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Deceiving Others After Being Deceived: Lying as a Function of Descriptive Norms

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**Abstract**

Previous research has found that being lied to makes a person more likely to respond with deception in a reciprocal manner. I hypothesize that lying instead creates a descriptive norm. Thus, a person being lied to will lie not only to the person who lied to them, but in new conversations with new people. Within a mock job interview, participants were lied to by one confederate, and then given the chance to lie to a second confederate. Being lied to did not produce significantly more lies, favoring existing theory that lying is reciprocal and not transitive.

### Deceiving Others after the Realization of Deceit: Lying as a Function of Descriptive Norms

Lying is a constant of personal interaction. Everybody lies, and they do it often (Depaulo & Kashy, 1998; DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996; Tosone, 2006). Using diary entries (DePaulo, et al. 1996, Depaulo & Kashy, 1998) and videotaped interactions (Tyler & Feldman, 2004; Tyler, Feldman & Reichert, 2006; Weiss & Feldman, 2006), researchers have found that most people lie more than once a day. Although deception is a rather common behavior, it is often overlooked in psychological research beyond the damage experimental deception has on participants. In particular, the way lies affect the deceived has been under-researched.

A lie requires two parties, the deceiver and the deceived. The deceiver first decides to lie to the deceived, whether through misrepresentation or outright falsehood. For the deceived to react to this lie, he or she must first discern that what is being said is not the truth. If the deceived does indeed accurately detect deception, he or she must react both internally and externally. Although people like to believe that they are being told the truth, they sometimes discover that they have been lied to. But when this mutual illusion is broken, how do they respond? Once this realization is made, the deceived may feel an emotional reaction to the lie, and change his or her behavior. The discovery of deception, whether by a close friend or a complete stranger, can have wide-ranging effects on relationships and interactions.

Lying literature often focuses on the deceiver, investigating how culture, personality, and situations alter the motivation and proclivity to lie. Previous studies have explored everything from broad topics such as the mediums through which people prefer to lie (Furner & George, 2012) to narrow examinations of differing motivations of specific kinds of online lying (Utz, 2005). Motivations of liars are varied and well documented. Deception can serve the goal of

protecting somebody else's feelings; when assuming that others put stock in their evaluations, people are more likely to lie to protect somebody's feelings (DePaulo & Bell, 1996). These "white lies" are often for the benefit of others rather than the deceiver. However, not all lying serves such an altruistic purpose. People also lie just because they can, or to see whether they can get away with it (Caspi & Gorsky, 2006; Utz, 2005). Lying motivation can also be affected by culture. People of Eastern cultures are more likely to lie in order to help a collective (Fu et al., 2007) or family (Aune & Waters, 1994), while Westerners lie more in order to help an individual or to protect themselves.

The relationship between the liar and his or her target also influences deception. In situations in which people need to appear likeable or capable, they told more lies in a short interaction (Feldman et al., 2002). Two common situations in which positive first impressions are vital are dating and job searches. Both men and women expect more lying as a strategy from their partners in dating situations (Benz, Anderson & Miller, 2005). This expectation becomes reality, as people tend to lie more when the level of trust with their conversation partner is low, especially in mixed-gender dyads (Olekalns, Kulik & Chew, 2013). This situation often occurs on a first date, when first impressions are the most important. People seeking to impress a possible employer rather than a potential mate will also lie more often. Even though people believe lying to get a job is wrong, (Robinson, Shepherd & Heywood, 1998) candidates lie in interviews (Fletcher, 1990; Levashina & Campion, 2007; Morgeson et al, 2007; Weiss & Feldman, 2006) as well as on job applications (Guillory & Hancock, 2012). Although there are clear motivations behind these lies, specific situations create desires to impress somebody for the first time. These impressions also have fairly high stakes; securing a job or a lifelong partner are not trivial matters. People believe that they lie differently and exhibit different types of "tells"

when lying in high stakes situations (Lakhani & Taylor, 2003), including exhibiting more nervous behavior (Taylor & Hick, 2007). These situational factors change both the amount and methods deceivers use, which in turn change the way that the deceived reacts.

As noted, much of the previous research on the motivations and situations that influence lying deal with the person telling the lie. The lie is the first step in a deceptive interaction and is the catalyst for anything that follows. But simply because the lie comes first does not mean that what comes after is any less important. Much of the research that addresses the other partner of a lie, the deceived, focuses primarily on the ability to detect deception. In order for people being deceived to respond to deception, they must first realize they have been lied to. Deception detection can be influenced by many different situations. People on dates are more likely to detect a lie (Barnacz et al., 2009), whereas people become less adept at detecting lies in old age (DePaulo, Jordan, Irvine & Laser, 1982; Ruffman, Murray, Halberstadt, & Vater, 2012). Online deception detection success also varies depending on which medium (i.e. email, instant message, video chat) is used; with less rich and immediate communication making lies harder to determine (Boyle, Kacmar & George, 2008; Carlson and George, 2004; George, Marett & Tille, 2008). In interrogations settings, few cues exhibited by people being questioned actually lead to successful detection of deception (Porter & Yuille, 1996). The motivation of the deceived to discover deception also influences his or her ability to accurately detect a lie (DePaulo et al., 2003; DePaulo, Lanier & Davis, 1983; DePaulo, LeMay & Epstein, 1991; Porter, McCabe, Woodworth & Peace, 2007).

