

2007

# Expectancy confirmation effects: accumulation and moderation by social interaction

Ashley Arden Buller  
*Iowa State University*

Follow this and additional works at: <http://lib.dr.iastate.edu/rtd>



Part of the [Social Psychology Commons](#), and the [Social Psychology and Interaction Commons](#)

---

## Recommended Citation

Buller, Ashley Arden, "Expectancy confirmation effects: accumulation and moderation by social interaction" (2007). *Retrospective Theses and Dissertations*. 15111.

<http://lib.dr.iastate.edu/rtd/15111>

This Thesis is brought to you for free and open access by Iowa State University Digital Repository. It has been accepted for inclusion in Retrospective Theses and Dissertations by an authorized administrator of Iowa State University Digital Repository. For more information, please contact [digirep@iastate.edu](mailto:digirep@iastate.edu).

**Expectancy confirmation effects: Accumulation and moderation by social interaction**

by

**Ashley Arden Buller**

A thesis submitted to the graduate faculty  
in partial fulfillment of the requirements for the degree of  
MASTER OF SCIENCE

Major: Psychology

Program of Study Committee:  
Stephanie Madon, Major Professor  
Susan Cross  
Larry Ebbers

Iowa State University

Ames, Iowa

2007

Copyright © Ashley Arden Buller, 2007. All rights reserved.

UMI Number: 1447475



---

UMI Microform 1447475

Copyright 2008 by ProQuest Information and Learning Company.  
All rights reserved. This microform edition is protected against  
unauthorized copying under Title 17, United States Code.

---

ProQuest Information and Learning Company  
300 North Zeeb Road  
P.O. Box 1346  
Ann Arbor, MI 48106-1346

## TABLE OF CONTENTS

Abstract	iii
Chapter I: The Confirmation of Expectancies	1
Chapter II: The Power of Expectancy Confirmation Processes	6
Chapter III: Conceptual Overview and Hypotheses	13
Chapter IV: Methods	17
Chapter V: Results	26
Chapter VI: Discussion	34
References	41
Appendices	47

## Abstract

The confirmation of expectancies may result in either a self-fulfilling prophecy or perceptual bias, altering social reality. Both experimental and naturalistic findings give support for expectancy confirmation processes, but effects are typically small. The current research investigates one way in which expectancy confirmation processes may become more powerful – through the accumulation of expectancy effects across perceivers. It also investigates an implicit question found in the expectancy confirmation literature that these effects may be highly pervasive and have the potential to accumulate across perceivers who share similar false expectancies, but do not have contact with one another. There were two perceivers and one target in each group of participants for a total of 114 groups. Perceivers were induced with either a hostile or non-hostile expectancy and then interacted with targets in a discussion task. Results failed to support either a self-fulfilling prophecy or perceptual bias; therefore analyses testing for the accumulation of expectancy effects across perceivers were not performed. Failure to find effects may have been due to social norms that conflicted with the hostile expectancy, but other paradigms may be more conducive for finding the accumulation of expectancy confirmation processes.

## Chapter I: The Confirmation of Expectancies

Since the *New Look in Perception*, the study of social psychology has focused on the notion that social reality is constructed by individuals' views of their social worlds (Klein & Snyder, 2003; Miller & Turnbull, 1986; Snyder & Stukas, 1999). Researchers of this theoretical tradition asserted that people's perceptions of their environment are biased by their goals, needs, fears and expectancies. These biases have the potential to influence not only the perceiver, but also the perceived, which may result in the confirmation of expectancies. The confirmation of expectancies can result in changes in either objective reality through a self-fulfilling prophecy, or changes in the perception of objective reality through a perceptual bias (Jussim, 1991). These confirmation expectancy processes are of interest to social scientists because of their potential to generate and perpetuate social problems (Merton, 1948; Rosenthal, 1973, 1994). For example, Merton (1948) originally conceptualized the self-fulfilling prophecy as a contributor to social problems such as racial prejudice and discrimination in education and the workplace and economic recessions.

This thesis includes six chapters that discuss expectancy confirmation effects. This first chapter describes the self-fulfilling prophecy and perceptual bias processes and then reviews the empirical literature pertaining to each. The second chapter discusses the power of expectancy confirmation effects and examines four moderators of these effects that produce relatively greater power, including the pervasiveness of accumulation effects across perceivers. The third chapter provides a conceptual overview of the methods and hypotheses used in this research, followed by a more detailed description of the methods in chapter four. The fifth chapter discusses the results of the analyses and the sixth chapter gives a general discussion of the findings.

### *Self-fulfilling Prophecies*

A self-fulfilling prophecy occurs when an individual (the perceiver) holds an inaccurate expectancy about someone else (the target) that is behaviorally confirmed by the target, thereby changing objective reality. There are three stages of a self-fulfilling prophecy: 1) the perceiver develops a false expectancy about the target, 2) the perceiver treats the target in a way that is consistent with that expectancy, constraining the target's behavior, and 3) the target confirms the perceiver's inaccurate expectancy by behaving in a manner consistent

with it (Darley & Fazio, 1980). For example, a mother may falsely expect that her child is likely to improve his or her academic performance. The mother may then treat her child in a manner consistent with her false expectancy. She may enroll her child in tutoring and extracurricular activities, keep track of her child's time after school, monitor who her child is friends with, and provide a supportive home environment. These actions may constrain the child's behavior in such a way as to elicit behavior consistent with the originally false expectancy, thereby making it come true. In this example, therefore, the child's behavior changed because of a self-fulfilling prophecy – the mother's false expectancy initiated a sequence of interactions that caused the child to behaviorally confirm her initially false expectancy.

### *Perceptual Biases*

A perceptual bias refers to a situation in which the perceiver believes that an inaccurate expectancy has been confirmed, but the behavior of the target has not actually confirmed the expectancy (Neuberg, 1989; Snyder & Haugen, 1995). In other words, a perceptual bias occurs when the perceiver's inaccurate expectancy biases his or her subsequent perceptions of the target in such a way that the perceiver believes that the target has confirmed the expectancy to a greater extent than the target actually has. These biases may be the result of the perceiver's efforts to reinterpret, remember, or explain the target's behavior in a way that is consistent with his or her inaccurate expectancy (Jussim, Eccles & Madon, 1996). For example, a mother who expects her child to improve academically may interpret her child's behavior as confirming her expectancy even though the child's performance has not changed in reality.

### *Empirical Evidence*

Research on the confirmation of expectancy processes has relied on two methodologies –experimental and naturalistic. In experimental studies, researchers lead perceivers to hold false expectancies about targets and then test whether those expectancies cause targets to behave in expectancy-consistent ways. In naturalistic studies, researchers assess the expectancy that perceivers naturally hold about targets and then test whether their expectancies have a positive association with targets' later behavior after taking into account valid predictors of that behavior. Both methods have yielded findings that strongly support

the confirmation of expectancies through self-fulfilling prophecies and perceptual biases across a wide array of contexts and outcomes. For example, confirmation effects have been found in classrooms (Brattesani, Weinstein, & Marshall, 1984; Jussim, 1989; Jussim & Eccles, 1992; Rosenthal & Jacobson, 1968; Smith et al., 1998; West & Anderson, 1976), between family members (Madon, Guyll, Spoth & Willard, 2004; Madon, Guyll, Spoth, Cross, & Hilbert, 2003; Madon, Willard, Guyll, Trudeau, & Spoth, 2006), in laboratories (Harris, Lightner & Manolis, 1998; Snyder & Haugen, 1994, 1995; Swann & Ely, 1984; Willard, 2006), and with expectancies that are based on target's personal characteristics (Copeland, 1994, Neuberg, 1989, Snyder & Swann, 1978a, 1978b) or based on social stereotypes (Skrypnek & Snyder, 1982; Snyder, Tanke, & Berscheid, 1977; Word, Zanna & Cooper, 1974). These findings provide convergent evidence in support of the idea that people's expectancies influence not only the behavior of other individuals in their circle of influence, but also their own perceptions of the behavior of those individuals (for reviews, see Miller & Turnbull, 1986; Rosenthal, 2002; Rosenthal & Rubin, 1978; Snyder & Stukas, 1999).

