMEMBER TO SHAKE FOOT THROUGHOUT INTERVIEW!)

IN ALL CONDITIONS (When interview is over):

STOP RECORDING, FILL OUT “TIME ENDED”/COMMENTS ON RUN SHEET,
THEN SAY:

“Well, again thank you very much for coming in today and talking with me about the job.
I’ll go get the experimenter so that you can move on to the next stage of the experiment.”

**Scripted Interviewer Questions - Negative Expectancy
Condition – Simulated Interview, Study 1**

- 1) OK, so you're interviewing for the service coordinator position, right? (neutral, repeat)

- 2) Now, have you ever been fired from a job? (negative, closed)

- 3) Would you say that your ability to communicate with others is something that you need to work on? (negative, closed)

- 4) OK. Discuss an instance in which you had a job that you didn't really feel qualified for. Why didn't you feel qualified? (negative)

- 5) Discuss some experiences you've had where you haven't gotten along well with your co-workers. Why do you think you didn't get along? (negative)

- 6) What skills and characteristics do you think you have that would make you well-qualified for this job? (positive)

- 7) OK. Describe your most recent job and how you think it might require similar or different skills compared to the service coordinator position. (neutral)

8) Discuss the most recent course where you didn't do as well as you could have. Why did this happen? (negative)

9) OK. Now, discuss a course where you actually did well, and tell me why you think you succeeded? (positive)

10) Describe the ways that taking this job would cut into your other activities or interests. (negative)

11) How would you assess your ability to organize and prioritize job-related tasks? (neutral)

**Scripted Interviewer Questions - Positive Expectancy
Condition - Simulated Interview, Study 1**

- 1) OK, so you're interviewing for the service coordinator position, right? (neutral, repeat)

- 2) Now, have you ever been promoted to the next level in a job? (positive, closed)

- 3) Would you say that your ability to communicate with others is one of your strengths?
(positive, closed)

- 4) OK. Discuss an instance in which you had a job that you felt especially qualified for.
Why did you feel qualified? (positive)

- 5) Discuss some experiences you've had where you've gotten along well with your co-workers. Why do you think you got along so well? (positive)

- 6) Are there any things in your life that might make it difficult for you to perform this job at a high level? (negative, closed)

- 7) OK. Describe your most recent job and how you think it might require similar or different skills compared to the service coordinator position. (neutral)

8) Discuss the most recent course where you did as well as you possibly could have.

Why did this happen? (positive)

9) OK. Now, discuss a course where you didn't do very well, and tell me why you think you underachieved? (negative)

10) Describe the ways that taking this job would enhance your college experience.
(positive)

11) How would you assess your ability to organize and prioritize job-related tasks?
(neutral)

APPENDIX H

Applicant Questionnaires for Study 1

**Demographic Information –
Simulated Interview, Study 1**

Brief Questionnaire Packet

Thank you for participating in our study! We couldn't do this research without helpful people like you. Please begin by carefully filling out the information below.

Age: _____

Ethnicity:

_____ African American

_____ American Indian, Alaskan Native

_____ Asian American

_____ Caucasian American, Non-Hispanic

_____ Hispanic American, Mexican American

_____ Other

Relationship Status:

_____ Single

_____ Dating

_____ Cohabiting

_____ Married/Partnered

_____ Separated

_____ Divorced

_____ Widowed

_____ Other

Year in College:

_____ Freshman

_____ Sophomore

_____ Junior

_____ Senior

_____ Other

**Applicant Affiliation Index –
Simulated Interview, Study 1**

Please answer the following questions, as they relate to your interview experience.

1.) To what extent were you trying to get along with the interviewer?

1 2 3 4 5

Not at all

Very much

2.) To what extent were you attempting to have a smooth interaction with the interviewer?

1 2 3 4 5

Not at all

Very much

3.) To what extent were you trying to get the interviewer to like you?

1 2 3 4 5

Not at all

Very much

APPENDIX I

Debriefing Materials for Study 1

Debriefing Script – Simulated Interview, Study 1

1.) **Funnel Debriefing** - Begin with general questions: So, how did the interview go? Do you feel OK about it? (Make sure the participant is not upset by the interview). Once participant is ok, move on to more specific questions about the study, and note participant's response:

a) Are you wondering anything about this experiment, or do you have any questions about it?

b) What did you think this experiment was about?

c) Did any part of this experiment seem strange to you, or were you suspicious of anything?

d) Did anything about the interviewer's behavior seem strange to you?

e) If yes, how?