After successfully detecting a lie, the deceived is left to grapple with the reason for deception. The reasons for the lie change how the deceived processes the dishonesty and how he or she will eventually react. Another focus of research on the deceived is his or her reaction to

different reasons for lying. Even though lying is common, it is still viewed negatively. When people are lied to, they tend to think less of the liar (Tyler et al., 2006). Relationships also become less close when deception is detected by one of the partners (Planalp & Honeycutt, 1985). Although almost no lie is generally looked on with favor, the type of lie dictates how much stigma is attached to the liar. “White lies”, such as ones that are made to avoid conflict, are viewed as more acceptable and are easier to forgive (McLeod & Genereux, 2004). Lies that are self-depreciating (i.e. downplaying accomplishments) also draw less ire from the deceived (Tyler et al., 2006). However, when the lies are to the benefit of the liar, the acceptability of the lie decreases considerably (Backbier, Hoogstraten & Terwogt-Kouwenhoven, 1997; Tyler et al., 2006). Culture affects reactions to lies as well, as people from Western cultures are more likely to reward honesty than punish dishonesty than people from Eastern cultures (Wang & Leung, 2010).

Empirical evidence highlights what most find intuitive: lying is wrong and being lied to feels bad. So why do people lie to each other? Do the needs of the liar outweigh the potential harm to the deceived should the lie be discovered? I posit that part of what leads liars to lie is how much lying they perceive around them. This hypothesis remains largely untested in psychological literature; however, one study has investigated whether people will lie to somebody who has lied to them. Under the guise of a “get-to-know-you” exercise, Tyler et al. (2006) showed participants information supposedly supplied by the admissions office about a student (actually a confederate). The participant was told they would eventually meet this confederate in person later. Participants then watched a video introduction by this confederate after reading the information allegedly supplied by admissions. In some introduction videos, the written information given to participants matched what the confederate said on camera. In other

videos, the confederates contradicted the information provided to participants by lying about past accomplishments. Later, each participant held a ten-minute conversation with the confederate whose video introduction he or she had seen. Participants who had seen the untruthful video interviews were more likely to lie to the confederates during these conversations, which were covertly video-recorded.

In Tyler et al.'s (2006) study, the participants were lying directly to the people who had attempted to deceive them. The participants in Tyler et al. (2006) also only lied significantly more to those confederates who had lied to them in the most inflammatory way: when the lie was to the direct benefit of the liar (confederate). Only the most egregious lies that made the confederate seem more competent and impressive warranted more lies from participants; white lies or self-interested lies that only slightly exaggerated the qualities of the confederate did not make participants lie more.

Tyler et al. (2006) interpreted these findings as an example of personal reciprocity norms. Reciprocity theory states that a person should respond in the same manner in which another person acts towards him or her (Gouldner, 1960; Perugini, Gallucci, Presaghi, & Ercolani, 2003) in order to ensure positive future interactions. Thus, if John acts in a way that benefits Paul, Paul will respond in kind so that John continues to help him. This effect is labeled as positive reciprocity because Paul's behavior benefits John. Positive reciprocity is evident when people are more intimate with those who are intimate with them (Surra & Longstreth, 1990) and are kinder to those who give them higher tips while waiting tables at restaurants (Rind & Strohmetz, 1999). However, not all reciprocity is pro-social. Negative reciprocity norms dictate that when somebody hurts another person, the person who has been hurt will respond with harm in order to dissuade the aggressor from doing harm in the future (Holt & Gillespie, 2008; Marshall & Rose,

1990). For example, if John hits Paul, Paul will hit John back so John knows that hurting Paul has negative consequences. Tyler et al. (2006) interpret participants lying after being lied to as retaliatory use of negative reciprocity. Thus, Tyler et al. (2006) believe that participants deceived confederates who had appeared to lie in their videos as a way to prevent from being lied to again.

However, the theory of reciprocity may not fully explain the situation described in Tyler et al. (2006). Reciprocity is used primarily as a motive in situations in which repeated interaction is expected (Perugini et al., 2003). This reasoning makes intuitive sense: reciprocity is meant to either reinforce helpful behavior or curb harmful behavior. If there is no opportunity for multiple interactions, then there is no reason to show people the consequences of their actions. In Tyler et al. (2006), participants were unlikely to encounter the confederates whom they had lied to in a meaningful way, as the confederate and participants were both students at a university enrolling over twenty thousand undergraduates. Thus, their reciprocal actions are useless, as the people being lied to would not have a chance to “learn their lesson”.

In addition, successful lying by definition should not be detectable. Lying as negative reciprocity cannot have its intended effect because the recipient does not know that his or her deception is being reciprocated. To properly reciprocate a lie, somebody who has been deceived must react in a way that does not actually teach the original liar not to continue his or her behavior. Thus, the basic mechanisms behind negative reciprocity have little power in this context.

Because of the problems in the logic of negative reciprocal norms being applied to lying, the current study proposes an alternative explanation of what drives the effect in Tyler et al. (2006). I believe this phenomenon is driven by the human tendency to do what others are doing, known as descriptive norms. One of the most powerful ways to encourage a behavior is to make

that behavior seem as if it is normal. Descriptive norms are communicated through the behavior a person views in his or her environment rather than explicitly communicated rules (Kredenster, Fabrigar, Smith & Fulton, 2012). They refer to what people generally do, rather than what ethical or moral codes suggest. Often, descriptive norms are more powerful than prescriptive norms, or what society accepts as right or valid (Brauer & Chaurand, 2010). For example, even though common courtesy and anti-littering laws would compel people to dispose of their trash in the appropriate waste receptacles, if an area is already messy (i.e. it is visible that people at this location generally do not throw their trash in a garbage bin) people will act in accordance with descriptive norms and litter as well (Cialdini, Reno, & Kallgren, 1990). Although descriptive norms have been shown to create pro-social behavior change (Gerber & Rogers, 2009; Lapinski, Rimal, DeVries, & Lee, 2007; Priebe & Spink, 2011; Smith & Masser, 2012; Smith et al., 2012), their role in influencing negative behavior is more applicable to the study of deception.