A classic illustration of expectancy confirmation processes is Rosenthal and Jacobson's (1968) Pygmalion study examining the influence of teachers' expectancies on students' IQ. Students took a standard IQ test that teachers were told was able to assess the children's likelihood of substantially increasing their IQs. Researchers randomly labeled some students as "late bloomers" and then induced in these students' teachers the expectancy that they would have substantial gains in their IQs over the academic year. In reality, the "late-bloomers" were no more likely to improve than other students in the class because they were randomly selected by the experimenters; it was only the teachers' beliefs about the students that made them different. At the end of the year the "late-bloomers" nonetheless showed greater increases in their IQs. These results support the occurrence of a self-fulfilling prophecy because they show that the teachers' false expectancies influenced the students' subsequent IQ scores, making the expectancy come true. In addition, teachers reported their perceptions of their students' behavior at the end of the year. Students labeled as "late bloomers" were regarded as more interesting, more curious, more appealing, better adjusted, and more autonomous than the other students. These results show that the teachers'



perceptions of the late-bloomers were influenced by their originally false expectancies, a finding consistent with a perceptual bias. This pattern of findings has been shown in hundreds of other studies, some experimental, some correlational, across a variety of settings and paradigms (Rosenthal, 2002; Rosenthal & Rubin, 1978; Snyder & Stukas, 1999).

### *Mediation*

Central to the expectancy confirmation process are the mechanisms through which expectancies are communicated to targets. However researchers studying the mediation of expectancy confirmation processes have not yet developed a coherent, meaningful theory that organizes the mediating behaviors and explains how the mediators fit into the expectancy process (Harris, 1993). One reason for the lack of an integrative theory is that the behaviors of perceivers towards targets vary by context; therefore the mediating mechanisms are also very likely to vary by context (Harris, 1993). However, the vast amount of research on mediation does offer some broad behavioral dimensions that might vary across contexts.

There have been three notable frameworks used to understand the mediators that operate within different contexts. Rosenthal (1973) delineated four factors that mediate expectancy confirmation processes in the context of student-teacher interactions. The four factors include the socio-emotional climate of the interaction, differential feedback given to students, how much material is taught to students, and how many opportunities students are given to respond or practice their skills. Using several meta-analyses, Harris and Rosenthal found that the four factors are highly correlated, yet distinguishable (Harris & Rosenthal, 1985, 1986). Extending his work on teacher-student relations, Rosenthal's (1989) affect-effort theory argued that teachers' affect towards students is vital for motivating students to perform, but ultimately the amount of information that the students can learn is limited by the effort put forth by the teacher to instruct them. Affect is considered primarily a nonverbal category of mediators, whereas effort encompasses mediators using verbal channels. Harris (1993) expanded this work by developing a theoretical taxonomy of mediators involved in expectancy confirmation processes. She discussed several different expectancy situations, including getting acquainted, dating, home life, child care, the workplace, consumer exchange, medical and institutional settings, psychotherapy, classrooms, courtrooms, and behavioral research, each one with its own set of potential mediators. Although most of the

mediators in the taxonomy have yet to be empirically investigated, the taxonomy provides an organizational structure that enables researchers to investigate these mechanisms and to further the knowledge of mediation of expectancy confirmation processes.

Even though these frameworks focus on different contexts, the overarching concept that connects them is that mediators can be categorized as verbal or non-verbal. Non-verbal mediators include variables like eye contact, smiling, interpersonal distance, leaning, physical affection, and touch. Non-verbal mediators have been shown to be persistent across diverse settings. Within the classroom, for example, it has been shown that teachers communicated expectancies to students through facial expressions, head nods, eye contact, and leaning (Chaikin, Sigler, & Derlega, 1974). Likewise, in the laboratory it has been shown that interviewers communicate expectancies to applicants by increasing the interpersonal distance between themselves and applicants they viewed unfavorably (Word, Zanna, & Cooper, 1974). Verbal mediators include tone of voice, praise, criticism, choice of conversation topic, sarcasm, encouragement, and number and type of questions asked. Evidence of verbal mediators has also been found across contexts. For example, both Snyder and Swann's (1978b) study manipulating introversion and extraversion and Willard's (2006) study on hostility found mediation through the type of questions that were selected by perceivers to ask targets in a discussion task. The distinction between non-verbal and verbal mediators is hopefully a useful one that will facilitate further research on the mediation of expectancy confirmation effects.

## Chapter II: The Power of Expectancy Confirmation Processes

Expectancy confirmation effects have historically been portrayed as powerful (Darley & Fazio, 1980; Merton, 1948; Miller & Turnbull, 1986; Rosenthal & Jacobson, 1968). But thus far empirical evidence has not supported that assertion (Jussim, 1991; Jussim & Eccles, 1992; Jussim, Eccles & Madon., 1996; Madon, Jussim & Eccles, 1997). Naturalistic studies have found that expectancy effects are typically in the neighborhood of .1 to .2 in terms of standardized regression coefficients (Jussim, 1991). The magnitude of experimental expectancy effects is similar, with average effects around .3 in terms of a correlation coefficient (Rosenthal, 2002, Rosenthal & Rubin, 1978). These findings have lead researchers to consider possible moderators which could cause expectancy confirmation effects to become more powerful. The following sections describe moderators of expectancy confirmation processes.

### *Situational Characteristics*

Researchers have looked at a variety of situational factors that increase the power of expectancy confirmation effects. For example, the length of the interaction between targets and perceivers has been shown to moderate the strength of expectancy confirmation processes (Cooper & Hazelrigg, 1988). It is possible that as individuals interact for longer periods of time, the more subtle communication methods and non-verbal signals become more understandable. Perceivers' awareness of their power has also been shown to be a stronger predictor of expectancy confirmation than the targets' awareness of the perceivers' power; in other words, the knowledge of the perceivers' power affects the perceivers' perceptions directly, which may then affect the targets' behavioral confirmation indirectly through the perceiver (Harris, Lightner, & Magnolis, 1998). In addition, when perceivers have a high level of confidence in the validity of their expectancies, self-fulfilling prophecies and perceptual biases are more likely to occur (Swann & Ely, 1984). On the other hand, expectancy effects are not as likely to occur when perceivers are motivated to get along with targets (Neuberg, Judice, Virdin, & Carrillo, 1993).

### *Valence of Perceiver Expectancies*

A second way expectancy confirmation processes may be moderated is by the valence or favorableness of the expectancy. Research addressing expectancy valence as a moderator

has focused exclusively on self-fulfilling prophecies. The central question addressed by this research is whether self-fulfilling prophecies have primarily helpful or harmful effects on targets' behaviors and outcomes. Positive self-fulfilling prophecies are more powerful than negative ones when perceivers' false expectancies help targets more than they harm them. Negative self-fulfilling prophecies are more powerful than positive ones when perceivers' false expectancies harm targets more than they help them. Much of the work addressing expectancy valence as a moderator of self-fulfilling prophecy effects has been theoretical, hypothesizing that negatively valenced expectancies are the most powerful (Babad, Inbar & Rosenthal, 1982; Brophy, 1983; Merton, 1948). However, empirical work has yielded mixed results (for reviews, see Jussim, Palumbo, Chatman, Madon, & Smith, 2000; Snyder & Stukas, 1999). Early work found that unfavorable expectancies had stronger self-fulfilling prophecy effects than favorable expectancies, suggesting that negative self-fulfilling prophecies are more powerful than positive ones (Babad, Inbar & Rosenthal, 1982; Sutherland & Goldschmid, 1974). In contrast, more recent work has found that favorable expectancies had stronger effects than unfavorable expectancies, suggesting that positive self-fulfilling prophecies are more powerful than negative ones (Madon, Jussim & Eccles, 1997; Madon et al., 2003). Considering these conflicting findings, it is apparent that more research is needed to determine whether favorable or unfavorable expectancies have stronger self-fulfilling effects.