2.) Give the participants the debriefing sheet, and state the following: "First of all, thanks for participating! We really appreciate you taking the time to be in our study. Since we'll be running this experiment until the end of the semester, we would greatly appreciate it if you would not tell others about it. If people come into this experiment knowing what they will be doing and what we are looking for, it can affect how they respond, even if they don't mean for it to. Thanks for your help in keeping things confidential – we really appreciate it!"

We are studying the relationship between nonconscious behavioral mimicry (imitation) and the self-fulfilling prophecy. Previous research shows that people can sometimes imitate the physical behaviors or mannerisms of other people without even being aware that they're doing so. People have also been shown to be particularly likely to imitate the behaviors of others when they are trying to get others to like them (in other words, to build affiliation). Now, research on the self-fulfilling prophecy has shown that when we have expectations about other people, we may treat them in ways that actually cause them to behave consistently with our expectations. However, this doesn't always happen: Sometimes, people that we have expectations for go out of their way to act in ways that contradict our expectancies; particularly if they feel our expectancies are inaccurate.

So, we placed you in an interview situation, where presumably everyone would want to get along with an interviewer in order to win \$50. However, we trained our interviewer to treat you in either a positive negative way. More specifically, we trained her to ask you either positively – or negatively-focused questions, and trained her to engage in subtle physical behavior. We are interested in seeing whether or not you engaged in those subtle behaviors too, and how doing so (or not) impacted you performance in the interview.

As you know, we videotaped the interview. We do this because we are interested in measuring the number of times that you engaged in the same behavior that the interviewer was engaging in. Once we finish collecting data, we will use participants' expectancy condition to see if it causes differences in how much participants imitate the interviewer, and how well participants' do in the interviews overall. This research will provide us with evidence of a relationship between mimicry (imitation), and the self-fulfilling prophecy, if such a relationship does indeed exist. Do you have any questions at all?"

3.) "Now, as you were informed of earlier in the study, one of the applicants will indeed get \$50 toward the end of the semester. But, the choice will actually be based on a lottery, instead of on any evaluations of your performance. It would be difficult to come up with specific criteria to compare the applicants, because different evaluators might use different standards for assessing applicants' performance. Therefore, we felt that a lottery procedure would be the most fair to all the applicants involved. We will hold the applicant lottery at the end of the semester, and the winner will be contacted, and will receive \$50."

4.) "There is one last thing I need to tell you about this experiment. Of course, the interview was videotaped. The reason that we do this is so that we can go back and code the interview for things like imitation behavior, how you responded to the interviewer's

questions, etc. I was wondering if you would be willing to give your consent for us to use your interview tape for research purposes. Giving your consent is completely voluntary, and we will erase the tape immediately if you do not want us to keep it. If you do agree to allow us to keep the videotape, there will be no identifying information written on the videotape, it will be kept confidential and in a secure place, and we will erase it 5 years after a report of the research is published, which is the required length of time that psychology researchers must keep data that are reported in psychology journals. The only people who will see the tape are people involved in this research project; that is, Dr. Darcy Reich, myself, and two or three research assistant coders. The research assistants who code the videotapes will be upper level psychology undergraduates who are taking an independent study research course in our lab; they will only LISTEN to the tapes. They will not actually see who is talking and will not have access to identifying information. Would you be willing to give your consent for us to keep the videotape?" (If "yes", have participants sign video tape consent form).

5.) Thank participant and collect debriefing form.

Debriefing – Simulated Interview, Study 1

Thanks for participating! We really appreciate you taking the time to be in our study. Since we'll be running this experiment until the end of the semester, we would greatly appreciate it if you would not tell others about it. If people come into this experiment knowing what they will be doing and what we are looking for, it can affect how they respond, even if they don't mean for it to. Thanks for your help in keeping things confidential – we really appreciate it!

We are studying the relationship between nonconscious behavioral mimicry (imitation) and the self-fulfilling prophecy. Previous research shows that people can sometimes imitate the physical behaviors or mannerisms of other people without even being aware that they're doing so. People have also been shown to be particularly likely to imitate the behaviors of others when they are trying to get others to like them (in other words, to build affiliation). Now, research on the self-fulfilling prophecy has shown that when we have expectations about other people, we may treat them in ways that actually cause them to behave consistently with our expectations. However, this doesn't always happen: Sometimes, people that we have expectations for go out of their way to act in ways that contradict our expectancies; particularly if they feel our expectancies are inaccurate.

So, we placed you in an interview situation, where presumably everyone would want to get along with an interviewer in order to win \$50. However, we trained our interviewer

to treat you in either a positive or negative way. More specifically, we trained her to ask you either positively or negatively-focused questions, and we trained her to engage in a subtle physical behavior. We are interested in seeing whether or not you engaged in that subtle behavior too, and how doing so (or not) impacted your performance in the interview.