People can be influenced to act as others act, rather than what societal norms dictate, even if those actions may be considered unethical, immoral, or abnormal. When at a busy intersection, people are more likely to cross illegally when they see others doing it, (Kitaori & Yoshida, 2000) even in the presence of clear prescriptive norms (a flashing red hand). College students will engage in more dangerous drinking when they think that their peers do the same, despite the danger and ostracization inherent in overindulgence (Burger et al. 2011; Larimer, Turner, Mallett, & Geisner, 2004). Adolescents are more swayed by how they believe others are acting than what people may think of them when they interact online (Baumgartner, Valkenburg, & Peter, 2011). Both men and women will even disregard how people “should” behave and admit to being more willing to cheat on their partners when they think their friends or acquaintances are having or willing to have extramarital relationships (Buunk & Bakker, 1995).

The belief that others would be willing to engage in infidelity was enough to convince people to engage in it themselves. In the present experiment, participants will know that lying in a job interview is considered “wrong;” however, I predict they will act how those around them are acting.

In order to demonstrate that the increase in lies told by participants in Tyler et al. (2006) is the product of descriptive rather than reciprocal norms, the present experiment examines whether people will lie not only to those who have lied to them but also in novel interactions to somebody who is not the original deceiver. If reciprocity is the mechanism that drives lying after being lied to, people will not lie more in new interactions because it will have no effect on those who lied to them earlier. However, if descriptive norms drive deception, participants will lie to other people in new conversations.

To test whether people will lie to others after being lied to, the present study will be set in the context of a mock job interview. This setting was chosen partly because job interviews are a situation in which people tend to lie often (Weiss & Feldman, 2006). Because lying is generally more acceptable in the context of a job interview, variability should be increased because participants may be more sensitive to the experimental manipulations. In addition, the job interview context allows participants clear evidence that they have been deceived without arousing suspicion of experimenter manipulation. Participants in the present study see both a potential job candidate’s resume as well as interview that potential candidate. Some candidates lie in their interview, deviating from their resume to do better in the interview portion. This information will directly contradict what is written on the resume, making it very clear if a candidate is lying in order to do well on the interview. After a deceived participant in the present study sees that he or she has been lied to, the participant will be interviewed by somebody

besides the original deceiver and have the opportunity to lie to this new person, as opposed to the design used by Tyler et al. (2006).

Using this design, the present study tests people's deceptive behaviors when they have knowledge of being deceived. Due to the influence of descriptive norms, I hypothesize that lying will increase after the realization of deception. In contrast with previous research, these new lies will be made to a novel interaction partner rather than the original liar. Although this is the only a priori prediction, demographic variables (such as age, race, and gender) were collected for exploratory analyses.

## **Method**

### **Participants**

The participants in this study were 37 Macalester College students. Two participants suspected that the other students participating in the experiment were confederates, and their data were excluded from analysis. Of the 35 remaining participants, 18 were female and 17 were male. Some students took part in the study for partial credit in an introductory psychology course; others took part after learning about the experiment through advertisements or social media.

### **Materials**

Participants were supplied with a description of a hypothetical job (Appendix A) at a Twin Cities non-profit and completed a mock application form (Appendix B) for the position. The application asked participants about their college performance, their previous work experience, as well as their skills and interests. Participants also interviewed a confederate and were then interviewed by a different confederate using an interview sheet that asked for information very similar to the job application (Appendix C).

### **Procedure**

Each participant arrived at the experiment room at roughly the same time as two confederates, who both acted as fellow participants. The confederates arrived separately to increase the believability of the cover story. Participants were told that the experiment investigated effective in-person interview strategies. After signing a consent waiver informing them that they would be videotaped during an interview, all three students were asked to complete an application for a hypothetical job.

Participants were told that the experiment would examine the differences between applications and in-person interviews. According to the cover story, each application would be read and evaluated by a fellow participant and each of the three participants (two of whom were confederates) would interview with a different participant. Both the interview and the application would be assigned a score from 1-10 based on quality and fit for the position. The two scores would then be compared and the video would be consulted to find the reasons for discrepancy. Also as part of the cover story, participants were told that if they received a score of 6 or higher either the application or the interview, they would receive a small reward (a “fun-size” candy bar), and if they scored above 6 on both the application and the interview they would receive a larger reward (a full-size candy bar). The experimenter then further elaborated on the cover story, explaining that each of the three applicants would both be interviewed and have their resume read by one of the other two people. The experimenter then told the participant that he or she had been randomly assigned to first interview Confederate 1, while Confederate 2 would read Confederate 1’s application (in accordance with the cover story) in private outside the room.

The participant first interviewed Confederate 1 while Confederate 2 walked outside to grade Confederate 1’s application in private. The experimenter also left and instructed Confederate 1 to retrieve the experimenter after the interview had concluded. The participant

asked questions from and recorded answers on an interview form that asked for the same information as the job application. During the interview, Confederate 1 described relevant work experience, applicable skills, and a strong academic record. After the interview was completed, the participant waited in the experimental room while Confederate 1 retrieved the experimenter from an adjacent room as instructed.