Regarding perceptual bias effects, there has not been any empirical work investigating differences in valence of expectancy, yet there is evidence suggesting that individuals are more influenced by negative information (for a review, see Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). For example, negative impressions and stereotypes are quicker to form and more resistant to disconfirmation than favorable impressions and stereotypes. Additionally, it has been shown that individuals give more attention to negative information than they do to positive information (Abele, 1985; Graziano, Brothern & Berscheid, 1980), and they regard negative information to be more useful than positive information (Kanouse & Hanson, 1971). These findings suggest that when confronted with an unfavorable expectancy, perceivers may be more likely to believe that targets have confirmed their expectancy than if they had initially held a favorable expectancy.

*Accumulation Processes*

A third way that expectancy confirmation effects may become more powerful is through accumulation processes. There are two general classes of accumulation – accumulation that occurs over time and accumulation that occurs across perceivers (Jussim, Eccles & Madon, 1996; Madon et al., 2004, 2006). To date, almost all of the literature addressing accumulation has focused on the accumulation of self-fulfilling prophecy effects, with the exception of one recent study looking at the accumulation of perceptual bias effects (Willard, 2006). The following sections summarize the current knowledge pertaining to accumulation processes and conclude with a discussion of their pervasiveness.

*Accumulation over time.* Accumulation over time occurs when the influence of a perceiver's false expectancy becomes stronger as time progresses. For example, a mother who has a self-fulfilling influence on her child's drinking behavior in the seventh grade may have an even stronger effect when her child goes on to the eighth grade, and even stronger in high school.

To date, only five studies have tested the accumulation of self-fulfilling prophecy effects over time and the findings of these studies is mixed (Jussim, Eccles & Madon, 1996; Madon et al., 2006; Rosenthal & Jacobson, 1968; Smith, Jussim & Eccles, 1999; West & Anderson, 1976). Whereas some found that self-fulfilling effects weakened over time, others found that self-fulfilling prophecy effects remained stable over time, and still others found that self-fulfilling prophecy effects accumulated over time. Although these mixed findings preclude any strong statements regarding the accumulation of self-fulfilling prophecy effects over time, it is worthwhile to note that when accumulation was found, it only occurred when the perceiver and target interacted on a regular basis. For example, Rosenthal and Jacobson (1968) found that teachers' self-fulfilling effects on their students' IQ accumulated within a single academic year and Madon et al. (2006) found that mothers' self-fulfilling effects on their children's alcohol use accumulated across adolescence. Accumulation was never found when perceivers and targets did not regularly interact. These findings underscore the important role of social interaction in the self-fulfilling prophecy process and suggest that self-fulfilling prophecies may not accumulate over time if social interaction between perceiver and target is not enduring.

There has not been any research investigating the accumulation of perceptual biases over time. However it is reasonable to hypothesize that perceptual biases, like self-fulfilling prophecies, may also accumulate over time. Because memory is biased towards expectancy consistent information, over time supportive evidence may accumulate in memory, while evidence contrary to the expectancy may dissipate or be forgotten altogether. If these types of memory biases occur routinely, then perceivers may increasingly gain greater confidence in their false perceptions as time progresses. That is, each additional piece of supporting evidence may be taken into account, but information inconsistent with the expectancy may be ignored, leading to cumulative perceptual biases.

*Accumulation across perceivers.* Expectancy confirmation effects may also accumulate across perceivers. Accumulation of self-fulfilling prophecies across perceivers occurs when multiple perceivers hold the same false expectancy about a target and the perceivers' self-fulfilling effects have a combined influence on the target that is larger than any of their individual effects. Consider a situation in which a minority applicant is confronted with a panel of interviewers, all holding the same inaccurate expectancy due to a stereotype about the applicant's minority group. It is possible that the self-fulfilling effects of the interviewers may combine to have a larger aggregate effect on the applicant's behavior than any one interviewer would have individually.

A corresponding process of accumulation can occur with respect to perceptual biases. Specifically, when multiple perceivers hold the same false expectancy about a target, the perceivers' combined perceptual biases can be larger than any of their individual perceptual biases. The interview scenario would be an example of the accumulation of perceptual biases if the interviewers came away from the interview even more convinced of their false expectancies than they would have been if they had interviewed the applicant alone. Accumulation across perceivers can occur through two distinct processes – concurrent and synergistic accumulation.

Concurrent accumulation is an additive process. Self-fulfilling prophecy effects can accumulate in a concurrent manner when the similar expectancies of multiple perceivers have a greater effect on targets' outcomes in combination than do any of their individual expectancies alone (Jussim, Eccles & Madon, 1996). Perceptual biases can accumulate in a

concurrent manner when the similar expectancies of multiple perceivers have a greater effect in combination on each perceiver's subsequent perceptions of the target than do any of their individual expectancies alone. A concurrent accumulation hypothesis would be supported if the total self-fulfilling influence of several perceivers exceeds any single perceiver's self-fulfilling influence.

Although there is no empirical research supporting the concurrent accumulation of self-fulfilling prophecies, one recent study has found support for the concurrent accumulation of perceptual biases (Willard, 2006). In this study, two perceivers interacted with the same target. Perceivers' expectancies of the target's personality were manipulated prior to the interaction such that one-third of the time both perceivers expected the target to be hostile, one-third of the time neither perceiver expected the target to be hostile, and one-third of the time one perceiver expected the target to be hostile whereas the other did not. The results indicated that following the interaction, perceivers judged the target as the most hostile when both perceivers held a hostile expectation for the target at the outset. This pattern occurred even though the target's level of hostility before and during the interaction did not vary across conditions. These results are consistent with the concurrent accumulation of perceptual bias hypothesis in that the effects of multiple perceivers' similar expectancies accumulated to create a combined perceptual bias that was greater than the perceptual bias of either individual perceiver.

Synergistic accumulation occurs when the combined expectancy effect of multiple perceivers is larger than the sum of the perceivers' individual expectancy effects (Madon et al., 2004). In other words, one perceiver's expectancy has a stronger effect on either the target's behavior or the perceiver's subsequent perceptions of the target when another perceiver has a similar expectancy about the same target. One longitudinal study investigating the self-fulfilling influence of parents' expectancies on children's alcohol use has shown support for the synergistic accumulation process (Madon et al., 2004). Mothers' and fathers' expectancies of their child's alcohol use were assessed along with valid predictors of the child's alcohol use. The children's actual alcohol use was re-assessed twelve months later. Consistent with the synergistic accumulation hypothesis, the predicted increase in children's alcohol use was greatest when both mothers and fathers held unfavorable

expectancies about their children's alcohol use. Results did not support synergistic accumulation effects for favorable expectancies. When mothers and fathers both held favorable expectancies about their children's alcohol use, the predicted increase in children's later alcohol use was similar regardless whether one parent or both held favorable expectancies about their children's alcohol use. These results suggest that the self-fulfilling effects of unfavorable expectancies accumulate across perceivers, but the effects of favorable expectancies do not.