As you know, we videotaped the interview. We do this because we are interested in measuring the number of times that you engaged in the same behavior that the interviewer was engaging in. Once we finish collecting data, we will use participants' expectancy condition (positive vs. negative) to see if it causes differences in how much participants imitate the interviewer, and how well participants' do in the interviews overall. This research will provide us with evidence of a relationship between mimicry (imitation) and the self-fulfilling prophecy, if such a relationship does indeed exist.

If you have any questions, please ask the experimenter before you leave. Again, thank you for your help!

APPENDIX J

Videotape Consent Form for Study 1

**Consent Form for Videotape –
Simulated Interview, Study 1**

I agree to let the researchers, Dr. Darcy Reich and Mario Casa de Calvo, keep the videotape of my interview for research purposes. I understand that the recording will be kept confidential and in a secure place, my name and identifying information will not be linked to it, and it will be destroyed five years after the research report is published, which is the required length of time that psychology researchers must keep data that are reported in psychology journals. I understand that I will receive credit for participating in this study even if I do not give my consent to use of the videotape.

Signature of Participant

APPENDIX K

Applicant Evaluation Form for Study 1

**Observers' Applicant Evaluation Form –
Simulated Interview, Study 1**

Please rate the applicant on the following dimensions. Circle the number that best represents your evaluation of the applicant on each dimension.

1. Overall, how well did the applicant perform in the interview?

1 2 3 4 5 6 7 8 9

Very poorly

Very well

2. How qualified is this applicant for the job?

1 2 3 4 5 6 7 8 9

Not at all qualified

Very qualified

3. How likely would you be to hire this applicant?

1 2 3 4 5 6 7 8 9

Not at all likely

Very likely

4. What is your overall evaluation of this applicant as a candidate for the job at Student Travel, Inc.?

1 2 3 4 5 6 7 8 9

Very weak candidate

Very strong candidate

APPENDIX L

Experimenter Script for Study 2

Experimenter Script – Simulated Interview, Study 2

“Thank you for coming in today. I’m Mario, and I’ll be running the first part of the experiment. The study you are participating in today is investigating different aspects of the interview process. More specifically, we’re interested in the way that people act during face-to-face interviews. You have been assigned to be the applicant in this simulated interview situation. First, you’ll complete a brief questionnaire. Then, you will have time to prepare. Next, you’ll talk with a research assistant who will serve as the interviewer. Finally, you’ll complete a brief questionnaire packet. The whole procedure should take about 45 minutes, and you will receive 1 experimental credit for your participation. Do you have any questions before we begin?”

“OK, if the procedure sounds alright to you, I’ll need to get your consent or agreement to be in this experiment. This form basically says that:

- you give your consent to be in the study
- you understand that Dr. Reich is responsible for the study
- we have explained the purpose and procedures of the study to you and answered any questions you might have
- you know that the study takes about 1 hour
- all of your data will be kept strictly confidential
- if you have concerns about the study, there are people on campus you can contact

- you can quit the study at any time
- Give participant consent form to sign. “Thank you.”

“OK. The first thing I’d like to ask you to do is complete this brief questionnaire (give applicant “pre-interview questionnaire”). Please respond to the questionnaire by circling the number that corresponds with your answer. Please do not write your name on the survey. Please take a few minutes to answer these questions. You can go ahead and get started. If you have any questions, or if you’ve finished, go ahead and let me know.”

WHEN APPLICANT IS FINISHED: “OK. I’ll go ahead and take that, thank you. I’m going to give this survey to the interviewer. I’ll be back very shortly.”

STEP OUT OF THE ROOM FOR A MINUTE OR SO.

UPON RETURN TO ROOM: “OK, thank you very much. As I mentioned earlier, today we’ll be asking you to be an applicant in a simulated interview situation. At this point, I’d like to tell you a little bit about the procedure.”

“You and some of the other applicants in this study will be interviewed for a job as the Customer Service Coordinator for a student travel agency. In order to increase the

realism and impact of this interview situation, the applicant who does the best in the interviews will receive \$50 as a substitute for getting the job. This should provide you with an extra incentive to perform well in the interview. Like most interview situations, your performance will be compared to the performances of other applicants who interviewed for this job to determine which of you receives the \$50 at the end of the semester.”

“Here is a profile of the company and the job that you will be interviewing for. Please take some time now to prepare for the interview. Also keep in mind that during the interview, you certainly should feel free not to answer any question if you do not feel comfortable answering. Do you have any questions?”