In the lie condition, Confederate 2 then entered the room as Confederate 1 left to retrieve the experimenter. He then asked the participant what grade he or she had given to Confederate 1, and without waiting for a response, said that he had rated Confederate 1 as a 3/10 because of her poor GPA and limited experience, specifically stating that the only job she had ever held was in a fast food restaurant. Confederate 2 quickly showed the participant Confederate 1's alleged application, which contradicted the information Confederate 1 had supplied to the participant in the interview. This information was intended to make it clear that Confederate 1 had lied to the participant during the interview. While both Confederate 2 and the participant both knew of the deceit, neither ever told the experimenter. The experimenter then returned with Confederate 1 and told all three (participant, Confederate 1, and Confederate 2) that the next stage of the experiment was beginning. Now Confederate 2 would interview the participant, and Confederate 1 would read the participant's application. The experimenter also recorded both scores and gave Confederate 1 the smaller reward (all 37 participants rated Confederate 1's interview higher than a six). Confederate 1 and the experimenter then left the room while Confederate 2 asked questions to the participant from the same interview form used earlier.

In the no-lie condition, Confederate 2 entered the room as Confederate 1 left to retrieve the experimenter. Confederate 2 asked the participant what grade he or she had given to Confederate 1, and without waiting for a response said that he had rated Confederate 1 as an 8/10

because of her high GPA and wide range of experience. Confederate 2 quickly showed the participant Confederate 1's alleged application, which confirmed the information Confederate 1 had supplied to the participant in the interview. This information was intended to make it clear that Confederate 1 had told the truth to the participant during the interview. The experimenter then returned and told all three (participant, Confederate 1 and Confederate 2) that the next stage of the experiment was beginning. Now Confederate 2 would interview the participant, and Confederate 1 would read the participant's application. The experimenter also recorded both scores and gave Confederate 1 the larger reward. Confederate 1 and the experimenter then went outside while Confederate 2 asked questions to the participant from the same interview form used earlier.

Across both conditions, after the second interview, the experimenter announced that the next stage of the study required only one person, and seemingly at random picked the participant to stay. The experimenter then told both confederates that they were free to go and thanked them for their participation. Next, the experimenter asked the participant what he or she had thought of the study so far, and what he or she had thought of their fellow "participants" in order to determine whether the participants had realized the nature of the deception. Those who had suspicions were quick and willing to voice them. The experimenter then verbally debriefed the participant and revealed the true aims of the study without revealing which condition the participant was in. The participant was only told that the real purpose of the experiment was to learn how many times he or she had lied in their job interview.

After giving the participant the chance to leave the study, the experimenter then reviewed the interview video with the participant, and had the participant indicate whether any of the statements were lies, mistruths or exaggerations. This method of lie detection has been used in

other deception studies (Tyler, Feldman, & Reichert, 2006; Weiss & Feldman, 2006, Tyler & Feldman, 2004). In these previous studies, after being assured of confidentiality and that lying was actually encouraged, participants were willing to reveal any lies they may have told. After logging the participant's lies and deleting the video in the presence of the participant, the experimenter then gave the participant the chance to strike his or her data from the records. The participant then received the larger of the two prizes as well as a debriefing form.

### **Results**

The only dependent variable in the present study was the number of lies, mistruths or exaggerations told by the participant to Confederate 2 in the second interview. The experimenter collected data orally with participants while reviewing videos of this second interview. While watching a video of the interview, participants indicated whenever they had told a lie, mistruth, or exaggeration, which the experimenter tallied. The independent variable of interest was whether or not participants were lied to in their first interview, which was experimentally manipulated. Other demographic independent variables were year in college, gender, and race. This information was collected after the video review to avoid any priming effects in lie disclosure. Because the number of participants in most racial groups other than "White" did not exceed one or two, race was categorized as either "White" or "Non-white." Gender and race of Confederate 2 (the confederate being lied to) were also examined, and variables were created to measure whether Confederate 2 matched or mismatched participants in these two categories.

Contrary to the main hypothesis, whether participants were lied to in their initial interview ( $M=2.22$ ) or not ( $M=1.82$ ) did not significantly influence whether they told more lies

in the second interview,  $t(33) < 1, p = .52$  (Figure 1). Race ( $t(33) = 1.32, p = .197$ ) and gender ( $t(33) < 1, p = .64$ ) of participants did not significantly influence the number of lies told.

Years of college completed had a marginally significant effect on lies told ( $F(34) = 2.80, p = .056$ ) when submitted to a one-way ANOVA. To determine the direction and practical size of the effect of college year, data was also submitted to a linear regression. The more years of college completed by participants, the more lies they told in the second interview  $\beta = .68, t(33) = 2.122, p = .042$  (Figure 2). One limiting aspect of both analyses is that only one participant was in their third year of college, and reported the highest score of any participant, which may have disrupted linear patterns.

After analyzing traits of the participants, characteristics of the confederates were investigated. The effect of the gender of Confederate 1 was not tested, as Confederate 1 was female in all trials. The gender of Confederate 2 (the confederate being lied to by participants) significantly predicted lying ( $t(33) = 2.281, p = .029$ ), with female confederates ( $M = 2.63$ ) being lied to more often than male confederates ( $M = 1.31$ ) regardless of condition (Figure 3).

This effect was not driven by gender mismatch between participants and confederates. A binary (match/mismatch) gender-matching variable was created. Gender mismatch between confederates and participants did not predict more lies,  $t(33) < 1, p = .524$ . When conducting a multiple regression, including Confederate 2 gender (dummy-coded) with year in college--the other significant independent variable--both predictors fell to marginal significance (Confederate 2 gender:  $\beta = -1.12, t(33) = 1.93, p = .06$ ; Year:  $\beta = .55, t(33) = 1.77, p = .087$ ).

Although neither race nor condition had a significant impact on lies, there was an interaction effect between the two variables. White participants in the lie condition ( $M = 2.71$ ) told more lies than white participants in the no-lie condition ( $M = 1.73$ ), while non-white participants

acted oppositely, telling fewer lies in the lie condition ( $M=.5$ ) than in the no lie condition ( $M=2.0$ ). Neither of these differences was significant, but this difference led to a marginally significant interaction between the two variables,  $F(31)=1.88, p=.07$  (Figure 4).