Although Madon et al.'s (2004) findings support the synergistic accumulation hypothesis for unfavorable expectancies, it was a correlational study. As such, it is susceptible to the interpretation that a relevant third variable was excluded from the analytic model. If that occurred, then Madon et al.'s findings showing that mothers' and fathers' self-fulfilling prophecy effects accumulated may have been due to perceptual accuracy. That is, the analytic model may have overestimated the magnitude of the mothers' and fathers' cumulative self-fulfilling effects by virtue of omitting a valid predictor of children's alcohol use that parents used to form their expectancies. Madon and colleagues made a strong argument against that interpretation, but the only definitive way to rule out perceptual accuracy as an alternative to a self-fulfilling prophecy interpretation is to manipulate perceivers' expectancies experimentally.

#### *Pervasiveness of Accumulation*

An implicit assumption underlying virtually all theoretical discussions of the accumulation of expectancy confirmation processes is that such effects are pervasive. The social constructivist view, for instance, hypothesizes that large-scale social problems such as bank runs, discriminatory policies, and the confirmation of negative stereotypes result from the combined self-fulfilling influence of many different perceivers' false beliefs (Merton, 1948). In order for cumulative expectancy processes to create social problems of this scale, however, it must be (and is) assumed that the individual perceivers involved have little or no social interaction with one another. Indeed, if expectancy effects only accumulate across perceivers who interact with one another, then accumulation processes would be restricted to a handful of perceivers who interact with one another and both interact with the target in question – a situation that would not be conducive to creating large-scale social problems. On



the other hand, if expectancy effects can accumulate across perceivers who have no social interaction with one other, then there is the potential for a large number of perceivers' self-fulfilling effects to combine, ultimately leading to the very types of social problems that the social constructivist view hypothesizes expectancy processes can create. Although the assumption that social interaction between perceivers is not necessary for cumulative expectancy effects to emerge, the pervasiveness hypothesis has not been empirically addressed in the literature. Accordingly, in this research, I examined whether social interaction between perceivers moderated the extent to which their individual self-fulfilling or perceptual bias effects accumulated.

### Chapter III: Conceptual Overview and Hypotheses

#### *Conceptual Overview*

The current study experimentally tested the accumulation of expectancy confirmation processes across perceivers using a modified version of a paradigm developed by Snyder and Swann (1978b). In Snyder and Swann's study, perceivers were given a fictitious profile of a target that served to manipulate their expectancy about the target's level of introversion/extraversion. Following the induction of the expectancy, each perceiver engaged in a discussion task with the target during which time they asked the target several pre-developed questions. The questions were designed to elicit either an extraverted or introverted response. The perceiver was told to evaluate whether the target's behavior matched the information given in the profile. Results showed that those perceivers who were given an extravert expectancy were more likely to choose extravert-oriented questions to ask during the discussion task, whereas those given the introvert expectancy chose more introvert-oriented questions. Following the discussion task, objective observers rated the targets' behavior as a way to assess whether a self-fulfilling prophecy occurred, and perceivers rated the target's behavior as a way to assess whether perceptual biases had occurred. Results showed that targets labeled as extraverts were rated by both objective observers and perceivers as being more extraverted than targets labeled as introverts. The questions asked by the perceivers functioned as the mediating mechanism through which the expectancy was conveyed to the target, leading to a self-fulfilling prophecy. The questions also functioned as the mediating mechanism through which the expectancy was confirmed in the mind of the perceiver, leading to a perceptual bias.

Research has shown that when testing a hypothesis, perceivers will often use a strategy that is biased towards confirming their expectancies (Snyder, Campbell, & Preston, 1982; Snyder & White, 1981; Zuckerman, Knee, Hodgins, & Miyake, 1995). Perceivers may attend to information that confirms their beliefs and ignore contrary information, but also may choose leading questions that if answered affirmatively would confirm their beliefs. Conversely, perceivers may not ask questions that if answered affirmatively would disconfirm their beliefs. Since the questions asked will tend to be affirmatively answered,

this strategy may contribute to larger self-fulfilling prophecy effects in targets and larger perceptual biases in perceivers.

### *Overview*

This study tested two ideas. The overarching goal of this study was to test whether self-fulfilling prophecies and perceptual biases accumulate across perceivers. Because the current research tested for the accumulation of expectancy effects across people, it was necessary for there to be two perceivers who interacted with the same target. In addition, because previous research has shown that unfavorable expectancies are more likely to accumulate across people than favorable expectancies (Madon et al., 2004), the current research focused on the personality trait of hostility which is generally considered unfavorable. Despite the value of studying the accumulation of unfavorable expectancies, the hostile expectancy in particular raises a concern because it is not socially acceptable to treat someone in a hostile manner in most situations. To minimize the potential influence of socially desirable responding on perceivers' interaction behaviors, perceivers were physically separated from the target during the discussion task and all communication occurred over an intercom system. In addition to increasing the interpersonal distance between the perceivers and the target, this procedural aspect of the study eliminated any non-verbal communication of the perceivers that was not consistent with the induced expectancy. Because of the lack of non-verbal communication, the study of the mediation of these processes focused on the verbal aspects of the discussion task, specifically looking at the type of questions asked.

Second, this study tested how pervasive the accumulation of self-fulfilling prophecy and perceptual bias effects are by examining how social interaction between perceivers moderates these effects. If the expectancy effects of many perceivers can accumulate even when the perceivers never interact with one another, then these effects may be highly pervasive. To manipulate social interaction, half of the perceivers from each expectancy condition were randomly assigned to either pick discussion questions as a team or individually.

### *Hypotheses*

Several hypotheses were examined in this study using the target's mood and perceivers' perceptions of the target after the discussion task as the primary dependent

variables. There were six hypotheses – two pertaining to the accumulation of self-fulfilling prophecies, two pertaining to the accumulation of perceptual biases, one pertaining to the mediation of these processes, and one pertaining to the moderation of these processes by social interaction.

*Self-fulfilling prophecies.* First, I hypothesized that a self-fulfilling prophecy would occur such that perceivers' expectancies would shape the targets' behavior during the discussion task. Results would support a self-fulfilling prophecy if targets' self-reported hostility following the discussion task was higher when either both perceivers or one perceiver held a hostile expectancy than when neither perceiver held the hostile expectancy. Second, I hypothesized that self-fulfilling prophecy effects would accumulate across perceivers in a concurrent or synergistic manner. The concurrent accumulation of self-fulfilling prophecy effects would be supported if targets' self-reported hostility following the interaction was: a) higher when both perceivers held a hostile expectancy than when only one did and b) higher when one perceiver held a hostile expectancy than when neither perceiver did. Results would support synergistic accumulation of self-fulfilling prophecy effects if the difference between targets' self-reported hostility when both perceivers held the hostile expectancy versus when one perceiver held a hostile expectancy was greater than the difference between targets' self-reported hostility when one perceiver held a hostile expectancy versus when neither perceiver held a hostile expectancy.

*Perceptual biases.* Third, I hypothesized that a perceptual bias would occur such that perceivers' expectancies would influence their impressions of the target. Results would support a perceptual bias if the perceivers who held a hostile expectancy rated the targets as more hostile and less kind than the perceivers who did not hold a hostile expectancy after controlling for targets' actual hostility. Fourth, I hypothesized that perceptual biases would concurrently or synergistically accumulate across perceivers. Results would support concurrent accumulation of perceptual biases if perceivers' ratings of the targets' hostility and kindness following the interaction were: a) more negative when both perceivers held a hostile expectancy than when only one perceiver held a hostile expectancy and b) more negative when only one perceiver held a hostile expectancy than when neither perceiver held a hostile expectancy. Results would support synergistic accumulation of perceptual biases if

the difference between perceivers' ratings of the targets' hostility and kindness when both perceivers held a hostile expectancy versus when only one perceiver held a hostile expectancy was greater than the difference between perceivers' ratings of the targets when one perceiver held a hostile expectancy versus when neither perceiver held a hostile expectancy.