Give applicant company profile.

“OK, please take 10 minutes to prepare for the interview, and then we’ll proceed to the next stage of the experiment.”

LEAVE ROOM

When 10 minutes is up, return...

“Before I get the interviewer so that you can begin your interview, there are a few final items that I’d like to go over with you. As you can see, there is a video camera set up in this interview room. If possible, I was wondering if it would be ok if we taped your interview. Taping the interview provides more data for making the final “hiring” decision. The tape will be kept confidential and will not be seen by anyone other than Dr. Reich, myself and our research assistants. Is it ok if your interview session is taped?”

(If Yes) “Thank you.” (If No) “OK. Thanks anyway for coming in. Since our main hypotheses must be tested from data on the videotape, we will not continue further. However, you will get credit for the time you’ve spent in the study (.5 credits). Thank you very much for coming in today. ”

(If Yes) “OK, in just a few minutes you’ll begin the interview, and the interviewer will ask you a series of questions that pertain to the Customer Service Coordinator position. The interviewer will ask you questions based on your responses to the survey that you completed when you first began the experiment. I just wanted to remind you that you should feel free not to answer any question if you do not feel comfortable doing so, and that you may quit this interview session at any time without penalty.”

“I also wanted to tell you that you’ll be asked to complete a VERY brief questionnaire packet after the interview is complete. Do you have any questions at this point?”

“OK, I’ll go get the interviewer so that you can begin your interview.”

AFTER INTERVIEW:

“Hi. OK, at this point, I’d like to ask you to complete this brief questionnaire packet.”

Give Questionnaire Packet to Applicant

“If you have any questions about the packet, please feel free to let me know. When you’re finished with the packet, you can simply let me know that you’re done and we’ll move on to the last stage of the experiment.”

WHEN PARTICIPANT IS FINISHED WITH PACKET, COLLECT IT AND MOVE ON TO DEBRIEFING SCRIPT.”

APPENDIX M

Consent Form for Study 2

Consent to Participate – Simulated Interview, Study 2

We are asking you to participate in a study called SIMULATED INTERVIEW.

Here is what you need to understand about the study:

- 1) The person in charge of this project is Dr. Darcy Reich (806-742-3711 x237). She works in the Department of Psychology at TTU. You can contact her if you have questions about the research.
- 2) You'll be asked to prepare for and engage in a face-to-face interview with a research assistant. You will also be asked to complete several brief questionnaires. The purpose of this study is to examine the way people interact during an interview.
- 3) Your participation is appreciated. You will get experiment credit for your Psychology course (PSY 1300). You should also learn about the research.
- 4) The study should take about 45 minutes to complete. You will get 1 experiment credit. No one but Dr. Reich and her assistants will see your data. They will be kept in a locked research lab at TTU. Your data will be recorded without your name. So, your names will not be associated with your data in any way.
- 5) Doing this study is completely up to you. You won't lose anything if you don't do it. You can quit anytime. You will still get experiment credit for the time you put in. You do not give up any legal rights by signing this form.
- 6) Dr. Reich or one of the experimenters will answer any questions you have about the study. For questions about your rights as a subject or about injuries caused by this

research, contact the Texas Tech University Institutional Review Board for the Protection of Human Subjects, Office of Research Services, Texas Tech University, Lubbock, Texas 79409. Or you can call (806) 742-3884.

I agree to participate in this research. I have read this form. Any questions have been answered.

Signature of Subject

Printed Name

Date

APPENDIX N

Pre-Interview Questionnaire for Study 2

**Pre-Interview Questionnaire –
Simulated Interview, Study 2**

Please answer the following questions by circling the appropriate number on the survey below.

1.) How old are you?

0) 22 or younger

1) Older than 22

2.) What is your current class standing at TTU?

0) Freshman

1) Sophomore

2) Junior

3) Senior

4) Other

3.) Which type of class have you performed the best in during high school and college?

Please select only one.

0) Liberal Arts (Examples - History, English, Philosophy)

1) Fine Arts (Examples - Painting, Theater, Design)

2) Behavioral Sciences (Examples – Psychology, Sociology)

3) Natural Sciences (Examples – Biology, Chemistry, Physiology)

4) Foreign Language (Examples – French, Spanish, German)

5) Computer Sciences (Example – Computer Programming)

6) Mathematics (Examples – Statistics, Calculus, Trigonometry)

4.) Which type of class have you most enjoyed during high school and college? Please select only one.