One more significant predictor of lies was which pair of confederates interacted with participants  $F(34)=6.98, p=.001$ . However, post-hoc LSD tests revealed that this difference was driven primarily by one specific pairing (who had also interacted with only four participants, the fewest of any confederate pair). When either controlling for confederate pair in a multiple regression ( $\beta =-.307, t<1, p=.43$ ) or including confederate pair as a random variable in a linear mixed-effect model ( $\beta =-.06, t<1, p=.87$ ) the effect of year in college is no longer a significant predictor of lies. However, when factoring confederate pair as a random variable, the interaction between race and condition remains marginally significant,  $F(31)=1.77, p=.088$ . No model analyzing both confederate pair and gender of Confederate 2 was tested, as the two variables were closely linked.

## Discussion

The present study found little evidence to support the hypothesis that lying is influenced by descriptive norms. Being lied to did not significantly affect participants' willingness to lie in a new interaction. The effect of lying condition on the number of participants' lies in the second interview never reached even marginal significance. This demonstrates support for rejection of the descriptive norms theory of deception.

Although reciprocal lying was not tested, existing evidence for this theory indicates that people will lie to those who have lied to them. Because of concerns over statistical power, a reciprocity condition was not included in the present study. This hypothetical condition would

give the participant the chance to deceive Confederate 1 (the original liar). Although there is no way of knowing whether participants would have lied more if Confederate 1 had been the interviewer, given the lack of evidence for descriptive norms, the existing explanation of reciprocity norms provides the best reasoning for the results found.

There was a marginally significant interaction between race and condition that provides support for the importance of descriptive norms, even if that effect operates inversely among different groups. However, this finding does not provide particularly strong evidence, practically or statistically. Although I chose to collapse race into a binary white/non-white variable, it was not made lightly and was based solely on necessity of statistical power. Treating race as binary denies meaningful differences between diverse, complex, and multifaceted groups and legitimizes damaging social concepts and structures. Binary representations of race reinforce the idea of racial polarization and opposition. It also limits the specificity and nuance of the finding, casting all non-white participants as a homogeneous and monolithic group, rather than making specific cultural predictions. Additionally, this finding may be the product of alpha inflation. Multiple post-hoc tests were run, resulting in a Bonferroni adjustment requiring an alpha of .0042. Because all comparisons besides the test between lie and non-lie conditions were purely exploratory, this already marginal effect is most likely due to chance. In light of these limiting factors, this is not sufficient evidence to overrule the existing reciprocal norms explanation.

Although the theory of lying as a descriptive norm was not supported, other independent variables significantly increased lying. Years of undergraduate education significantly increased the number of lies told to confederates. Previous research investigating age differences in lying has dealt either with detection of lies (Depaulo, Jordan, Irvine & Laser, 1982; Ruffman, Murray,

Halberstadt, & Vater, 2012) or is centered on the prepubescent age group (Greenglass, 1972). In the present experiment, the differences created by age could have more to do with the experimental situation. Common sense holds that older applicants have been in more job interviews. Perhaps in their experience, lying is an effective means of getting a job. As employers and interviewers often have ineffective strategies for detecting lies during interviews (Simonenko, 1999), it is likely that lying does work. Additionally, as older participants were beginning to have interviews with greater stakes, the situation could have been more real and important. This salience may have led them to use more effective, rather than more moral, methods of interviewing. Younger participants, who may have had interviews for minimum wage jobs rather than substantive positions, may not be using this experiment as a way to practice for interviews, where older students are using the opportunity to get ready for interviews that could land them a full-time position or competitive internship. This may lead older participants to interview in a more realistic way, which would include deception (Weiss & Feldman, 2006). Although there is some basis for interpreting this finding, it is important to remember that under the more stringent standards set for exploratory analyses by the Bonferroni adjustment, the influence of year would not be significant. It is valuable to attempt to explain these results but they could be due to chance rather than a true psychological effect.

The most surprising result of the present study was the greater number of lies told to female confederates as compared to male confederates. In Tyler et al.'s (2006) study, all confederates were male and therefore did not experience this issue. Although there is debate over whether mixed-gender interactions increase lying (DePaulo, Stone, & Lassiter, 1985; Glass, Gottman, & Shmurak, 1976; Leary et al., 1994) or have no effect (DePaulo et al., 1996; Feldman et al., 2002, Tyler & Feldman, 2004), the number of lies were no different when participant and

confederate genders were matched or mixed. Although women were lied to more often in this study, women are generally more confident in their ability to detect lies than to tell them (Sato & Nihei, 2008). It is possible that this finding may be the byproduct of male-dominated workplaces. Women are much less likely to hold supervisory positions (Mitra, 1993; Mintz & Krymkowski, 2010; Yaish & Steer, 2009) in the actual workforce. Perhaps the authenticity of the situation was somewhat lower for participants who were interviewed by women, who in turn did not feel as much guilt or danger in lying. Women are also less likely to have as much authority in the workplace (Alkadry & Tower, 2007). This could lead to more lying to women confederates because participants were less likely to feel like the interviewer had power to punish them for their lying in the job context. As discussed above, I must use caution when interpreting this finding. This test was merely exploratory and does not meet the significance thresholds mandated by more the restrictive standards of the Bonferroni correction.

One major challenge this study dealt with was lack of consistency across confederate pairs. Although I did my best to standardize what was said across each confederate and trial, differences were impossible to avoid. Whether these differences are related to individual tendencies of each confederate or more systematic reasons (i.e. gender of confederate) is difficult to discern due to the use of only four different confederate pairs with uneven numbers of participants for each pair. Due to time and participant constraints, practice trials were run only with other confederates instead of piloted with participants. This meant that confederates had no actual experience interacting with real participants when live trials began.