*Mediation and moderation.* Fifth, I hypothesized that the questions that perceivers chose to ask the target in the discussion task would mediate the relationship between their expectancies and targets' outcomes and the relationship between their expectancies and their perceptions of the targets. The mediation hypothesis would be supported if a significant amount of the variance in the targets' mood (self-fulfilling prophecy) or perceivers' impression of the targets' hostility and kindness (perceptual bias) was accounted for by the level of hostility of the questions asked beyond the variance accounted for by the number of perceivers who held a hostile expectancy. Finally, I hypothesized that social interaction would moderate the accumulation of self-fulfilling prophecies and perceptual biases. This hypothesis speaks to the pervasiveness of the processes because accumulation may only occur when perceivers have contact with one another. If expectancy confirmation processes can accumulate without social interaction, the process may be highly pervasive. The moderation hypothesis would be supported if the pattern or strength of accumulation of self-fulfilling prophecies and perceptual biases was different when there was social interaction between the perceivers than when there was no social interaction.

## Chapter IV: Methods

This research consisted of two preliminary studies and a main experiment. The preliminary studies were performed in order to identify questions to use in the discussion task in the main experiment. In the first preliminary study, perceivers induced with a hostile or no expectancy selected questions from a pool of questions to ask a target, and then rated the questions' interest and hostility. This study showed that questions labeled as hostile were chosen more frequently by perceivers' induced with a hostile expectancy and that the hostile questions were significantly more likely to elicit a hostile response than the non-hostile questions. In the second preliminary study, perceivers were given one of two versions of hypothetical feedback and were asked to choose which questions they would ask if they were going to participate in a discussion with the author of the feedback. This study allowed for the selection of additional questions for the main experiment. Each of these preliminary studies is discussed next.

### *Preliminary Study I*

#### *Participants*

Participants were 53 undergraduates who were enrolled in a psychology class at Iowa State University. There were 15 men (28%) and 38 women (72%) with a mean age of 19.5 years. Students earned credit in their psychology classes in exchange for their participation.

#### *Materials*

Forty questions were designed by experimenters. Of these, 20 were intended to elicit hostile responses and 20 were intended to elicit non-hostile responses (see Appendix A). These questions were designed to assess participants' beliefs, attitudes, and responses to different life situations. Packets containing half of the hostile and non-hostile questions in one of two random orders or reverse orders were assembled. The packets also contained two additional questionnaires. One of these questionnaires assessed participants' interview style. The purpose of this measure was to provide a cover story for the experiment. Participants answered 10 questions assessing different aspects of communication that are relevant to interview situations using a 5-point Likert scale with 1 (*Most of the Time*) and 5 (*Never*) as anchor points. The second additional questionnaire assessed how hostile and interesting participants perceived each question. The purpose of this measure was to ensure that the

hostile and non-hostile questions used in the main experiment were equal in terms of interest, but differed in terms of their likelihood of eliciting a hostile response. Participants rated all 40 questions in the pool on both of these dimensions using 7-point Likert scales with 1 (*not at all*) and 7 (*extremely*) as anchor points.

### *Procedure*

Participants were run in groups but completed all materials independently. Participants read and signed a consent form, completed demographic information, and randomly received one of the assembled packets. Participants were told that half of them would be assigned to be interviewers, and half would be assigned to be respondents, but in reality all participants were interviewers. The experimenter stated that the participants would interact with another person in the group and the person they would interact with would either be high or low on the measure of hostility that they were to complete. Participants received a profile that was used to manipulate participants' expectancies about the target (See Appendix B). The instructions on the profile stated that typically about a third of the people who take the Cook-Medley survey are classified as hostile, a third as neutral, and a third as friendly. The participants assigned to the hostile expectancy were told that they had been assigned to work with a respondent who was hostile, but the specific respondent they would work with would not be determined until after the hostility measure had been scored. Participants who were in the no expectancy condition were told that their task was to determine what personality type best describes the respondent they would work with. Participants then selected fourteen questions from the pool to ask the target in a bogus upcoming discussion task. Next they rated all of the questions in the pool on how interesting and hostile each question was. The participants were then debriefed. Questions that were never selected for the bogus discussion task and questions that were selected equally across the expectancy conditions were discarded.

### *Preliminary Study II*

#### *Participants*

Participants were 251 undergraduates who were enrolled in a psychology class at Iowa State University. Students earned credit in their psychology class in exchange for their participation

#### *Materials*

Eighty-eight questions were designed by experimenters. Of these, 44 were intended to elicit hostile responses and 44 were intended to elicit non-hostile responses (see Appendix C). These questions were designed to assess participants' beliefs, attitudes, and responses to different life situations. Half of the participants received a questionnaire with hostile essay feedback and half received a questionnaire with neutral essay feedback (See Appendix D).

#### *Procedure*

Participants were asked to imagine that they were participating in an experiment with two other participants. In this imaginary study, they had completed four steps. First they wrote a short essay on illegal music downloading. Second, they had read another participant's essay and had given feedback on it. Third, they were shown the feedback about an essay written by one of the other participants. Fourth, they were either given information about a hostility score of the author of the feedback or not. Then, participants were instructed to choose 15 questions they would ask during the discussion from the available 44 questions. Half of the questions were hostile, half were non-hostile. Participants then handed in their questionnaires and were debriefed. Questions that were rarely selected for the discussion task and questions that were selected equally across the expectancy conditions were discarded.

### *Main Experiment*

#### *Participants*

Participants were 342 undergraduates recruited from the Department of Psychology's Participant Research Pool at Iowa State University. There were 171 men and 171 women with a mean age of 19.8 years. Students earned credit in their psychology classes in exchange for their participation. Minors were not allowed to participate in the main experiment.



### *Design*

Participants were run in groups of three. Two participants in each group were randomly assigned to be perceivers and the third was randomly assigned to be targets. Each three-person group was randomly assigned to one of six conditions in a 3 (Hostile Expectancies: no vs. single vs. double) x 2 (Social Interaction: Yes vs. No) factorial design. In the no expectancy condition, neither perceiver received information about the target's hostility. In the single-hostile expectancy condition, one perceiver received bogus information that the target had a hostile personality whereas the other perceiver did not receive any information about the target's hostility. In the double-hostile expectancy condition both perceivers received bogus information that the target was hostile. Perceivers assigned to the social interaction condition collectively chose which questions to ask the target in the discussion task. Perceivers assigned to the no social interaction condition individually selected which questions to ask the target in the discussion task. Thus, this design manipulated three variables: the type of expectancy induced in perceivers (hostile vs. non-hostile), the similarity of perceivers' expectancies about the target (not similar vs. similar) and social interaction between perceivers (choosing questions together vs. choosing questions separately).

### *Expectancy Manipulation*

The expectancy was manipulated by feedback supposedly written by the target and a profile describing the target's supposed level of hostility.

*Feedback.* Each perceiver wrote an essay and received bogus feedback about the other perceiver's essay that they were told was written by the target. This feedback was in all cases bogus; it was written by the experimenter. There were two versions of the feedback. Perceivers in the hostile expectancy condition received feedback about the other perceiver's essay that was harsh and sarcastic:

*This is by far the worst essay I've ever read. It was a waste of time for me to read it and I could tell the person put absolutely no effort or thought into this. The only thing I was "convinced" of was that they should never try to write again. Good job.*

Perceivers in the non-hostile expectancy condition received feedback about the other perceiver's essay that was pleasant:

*This is a pretty good essay, especially given how little time there was to write it. I could tell that the person put some effort and thought into this. I thought that the essay was convincing. Good job.*

*Profile.* Perceivers in the hostile expectancy condition also received a profile relevant to the personality trait of hostility. The profile provided a general description of three personality types: a hostile personality type, an average personality type, and a friendly personality type. The profile indicated that the target had a hostile personality type (See Appendix H). The hostile profile was given to both perceivers in the double-hostile expectancy condition and to one of the perceivers in the single-hostile expectancy condition. Perceivers in the no hostile expectancy condition did not receive a profile.