0) Liberal Arts (Examples - History, English, Philosophy)

1) Fine Arts (Examples - Painting, Theater, Design)

2) Behavioral Sciences (Examples – Psychology, Sociology)

3) Natural Sciences (Examples – Biology, Chemistry, Physiology)

4) Foreign Language (Examples – French, Spanish, German)

5) Computer Sciences (Example – Computer Programming)

6) Mathematics (Examples – Statistics, Calculus, Trigonometry)

5.) Which type of class have you performed the worst in during high school and college?

Please select only one.

0) Liberal Arts (Examples - History, English, Philosophy)

1) Fine Arts (Examples - Painting, Theater, Design)

2) Behavioral Sciences (Examples – Psychology, Sociology)

3) Natural Sciences (Examples – Biology, Chemistry, Physiology)

4) Foreign Language (Examples – French, Spanish, German)

5) Computer Sciences (Example – Computer Programming)

6) Mathematics (Examples – Statistics, Calculus, Trigonometry)

6.) Which type of class have you least enjoyed during high school and college? Please select only one.

0) Liberal Arts (Examples - History, English, Philosophy)

1) Fine Arts (Examples - Painting, Theater, Design)

2) Behavioral Sciences (Examples – Psychology, Sociology)

3) Natural Sciences (Examples – Biology, Chemistry, Physiology)

4) Foreign Language (Examples – French, Spanish, German)

5) Computer Sciences (Example – Computer Programming)

6) Mathematics (Examples – Statistics, Calculus, Trigonometry)

7.) Which of the following do you consider to be your greatest strength? Please select only one.

0) Interpersonal skills / Communication skills

1) Motivation / Willingness to work hard

2) Intelligence / Common sense

3) Leadership skills

4) Sense of humor

8.) Which of the following do you most need to work on? Please select only one.

0) Interpersonal skills / Communication skills

1) Motivation / Willingness to work hard

2) Intelligence / Common sense

3) Leadership skills

4) Sense of humor

9.) Which personality type best describes you?

0) Outgoing, talkative

1) Quiet, reserved

10.) Which personality type best describes you?

0) Anxious, nervous

1) Calm, relaxed

11.) Which personality type best describes you?

0) Open to new experiences

1) Conservative, prefer consistency

12.) Which personality type best describes you?

0) Sociable, get along well with others

1) Reflective, like to do my own thing

13.) Which of the following personality characteristics would you most like to have or improve on?

- 0) Outgoing, talkative
- 1) Calm, relaxed
- 2) Open to new experiences
- 3) Sociable, get along well with others
- 4) Concerned about the welfare of others and/or your environment

APPENDIX O

Description of Hypothetical Job for Study 2

**Description of Hypothetical Job –
Simulated Interview, Study 2**

Student Travel, Inc.

Student Travel, Inc. is a national travel agency that specializes in providing students with travel packages over spring, fall, and winter breaks, as well as during the summer months. These packages typically consist of transportation and accommodations for periods ranging from 4-5 days to six-week trips during summer vacation. Student Travel offers vacations to the beaches of Florida, Mexico, and the Caribbean; ski trips to the mountains of Colorado, Utah, California, Switzerland, and Austria; and more extended travel opportunities to Western Europe, the Middle East, and the Orient. The prices of these trips are kept low by booking large numbers of students and by utilizing charter transportation services and relatively inexpensive housing accommodations, although more expensive trips are also offered. Most of Student Travel's income comes from the less expensive of its trips.

Student Travel has its headquarters in Fort Lauderdale, Florida, as well as small "branch offices" at over 60 colleges and universities in the U. S. and Canada. The branch offices are run by students at the colleges under the supervision and guidance of managers from the main office. Each branch office is headed by a student manager who oversees a student staff that ranges in size from one other employee at small schools to 5 other employees at larger schools. Most of the vacation packages originate from the main office, in which case the role of the branch office is promotion, sales, and some logistics. Other packages, however, are created by the branch office specifically to

accommodate the needs of its own students. In these cases, most of the work originates from the branch office with only minimal support from the main office. In recent years, these specialized trips have accounted for approximately 20% of the total business.

JOB DESCRIPTION: SERVICE COORDINATOR

Student Travel has decided to expand its operations to Texas Tech University, and thus, needs to hire a Service Coordinator. The new student coordinator will be responsible for selecting and supervising three assistants, handling customers in all aspects of service (complaints, etc.), and maintaining relations with the main office. Since the Service Coordinator will be starting largely from scratch, he or she will have to hire and supervise a group of student employees, and will also be largely responsible for promotion of travel packages and maintaining customer satisfaction. The job requires maintaining staff morale, and working very closely with superiors as the office becomes established.