Another potential methodological flaw of the present study was the possible influence of experimenter bias. Because the experimenter was aware of which condition the participant was assigned to (as necessitated by the experimental design), there is the possibility that participants

were given non-verbal cues as to whether more lies were expected during the video review. Under ideal conditions, a condition-blind experimenter would have conducted the debriefing and video review with the participants. Due to lack of resources, the principal investigator filled this role in all experiments. However, this potential bias was not manifested in the results, as there was not significant differences based on condition.

Although a job interview situation was chosen to increase variability in the dependent variable of lies, it also limited the generalizability of the study. Because job interviews are such a specialized situation, it is possible that different rules for lying apply, such as inflating one's accomplishments and seeking to conform to what employers want in a candidate. Additionally, the job interview setting necessitates that all lies are told by strangers and to strangers. Perhaps norms created by acquaintances or friends are more powerful than those created by strangers, or in this case, quasi-competitors. This could be because people have no barometers for the acceptability of strangers' actions, whereas people can often assume their friends act generally within normal patterns of behavior.

Although this study did not find evidence for lying as the product of descriptive norms, there is still need for future research in this area. As stated above, both the unique situations of the job interview and the use of strangers in setting of norms may have impacted results. Research has shown that friends can be powerful generators of norms (Howland, Hunger, & Mann, 2012) and perhaps having somebody participants know and respect set norms may create more powerful behavior change. The use of lies as descriptive norms should also be tested in other settings, such as first impression situations, as seen in Tyler et al. (2006), or in more pragmatic areas of lying for college undergraduates, such as cheating on tests.

I did not predict the significant relationship between lying and years of college experience, but this finding provides interesting ground for future job interview research. This research is of practical importance, as applicants who are not as qualified as they made themselves out to be may be overwhelmed when beginning a new job. If lying in job interviews increases as experience with the job market increases, something that students experience could be teaching them that lying works as a job interview tactic. This demonstrates what employers value and what practical considerations go into deception.

The surprising finding of women being lied to more often than men should also be investigated further. Previous research has only briefly touched on how the gender of the deceiver influences lying (Marchewka et al., 2012), but none has investigated how the gender of the potentially deceived affects lying behavior outside of mixed-gender and dating situations (DePaulo et al., 1996; DePaulo, Stone, & Lassiter, 1985; Feldman et al., 2002; Glass, Gottman, & Shmurak, 1976; Leary et al., 1994; Tyler & Feldman, 2004). More research on the nature of lying to authority figures and the differences in perceived authority between genders would allow for the discovery of the mechanisms behind the results found in the present study.

Although this study did not find support for the theory of descriptive norms or strengthen the evidence for reciprocal norms in regards to deception, it did create new avenues for research in other areas. Further experimentation in the nature of reciprocal lying norms, the effect of experience in job interview deception, and the gender of the deceived in lying may all yield interesting findings that broaden the scientific understanding of deceit.