### *Materials*

A total of 48 questions were selected from the preliminary studies. These questions were printed on index cards and laminated. Before each session, the index cards were separated by type (non-hostile vs. hostile), shuffled, and then each pile was split into two new piles, one for each perceiver. Accordingly, each perceiver received a set of 16 randomly ordered questions, half of which tended to elicit a hostile response and half of which tended to elicit a non-hostile response. Targets also received a unique set of 16 randomly ordered questions, half hostile and half non-hostile from which to select questions for the second bogus discussion task (see Appendix E).

*Mood assessment.* Two surveys assessed the participants' mood, the Short Form of the Profile of Mood States (POMS-SF; Shacham, 1983), and an adjective survey designed specifically for this experiment (see Appendix F). Participants completed these mood assessments twice; once before the discussion task (pre-mood) and then again after the discussion task (post-mood).

The POMS-SF is an abridged version of the Profile of Mood States (McNair, Lorr, & Droppleman, 1981). Participants rated how accurately each adjective described their current mood. Four subscales are included in the POMS-SF, but only items from the subscales of Tension-Anxiety and Anger-Hostility were used in this study. After the discussion task, participants again rated how they felt during the discussion task using these subscales as a measure of post-mood.

The adjective mood survey consisted of 10 adjectives related to anger and hostility. Before the discussion task, participants rated the degree to which each adjective described how they felt currently as a measure of pre-mood using Likert scales with 1 (*not at all*) and 5 (*extremely*) as anchor points. After the discussion task, participants used the same adjective mood survey to rate how they felt during the discussion task as a measure of post-mood.

*Trait hostility assessment.* The Cook-Medley Hostility Inventory was used to assess targets' trait hostility (Cook & Medley, 1954). The trait hostility scale included 50 true-false items with higher scores representing greater hostility (see Appendix G). Several findings reported in the literature demonstrate the reliability and validity of this measure. With respect to the scale's reliability, it has been shown to have good stability over a 4-year interval,  $r = .84$  (Shekelle, Gale, Ostfeld, & Paul, 1983) and to have internal reliability coefficients ranging from .80 to .84 for both men and women (Smith & Frohm, 1985). With respect to the scale's validity, it has been shown to correlate more highly with self-reported anger ( $r = .61$ ) than with self-reported anxiety ( $r = .26$ ) or depression ( $r = .38$ ) (Smith & Frohm, 1985). Thus, it has both good convergent and discriminate validity. In addition, individuals who have high scores on trait hostility tend to show more anger and hostility during provoking situations (Cook & Medley, 1954). Only targets completed the trait hostility scale because it was used to control for existing hostility that was independent of the manipulation. Therefore, it was not necessary for perceivers to complete this measure.

*Manipulation checks.* As a manipulation check, perceivers rated the essay feedback they received on seven descriptive adjectives (e.g. harsh, mean, and constructive). These items were answered on a Likert scale with 1 (*Not at all*) and 5 (*Extremely*) as anchor points. The adjective ratings were combined to form a single composite measure ( $\alpha = .915$ ). The second manipulation check included perceivers' ratings of how they expected the target to be during the discussion task. This manipulation check was given immediately after receiving the expectancy, but before the discussion task. The items were answered on a Likert scale with 1 (*Not at all*) and 5 (*Very much*) as anchor points. The adjective ratings were combined to form a single composite measure ( $\alpha = .895$ , see Appendix I).

*Impression assessment.* An impression formation questionnaire assessed perceivers' impressions of targets following the discussion task. Following the discussion task,

perceivers rated the target on several adjectives (e.g. kind, rude, pleasant, and aggressive) as a measure of their impression of the target. These items were answered on a Likert scale with 1 (*not at all*) and 10 (*very much*) as anchor points. Perceivers' mean impression formation ratings of the targets' hostility and kindness were combined to form a composite measure ( $\alpha = .895$ , see Appendix J).

*Additional measures.* All participants answered demographic questions and a series of open-ended questions designed to identify any participants that knew each other or who suspected the true purpose of the experiment (see Appendix K).

### *Procedure*

Participants were run in same-gender groups with three individuals per group. Upon arrival, an experimenter randomly assigned two participants to play the role of interviewer (perceiver) and one participant to play the role of the respondent (target). To reduce any potential influence that participants' roles may have had on their subsequent survey responses, the experimenter did not inform participants of their role until it was time to induce the expectation. The experimenter verified that the two participants who were assigned to be perceivers did not know each other. If the perceivers did know one another, one was asked to do another study and a new participant was assigned to be a perceiver. Participants were at this point escorted to individual rooms each equipped with a personal computer and intercom system. Once seated in the room, participants were asked to read and sign a consent form and then to follow the instructions provided by MediaLab on the computer. MediaLab instructed all participants to complete surveys by responding to items on the computer. All participants completed surveys designed to assess their mood. In addition, participants assigned to the role of respondent also completed the trait hostility measure.

Next, all participants were asked to write a short paragraph on the topic of illegal downloading on a blank piece of lined paper. Once the essays were collected, each participant was given a bogus hand-written essay supposedly written by one of the other participants to write feedback about. Next, the perceivers received the feedback manipulation (in which they received bogus feedback about the other perceiver's essay that they were told was written by the target) and rated that feedback using MediaLab. Then perceivers in the

hostile expectancy condition received the hostile profile, but perceivers in the non-hostile expectancy condition did not receive a profile. All participants were told that the purpose of the study was to investigate different kinds of communication and that they would be interacting with one another in an upcoming discussion task. Perceivers in the non-hostile expectancy condition were told that their goal during the discussion task was to determine what the target's personality was like. Perceivers who were given the hostile profile were told that their goal during the discussion task was to determine if the target does in fact have a hostile personality type.

Following the expectancy manipulation, perceivers answered the impression formation questionnaire assessing their expectancies for what the target would be like. This questionnaire served as an expectancy manipulation check insuring that the perceivers' expectancies were consistent with the feedback and profile they had been given. Next, perceivers who were assigned to the social interaction condition were brought into the same room and were given a unique set of 16 questions each. They worked together to select 14 questions to ask the target in the discussion task. Perceivers assigned to the no social interaction condition stayed in their individual rooms. They were each given a unique set of 16 questions and selected seven to ask the target. Targets were told that perceivers were choosing a few questions to ask them and they should try to answer each question to the best of their ability. However, targets were also told that if they were uncomfortable with any question they had the right to refuse to answer.

Finally, the participants used an intercom system to complete the discussion task. During the discussion task, perceivers took turns asking the target seven questions so that each target answered a total of 14 questions. Perceivers in the social interaction condition could hear the other perceiver's questions and the target's answers to all of the questions. Perceivers in the no social interaction condition could not hear the other perceiver's questions or the target's answers to those questions. When the discussion task was completed, the target completed the mood surveys a second time using MediaLab, and perceivers answered the impression formation questionnaire again to assess their impressions of the target during the interaction. When finished with these questionnaires, demographic questions and suspicion checks were completed by all participants. As an additional

dependent measure, the target was told that he or she would switch roles and would be an interviewer in a second unexpected discussion task. The target received 16 unique questions similar to what the perceivers received for the prior discussion task. The dependent measure was how many hostile questions the target chose to ask the perceivers. After the target selected the questions, the experiment was concluded. There was not a second discussion task. Participants were debriefed and thanked for their participation.