APPENDIX P

Interviewer Materials for Study 2

Interviewer Script – Simulated Interview, Study 2

“Hi, and thanks for coming in! My name is {name}, and I’ll be interviewing you today.
Please have a seat.”

“Are you ready to begin? OK.... let me go turn on the video camera...and we’ll get started.”

IN STAMMERING CONDITION: TURN ON CAMERA, SAY INTO CAMERA:
“THIS IS APPLICANT NUMBER: INSERT PARTICIPANT NUMBER HERE”, FILL
IN “TIME STARTED” ON RUN SHEET, RETURN TO SEAT, AND ASK
QUESTIONS FROM SCRIPT (MAKE SURE TO CONSISTENTLY STUTTER IN
DESIGNATED AREAS!!!!!! REMEMBER TO SHAKE FOOT THROUGHOUT
INTERVIEW!)

IN NON-STAMMERING CONDITION: TURN ON CAMERA, SAY INTO CAMERA:
“THIS IS APPLICANT NUMBER: INSERT PARTICIPANT NUMBER HERE”, FILL
IN “TIME STARTED” ON RUN SHEET, RETURN TO SEAT, AND ASK
QUESTIONS FROM SCRIPT. (SPEAK CLEARLY AND PRECISELY! REMEMBER
TO SHAKE FOOT THROUGHOUT INTERVIEW!)

IN ALL CONDITIONS (When interview is over):

STOP RECORDING, FILL OUT “TIME ENDED”/COMMENTS ON RUN SHEET,

THEN SAY:

“Well, again thank you very much for coming in today and talking with me about the job.

I’ll go get the experimenter so that you can move on to the next stage of the experiment.”

**Scripted Interviewer Questions/Stammering
Condition – Simulated Interview, Study 2**

- 1) OK...so you're interviewing for the ...umm...service...ahhh... coordinator position, right? (neutral, repeat)

- 2) Now... ahhh...have...have you ever been fired from a job? (negative, closed)

- 3) Hmm. Would you...ummm...say that your ability to commun...to communicate with others is something that you need to work on? (negative, closed)

- 4) OK. Discuss an instance in.. in which you had a job that you.. well... you didn't really feel qualified for. Why...why didn't you feel qualified? (negative)

- 5) Discuss some experiments...I mean ...experiences you've had where you haven't gotten along well with your ...your ...co-workers. Why...why do you think you didn't get along? (negative)

- 6) What skills and characteristics...ummmm... do you think you have that would make you well-qua...qualified for this job? (positive)

7) OK. Describe your... your most recent job and how you think it might...ahh... require similar or different skills com...compared to the ...ahh... service coordinator position. (neutral)

8) Discuss the most...ummmm...recent course where you didn't do as well as you should... I mean... could have. Why did this happen? (negative)

9) OK. Now, discuss a course...ummm...where you actually did well... and, uhhh...tell me why you think you succeeded? (positive)

10) Describe the ways that talking...umm...I mean...taking this job would cut-umm...cut into your other activities or interests. (negative)

11) How would you assess your ability to...ummm... organize and prioritize job rela...job related tasks? (neutral)

**Scripted Interviewer Questions/Non-Stammering
Condition – Simulated Interview, Study 2**

- 1) OK, so you're interviewing for the service coordinator position, right? (neutral, repeat)

- 2) Now, have you ever been fired from a job? (negative, closed)

- 3) Would you say that your ability to communicate with others is something that you need to work on? (negative, closed)

- 4) OK. Discuss an instance in which you had a job that you didn't really feel qualified for. Why didn't you feel qualified? (negative)

- 5) Discuss some experiences you've had where you haven't gotten along well with your co-workers. Why do you think you didn't get along? (negative)

- 6) What skills and characteristics do you think you have that would make you well-qualified for this job? (positive)

- 7) OK. Describe your most recent job and how you think it might require similar or different skills compared to the service coordinator position. (neutral)

8) Discuss the most recent course where you didn't do as well as you could have. Why did this happen? (negative)

9) OK. Now, discuss a course where you actually did well, and tell me why you think you succeeded? (positive)

10) Describe the ways that taking this job would cut into your other activities or interests. (negative)

11) How would you assess your ability to organize and prioritize job-related tasks? (neutral)

APPENDIX Q

Applicant Questionnaires for Study 2

**Demographic Information –
Simulated Interview, Study 2**

Brief Questionnaire Packet

Thank you for participating in our study! We couldn't do this research without helpful people like you. Please begin by carefully filling out the information below.