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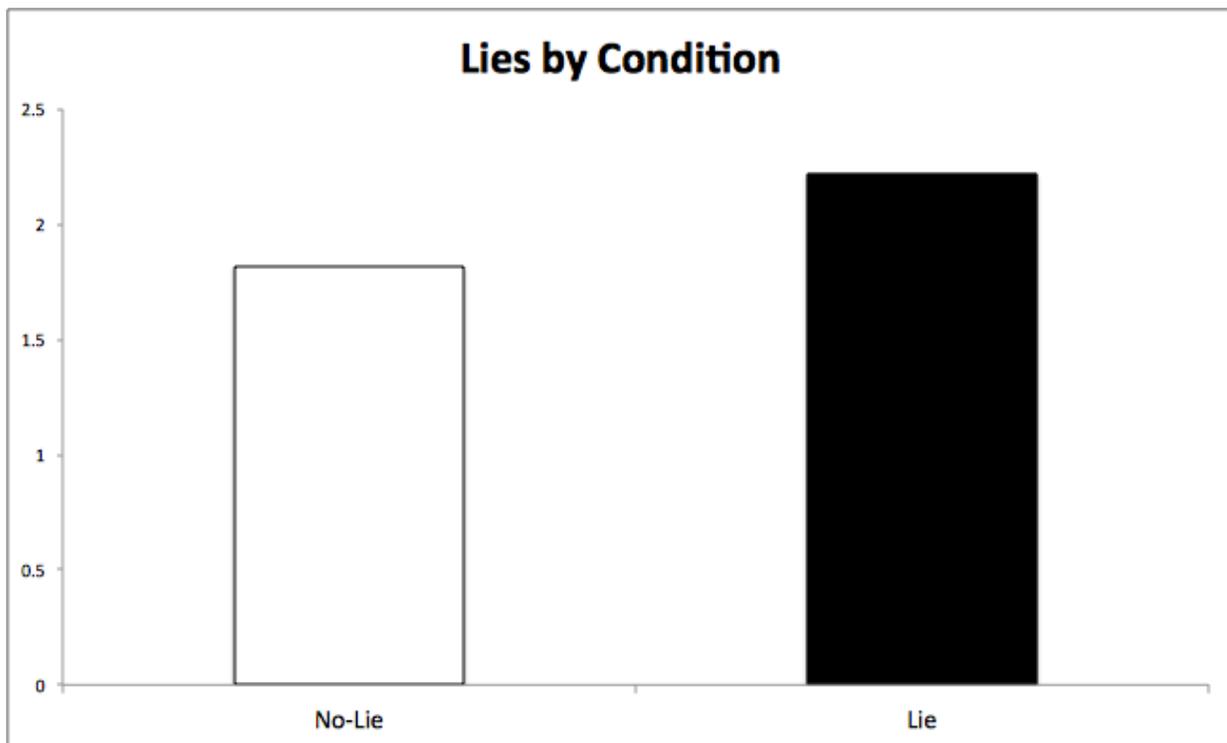
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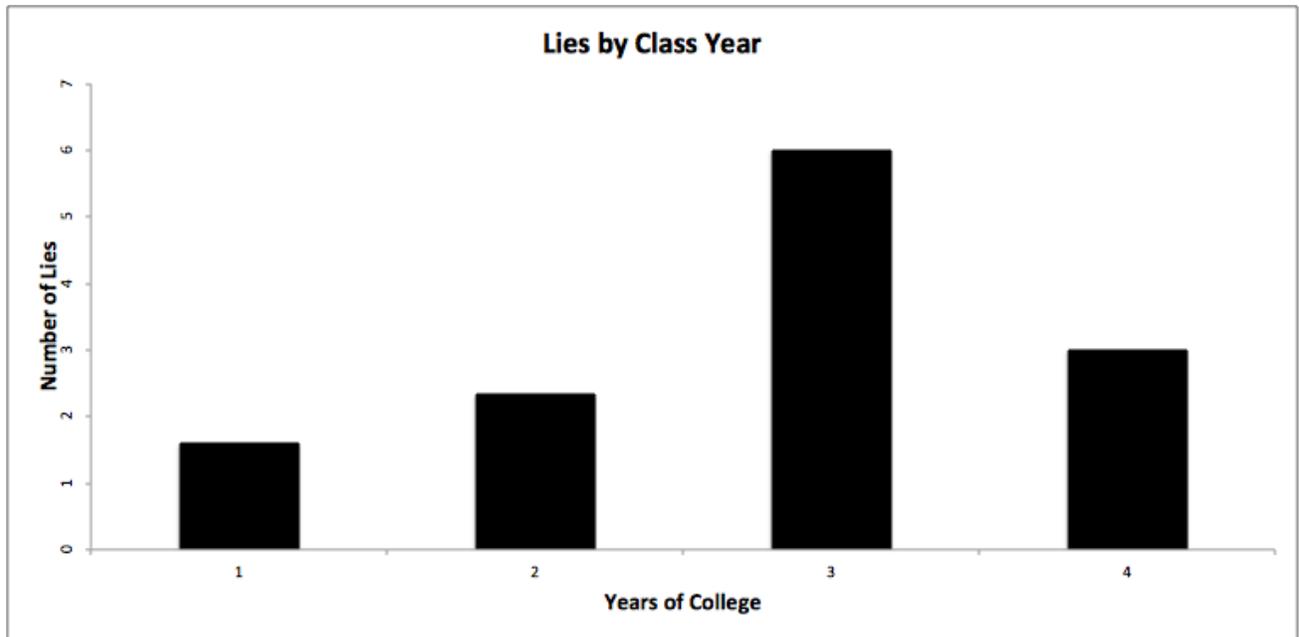
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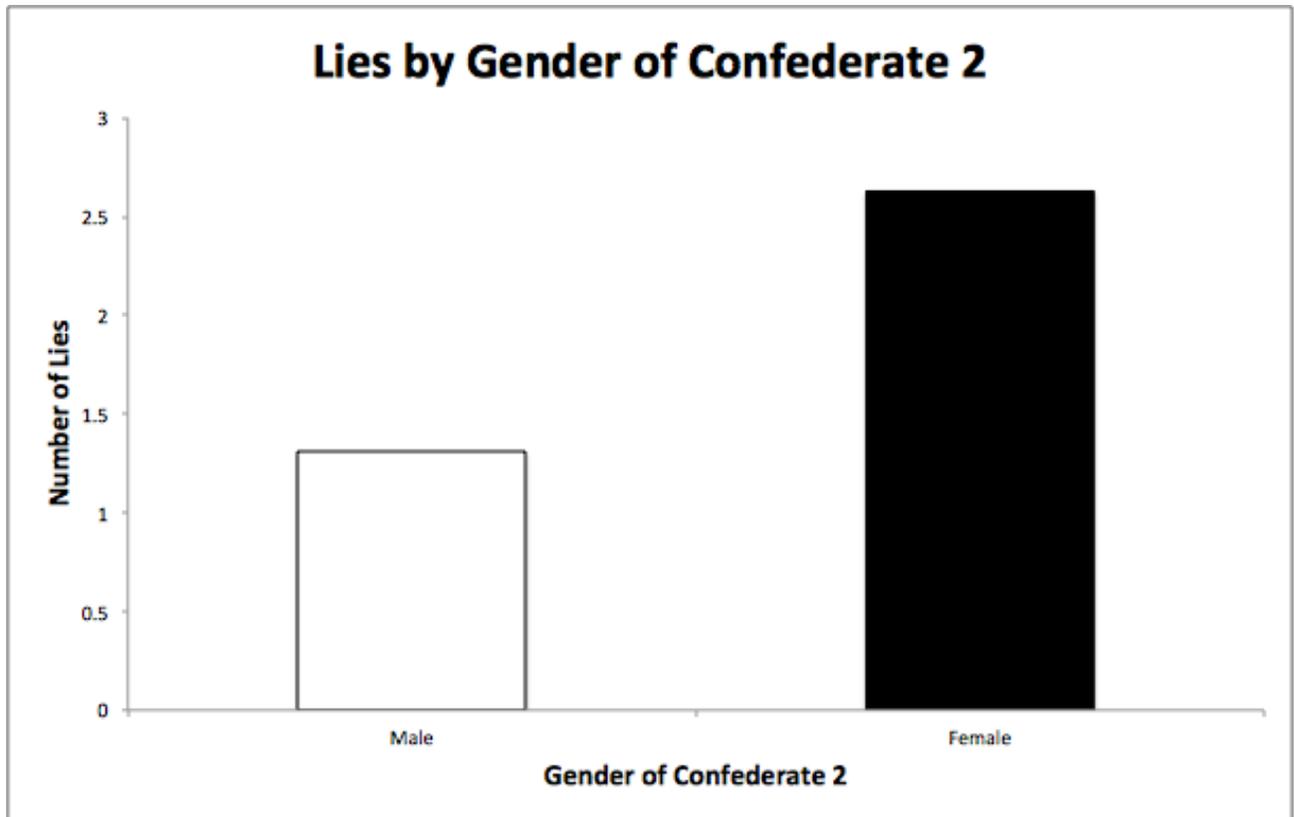
*Figure 1.* Differences in lies told to Confederate 2 in the second interview by condition.