## Chapter V: Results

### *Preliminary Analyses*

*Overview.* Four sets of preliminary analyses were performed. The first set of analyses evaluated participant, experimenter, or computer errors in the sessions, whether perceivers knew the target prior to the experiment, and the suspicion level of each participant. The second set of analyses looked at gender differences in the pre-mood measures, trait-hostility measure, and perceivers' impressions of the target. The third set of analyses tested whether there were any differences between expectancy and social interaction conditions prior to the expectancy manipulation. The fourth set of analyses tested whether the expectancy manipulation was effective.

*Evaluation of session.* Session information was examined to determine if there were any errors made by participants, experimenters, or the computer that would require the removal of a session. Two sessions were removed due to computer errors in recording the data, and a third session was removed due to the sensitive nature of information that was brought up during the discussion task. In addition, four sessions were removed because the perceivers were previously acquainted with the target. Open-ended suspicion questions were evaluated for each participant (see Appendix K). Eight sessions were removed due to very high suspicion about the feedback or guessing the self-fulfilling prophecy hypothesis. Overall, 12 sessions were removed and were not included in any of the analyses.

*Gender differences.* Four t-tests were performed to test for gender differences in targets' pre-mood scores and trait-hostility scores. There were not any statistically significant gender differences for any of the pre-mood measures, but men reported a significantly higher level of trait-hostility than women,  $t(112) = 3.51, p = .001, d = .66$  (Table 1). Two additional t-tests were performed to test for gender differences in perceivers' impressions of targets. Perceivers judged male targets as significantly more hostile ( $M_{hostile} = 2.60$ ) and less kind ( $M_{kind} = 6.29$ ) than female targets ( $M_{hostile} = 2.19; M_{kind} = 7.30$ ),  $t(226) = 2.70, p = .008, d = .36, t(226) = 4.79, p < .001, d = .64$  (Table 2). Because of these gender differences, gender was controlled for in all relevant analyses.

Table 1. Correlations among targets' pre-mood scores and trait hostility scores. Means, standard deviations, and *t*-statistics presented separately for women (N = 57) and men (N = 57).

	(1)	(2)	(3)	(4)
Pre-Mood Subscales				
(1) Anger-Hostility		.344**	.513**	.219*
(2) Tension-Anxiety			.277**	.355**
(3) Adjective Mood				.161
Trait Hostility				
Women				
M	1.26	1.67	1.90	20.20
SD	0.41	0.52	0.43	6.17
Men				
M	1.20	1.74	1.88	24.40
SD	0.27	0.55	0.44	5.37
<i>t</i> -value	0.86	0.92	0.28	3.51***

Note. *df* = 112.

\*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

Table 2. Perceivers' impressions of the target. Means, standard deviations, and *t*-statistics presented separately for women and men.

Impression Formation Ratings	Male Target	Female Target	<i>t</i>
Hostility			
M	2.60	2.19	2.70**
SD	1.19	1.10	
Kindness			
M	6.29	7.30	4.79***
SD	1.49	1.68	

Note. *df* = 226.

\*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

*Condition differences prior to expectancy manipulation.* Two separate 3 (Expectancy: no hostile expectancy vs. single hostile expectancy vs. double hostile expectancy) x 2 (Social interaction: yes vs. no) analyses of variance (ANOVAs) were conducted to determine if



targets' pre-mood and trait-hostility scores differed by condition. The dependent variables were the targets' pre-mood scores and trait-hostility scores. Results indicated that there were no significant main effects for either expectancy condition or social interaction, all  $F$ 's < 2.67,  $p$ 's > .11. In addition, none of the two-way interactions between expectancy and social interaction were significant, all  $F$ 's < 1.71,  $p$ 's > .19 (Table 3).

Table 3. Targets' pre-mood main effects and interactions.

Dependent Variable	Main Effect of Expectancy	Main Effect of Social Interaction	Interaction of Expectancy and Social Interaction
Pre Anger-Hostility	$F(2, 108) = 0.26$ $p = .77$	$F(1, 108) = 2.67$ $p = .11$	$F(2, 108) = 0.20$ $p = .82$
Pre Tension-Anxiety	$F(2, 108) = 0.09$ $p = .92$	$F(1, 108) = 1.36$ $p = .25$	$F(2, 108) = 0.94$ $p = .40$
Pre Adjective-Mood	$F(2, 108) = 0.14$ $p = .87$	$F(1, 108) = 0.05$ $p = .83$	$F(2, 108) = 0.40$ $p = .67$
Trait Hostility	$F(2, 108) = 0.40$ $p = .68$	$F(1, 108) = 0.70$ $p = .40$	$F(2, 108) = 1.71$ $p = .19$

*Expectancy manipulation checks.* Several analyses were performed to examine the effectiveness of the expectancy manipulation. A t-test revealed that perceivers who received the hostile feedback rated the feedback as significantly more hostile ( $M = 4.63$ ) than perceivers who received neutral feedback ( $M = 2.02$ ),  $t(225) = 54.65$ ,  $p < .001$ ,  $d = 7.29$ . A second t-test revealed that perceivers who received the hostile expectancy ( $M = 3.88$ ) did in fact expect the target to be more hostile prior to the discussion task than those who received no expectancy ( $M = 1.74$ ),  $t(225) = 26.45$ ,  $p < .001$ ,  $d = 3.53$ .

Third, analyses were performed to examine whether perceivers who received the hostile expectancy selected more hostile questions to ask during the discussion task than those who did not receive a hostile expectancy. Because half of the perceivers chose their questions individually and half chose them as a team, two separate analyses were required. Perceivers in the no social interaction condition chose their questions individually and were therefore treated as independent observations. The number of questions chosen by each

individual perceiver served as the dependent variable. A t-test examining their responses revealed that perceivers who received the hostile expectancy chose to ask the target more hostile questions ( $M = 3.35$ ) than those who did not receive an expectancy ( $M = 2.43$ ),  $t(110) = 3.26$ ,  $p = .001$ ,  $d = .62$ .

Perceivers in the social interaction condition chose their questions as a team and were therefore treated as a single unit of analysis. The number of questions chosen by each team of perceivers served as the dependent variable. A one-way ANOVA examining their responses revealed that the pair of perceivers chose to ask the target more hostile questions as the number of perceivers who received a hostile expectancy increased ( $M_{No\ expectancy} = 5.39$ ,  $M_{Single\ hostile\ expectancy} = 6.80$ ,  $M_{Double\ hostile\ expectancy} = 7.55$ ),  $F(2, 55) = 3.36$ ,  $p = .04$ . The mean number of hostile questions asked in the social interaction condition analysis is, of course, higher than in the no social interaction condition analysis because it is the sum of two perceivers' question selections rather than just one perceiver's questions in the no social interaction condition. Although these means are in the expected direction, contrasts that used Bonferroni corrections for Type I error (i.e.,  $p \leq .017$ ) revealed only one significant mean difference: Perceivers in the double hostile expectancy condition chose to ask the target significantly more hostile questions than perceivers in the no expectancy condition. There were no significant differences in the number of hostile questions chosen by perceivers in the single versus the no expectancy conditions or by perceivers in the single versus double expectancy conditions (all  $t$ 's  $< 1.67$ , all  $p$ 's  $> .30$ ).

These results generally support the conclusion that the expectancy manipulation was effective. Perceivers who received the hostile feedback judged the feedback to be significantly more hostile than those who received neutral feedback. Perceivers induced with a hostile expectancy expected the target to be significantly more hostile before beginning the discussion task than those who did not receive a hostile expectancy. Perceivers given a hostile expectancy generally chose to ask the target a greater number of hostile questions than did perceivers who were not given a hostile expectancy, though in the social interaction condition this difference did not always achieve statistical significance.