Age: _____

Ethnicity:

_____ African American

_____ American Indian, Alaskan Native

_____ Asian American

_____ Caucasian American, Non-Hispanic

_____ Hispanic American, Mexican American

_____ Other

Relationship Status:

_____ Single

_____ Dating

_____ Cohabiting

_____ Married/Partnered

_____ Separated

_____ Divorced

_____ Widowed

_____ Other

Year in College:

_____ Freshman

_____ Sophomore

_____ Junior

_____ Senior

_____ Other

**Applicant Affiliation Index –
Simulated Interview, Study 2**

Please answer the following questions, as they relate to your interview experience.

1.) To what extent were you trying to get along with the interviewer?

1 2 3 4 5

Not at all

Very much

2.) To what extent were you attempting to have a smooth interaction with the interviewer?

1 2 3 4 5

Not at all

Very much

3.) To what extent were you trying to get the interviewer to like you?

1 2 3 4 5

Not at all

Very much

**Applicants' Perceptions of the Interviewers'
Perceptions of Them – Simulated Interview, Study 2**

Please answer these questions about the interviewer.

1. How well do you think the interviewer expected you to do in the interview?

1 2 3 4 5 6 7

Very poorly

Very well

2. What type of expectations do you think the interviewer had about your skills or qualifications?

1 2 3 4 5 6 7

Very negative

Very positive

3. What was the tone of most of the questions that you were being asked by the interviewer?

1 2 3 4 5 6 7

Extremely negative

Extremely positive

Please rate the interviewer on the following traits or characteristics.

	Poor		Good			Excellent	
Competence	1	2	3	4	5	6	7
Intelligence	1	2	3	4	5	6	7
Nervousness	1	2	3	4	5	6	7
Warmth	1	2	3	4	5	6	7
Friendliness	1	2	3	4	5	6	7
Confidence	1	2	3	4	5	6	7

**Applicants' Expressions of Discomfort with Interviewer
- Simulated Interview, Study 2**

Please answer the following question about the interviewer.

1.) Were you uncomfortable or upset about the way the interviewer treated you?

1 2 3 4 5 6 7

Not at all

Very much so

APPENDIX R

Debriefing Materials for Study 2

Debriefing Script – Simulated Interview, Study 2

1.) **Funnel Debriefing** - Begin with general questions: So, how did the interview go? Do you feel OK about it? (Make sure the participant is not upset by the interview). Once participant is ok, move on to more specific questions about the study, and note participant's response:

a) Are you wondering anything about this experiment, or do you have any questions about it?

b) What did you think this experiment was about?

c) Did any part of this experiment seem strange to you, or were you suspicious of anything?

d) Did anything about the interviewer's behavior seem strange to you?

e) If yes, how?

2.) Give the participants the debriefing sheet, and state the following: "First of all, thanks for participating! We really appreciate you taking the time to be in our study. Since we'll be running this experiment until the end of the semester, we would greatly appreciate it if you would not tell others about it. If people come into this experiment knowing what they will be doing and what we are looking for, it can affect how they respond, even if they don't mean for it to. Thanks for your help in keeping things confidential – we really appreciate it!"

We are studying the relationship between nonconscious behavioral mimicry (imitation) and the self-fulfilling prophecy. Previous research shows that people can sometimes imitate the physical behaviors or mannerisms of other people without even being aware that they're doing so. People have also been shown to be particularly likely to imitate the behaviors of others when they are trying to get others to like them (in other words, to build affiliation). Now, research on the self-fulfilling prophecy has shown that when we have expectations about other people, we may treat them in ways that actually cause them to behave consistently with our expectations. However, this doesn't always happen: Sometimes, people that we have expectations for go out of their way to act in ways that contradict our expectancies; particularly if they feel our expectancies are inaccurate.

So, we placed you in an interview situation, where presumably everyone would want to get along with an interviewer in order to win \$50. However, we trained our interviewer to treat you in a negative way. More specifically, we trained her to ask you negatively-focused questions, and in some conditions we trained her to engage in more subtle behaviors that indicate negative bias. We are interested in seeing whether or not you engaged in those subtle behaviors too, and how doing so (or not) impacted your performance in the interview.

As you know, we videotaped the interview. We do this because we are interested in measuring the number of times that you engaged in the same behavior that the interviewer was engaging in. Once we finish collecting data, we will use participants'

imitation levels to see if they predict how well participants' do in the interviews overall.

This research will provide us with evidence of a relationship between mimicry (imitation) and the self-fulfilling prophecy, if such a relationship does indeed exist. Do you have any questions at all?"