There is no significant difference between conditions.



*Figure 2.* Differences in lies told to Confederate 2 in the second interview by year in college.

Lies increased significantly as years of college increased.



*Figure 3.* Differences in lies told to Confederate 2 in the second interview by gender of Confederate 2. Women were told significantly more lies than men.

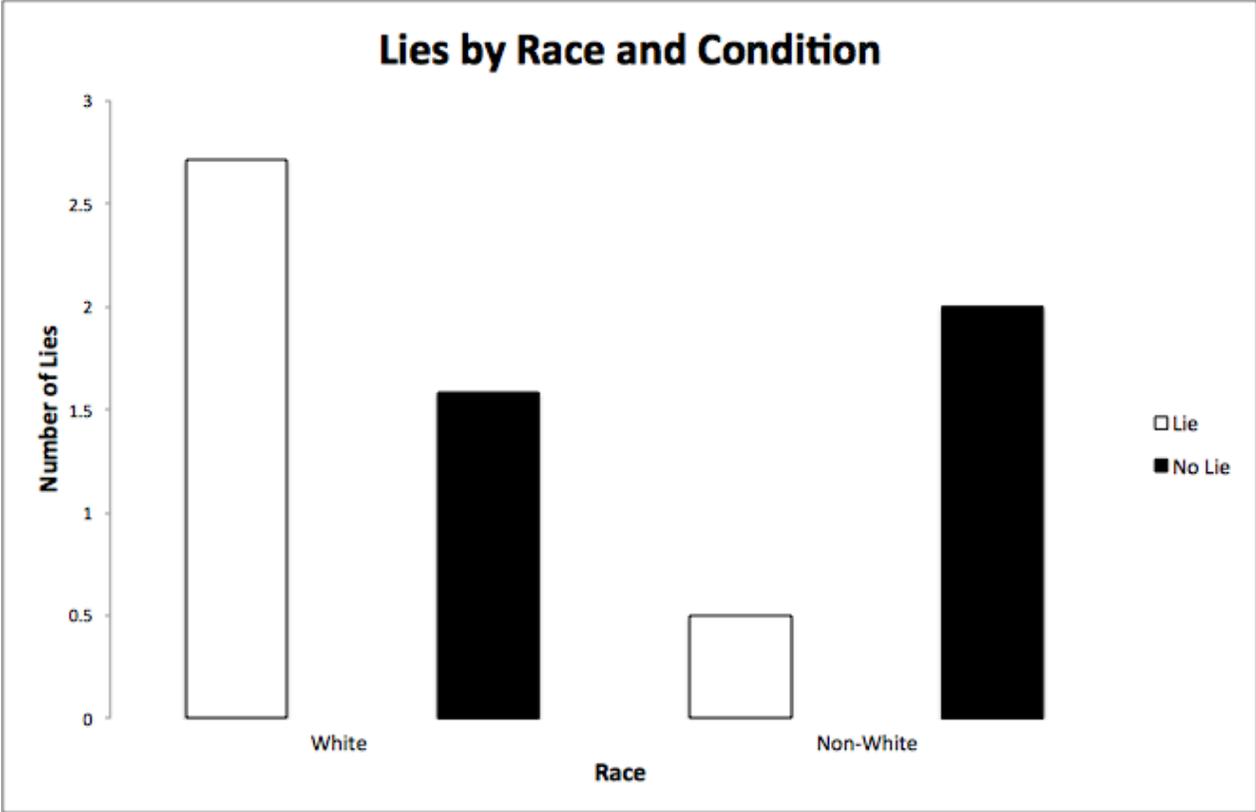


Figure 4. Differences in lies told to Confederate 2 in the second interview by race and condition. There was a marginally significant interaction between the two variables.

*Appendix A.* The description of the hypothetical internship given to participants

You will be applying for a paid internship at a small Twin Cities non-profit. Most of the work you will be doing involves fundraising and marketing, including the use of social media. No experience is needed, but it is recommended. Requirements include strong communication skills, ability to work independently, and familiarity with Microsoft Word and Excel.

*Appendix B:* The mock job application filled out by participants.

## Application for Employment:

Subject #:

Previous work experience:

Employer:

Title:

Wage:

Duties:

Employer:

Title:

Wage:

Duties:

Employer:

Title:

Wage:

Duties:

Skills and Honors:

Please describe how you can be an asset to this company:

Score: /10

*Appendix C.* The interview form used by participants both to interview Confederate 1, and were interviewed with by Confederate 2

## **Interview Form**

### **Subject #:**

Please describe your previous employment:

What specific skills would you bring to the company?

How do you think this previous experience prepares you for this job?

Why would you be an asset to this company?

**Score: /10**