3.) "Now, as you were informed of earlier in the study, one of the applicants will indeed get \$50 toward the end of the semester. But, the choice will actually be based on a lottery, instead of on any evaluations of your performance. It would be difficult to come up with specific criteria to compare the applicants, because different evaluators might use different standards for assessing applicants' performance. Therefore, we felt that a lottery procedure would be the most fair to all the applicants involved. We will hold the applicant lottery at the end of the semester, and the winner will be contacted, and will receive \$50."

4.) "There is one last thing I need to tell you about this experiment. Of course, the interview was videotaped. The reason that we do this is so that we can go back and code the interview for things like imitation behavior, how you responded to the interviewer's questions, etc. I was wondering if you would be willing to give your consent for us to use your interview tape for research purposes. Giving your consent is completely voluntary, and we will erase the tape immediately if you do not want us to keep it. If you do agree to allow us to keep the videotape, there will be no identifying information written on the videotape, it will be kept confidential and in a secure place, and we will

erase it 5 years after a report of the research is published, which is the required length of time that psychology researchers must keep data that are reported in psychology journals. The only people who will see the tape are people involved in this research project; that is, Dr. Darcy Reich, myself, and three research assistant coders. The research assistants who code the videotapes will be upper level psychology undergraduates who are taking an independent study research course in our lab. They will not have access to identifying information. Would you be willing to give your consent for us to keep the videotape?" (If "yes", have participants sign video tape consent form).

5.) Thank participant and collect debriefing form.

Debriefing – Simulated Interview, Study 2

Thanks for participating! We really appreciate you taking the time to be in our study. Since we'll be running this experiment until the end of the semester, we would greatly appreciate it if you would not tell others about it. If people come into this experiment knowing what they will be doing and what we are looking for, it can affect how they respond, even if they don't mean for it to. Thanks for your help in keeping things confidential – we really appreciate it!

We are studying the relationship between nonconscious behavioral mimicry (imitation) and the self-fulfilling prophecy. Previous research shows that people can sometimes imitate the physical behaviors or mannerisms of other people without even being aware that they're doing so. People have also been shown to be particularly likely to imitate the behaviors of others when they are trying to get others to like them (in other words, to build affiliation). Now, research on the self-fulfilling prophecy has shown that when we have expectations about other people, we may treat them in ways that actually cause them to behave consistently with our expectations. However, this doesn't always happen: Sometimes, people that we have expectations for go out of their way to act in ways that contradict our expectancies; particularly if they feel our expectancies are inaccurate.

So, we placed you in an interview situation, where presumably everyone would want to get along with an interviewer in order to win \$50. However, we trained our interviewer

to treat you in a negative way. More specifically, we trained her to ask you negatively-focused questions, and in some conditions we trained her to engage in subtle behaviors that indicate negative bias. We are interested in seeing whether or not you engaged in those subtle behaviors too, and how doing so (or not) impacted your performance in the interview.

As you know, we videotaped the interview. We do this because we are interested in measuring the number of times that you engaged in the same behavior that the interviewer was engaging in. Once we finish collecting data, we will use participants' imitation levels to see if they predict how well participants' do in the interviews overall. This research will provide us with evidence of a relationship between mimicry (imitation) and the self-fulfilling prophecy, if such a relationship does indeed exist.

If you have any questions, please ask the experimenter before you leave. Again, thank you for your help!

APPENDIX S

Videotape Consent Form for Study 2

**Consent Form for Videotape –
Simulated Interview, Study 2**

I agree to let the researchers, Dr. Darcy Reich and Mario Casa de Calvo, keep the videotape of my interview for research purposes. I understand that the recording will be kept confidential and in a secure place, my name and identifying information will not be linked to it, and it will be destroyed five years after the research report is published, which is the required length of time that psychology researchers must keep data that are reported in psychology journals. I understand that I will receive credit for participating in this study even if I do not give my consent to use of the videotape.

Signature of Participant

APPENDIX T

Applicant Evaluation Form for Study 2

**Observers' Applicant Evaluation Form –
Simulated Interview, Study 2**

Please rate the applicant on the following dimensions. Circle the number that best represents your evaluation of the applicant on each dimension.

1. Overall, how well did the applicant perform in the interview?

1 2 3 4 5 6 7 8 9

Very poorly

Very well

2. How qualified is this applicant for the job?

1 2 3 4 5 6 7 8 9

Not at all qualified

Very qualified

3. How likely would you be to hire this applicant?

1 2 3 4 5 6 7 8 9

Not at all likely

Very likely

4. What is your overall evaluation of this applicant as a candidate for the job at Student Travel, Inc.?

1 2 3 4 5 6 7 8 9

Very weak candidate

Very strong candidate