### *Main Analyses*

Analyses were performed to test for self-fulfilling prophecy effects and perceptual biases. Target's pre-mood scores and trait hostility scores were included as covariates in all analyses in order to control for targets' actual hostility unrelated to the expectancy manipulation. Gender was included as a covariate only when preliminary analyses indicated that there were gender differences for that dependent variable. Gender was included as a covariate for number of hostile questions chosen by targets, hostility level of questions chosen by targets, and perceivers' impressions of targets. Gender was not included as a covariate for the targets' post-mood measures.

*Self-fulfilling prophecy effects.* Five separate 3 (Expectancy: no hostile expectancy vs. single hostile expectancy vs. double hostile expectancy) x 2 (Social interaction: no vs. yes) ANCOVAs were conducted to test for self-fulfilling prophecy effects. Target's pre-mood and trait hostility scores were included as covariates in each of these analyses. In three of these analyses, self-fulfilling prophecy effects were tested with the target's mood following the discussion task as the dependent variables – i.e., the targets' post-anger, post-tense, and post-adjective mood scores. The self-fulfilling prophecy hypothesis would be supported if there was a main effect of expectancy condition such that targets' post-mood scores were significantly lower in the no hostile expectancy condition than those scores in either the single or double hostile expectancy conditions. Results indicated that there was not a significant difference between targets' mean post-mood scores based on condition, therefore there was no support for the self-fulfilling prophecy hypothesis,  $F_{post-anger}(2, 104) = .40, p = .67$ ,  $F_{post-tense}(2, 104) = .17, p = .85$ ,  $F_{post-adjective\ mood}(2, 104) = .72, p = .49$  (Table 4). There was a significant main effect of social interaction on targets' post-tense scores such that targets in the social interaction condition felt more tense after the discussion task ( $M = 1.64$ ) than did targets in the no social interaction condition ( $M = 1.45$ ),  $F_{post-tense}(1, 104) = 4.29, p = .04, d = .41$ . There were no significant main effects of social interaction on targets' post-anger nor on their post-adjective mood,  $F_{post-anger}(1, 104) = .43, p = .52, d = .13$ ,  $F_{post-adjective\ mood}(1, 104) = .36, p = .55, d = .12$ . There were also no significant interactions of expectancy condition and social interaction condition for any of the dependent measures,  $F_{post-anger}(2, 104) = .36, p = .70$ ,  $F_{post-tense}(2, 104) = .36, p = .70$ ,  $F_{post-adjective\ mood}(2, 104) = .23, p = .79$ .

Table 4. Targets' post-mood. Cell means.

	Condition		
	No Hostile Expectation	Single Hostile Expectation	Double Hostile Expectation
<b>Post Anger-Hostility</b>			
Social Interaction			
M	1.17	1.14	1.11
SD	0.26	0.22	0.24
No Social Interaction			
M	1.10	1.09	1.18
SD	0.34	0.24	0.48
<b>Post Tension-Anxiety</b>			
Social Interaction			
M	1.62	1.72	1.48
SD	0.68	0.70	0.44
No Social Interaction			
M	1.40	1.45	1.59
SD	0.43	0.40	0.78
<b>Post Adjective-Mood</b>			
Social Interaction			
M	1.80	1.84	1.79
SD	0.61	0.49	0.54
No Social Interaction			
M	1.90	1.89	1.70
SD	0.48	0.49	0.46

One analysis tested for self-fulfilling prophecy effects with the target's behavior following the discussion task as the dependent variable – i.e., the number of hostile questions selected by targets' for the second bogus discussion task. Gender was included as a covariate in this analysis because male targets selected more hostile questions than female targets. Results would support a self-fulfilling prophecy effect if there was a main effect of expectancy condition such that targets in the no hostile expectancy condition selected a lower number of hostile questions than targets in either the single or double hostile expectancy

conditions. Results did not fit this pattern, however. There was not a significant main effect of expectancy or social interaction on the number of hostile questions selected by targets,  $F(2, 103) = .59, p = .56$ ,  $F(1, 103) = .14, p = .71$ , respectively (Table 5). Moreover, the interaction between expectancy and social interaction condition was also not significant,  $F(2, 103) = 2.43, p = .09$ .

Table 5. Targets' number of hostile questions selected and hostility levels of questions selected. Cell means.

	Condition		
	No Hostile Expectation	Single Hostile Expectation	Double Hostile Expectation
Number of hostile questions asked by targets			
Social Interaction			
M	2.94	2.75	2.10
SD	1.06	1.45	1.33
No Social Interaction			
M	2.43	2.89	2.88
SD	1.08	1.23	1.22
Hostility level of questions asked by targets			
Social Interaction			
M	19.84	19.48	17.62
SD	3.62	3.89	4.01
No Social Interaction			
M	18.50	19.67	19.89
SD	3.22	3.64	3.54

The final analysis testing for self-fulfilling prophecy effects used as the dependent variable the hostility level of the questions selected by targets' for the second bogus discussion task. Using hostility ratings obtained from the pilot study, a composite hostility level rating was computed by summing the hostility ratings of the questions chosen by the target to ask in the second discussion task. There were no significant main effects of either expectancy or social interaction condition,  $F(2, 103) = .38, p = .68$ ,  $F(1, 103) = .12, p = .73$ , respectively (Table 5). The interaction between expectancy and social interaction condition

was also not significant,  $F(2, 103) = 1.85, p = .16$ . Because none of the analyses supported the self-fulfilling prophecy hypothesis, there was no self-fulfilling prophecy effect to accumulate. Accordingly, analyses testing for mediation and the accumulation of self-fulfilling prophecies across perceivers were not performed.

*Perceptual biases.* A 3 (Expectancy: no hostile expectancy vs. single hostile expectancy vs. double hostile expectancy) x 2 (Social interaction: no vs. yes) ANCOVA was conducted to test for perceptual bias effects. Targets' pre-mood scores, trait hostility, and gender were included as covariates. The perceptual bias hypothesis would be supported if there was a main effect of expectancy condition on perceivers' impressions of the target such that perceivers' impressions of the targets' hostility were significantly lower in the no hostile expectancy condition than in either the single or double hostile expectancy conditions. Results indicated that there was not a significant difference in perceivers' impressions of targets across expectancy conditions, therefore there was not any support for the perceptual bias hypothesis,  $F(2, 103) = 1.10, p = .34$ . Non-significant results were also found for the main effect of social interaction,  $F(1, 103) = .77, p = .38$ , and the interaction of expectancy and social interaction condition,  $F(2, 103) = 2.26, p = .11$  (Table 6). Because the perceptual bias hypothesis was not supported, there were no perceptual bias effects to accumulate. Therefore, analyses testing for mediation and the accumulation of perceptual biases across perceivers were not performed.

Table 6. Perceivers' impressions of targets' hostility and kindness. Cell means.

	No Hostile Expectation	Condition	
		Single Hostile Expectation	Double Hostile Expectation
Social Interaction			
M	3.12	3.79	2.95
SD	1.03	1.43	0.72
No Social Interaction			
M	3.23	3.42	3.83
SD	0.96	1.18	1.31

## Chapter VI: Discussion

The present research had two primary goals. One goal was to experimentally replicate the accumulation of expectancy processes across perceivers. The second goal was to investigate the pervasiveness of these processes by manipulating the amount of social interaction perceivers had with one another. Results indicated that perceivers' expectancies did not have a self-fulfilling effect on targets' behavior. The false expectancies that perceivers' held about targets' hostility failed to shape the behavior exhibited by targets in a subsequent discussion task. Perceivers' expectancies also failed to produce perceptual bias effects. Perceivers' impressions of the targets' hostility following the discussion task were unaffected by their prior false expectancies. There was also no evidence of moderation of these effects through social interaction. That is, targets' hostility during the discussion task and perceivers' impressions of the targets' hostility following the discussion task did not differ as a function social interaction between perceivers. The absence of self-fulfilling prophecy and perceptual bias effects in these data precluded tests of accumulation processes. Indeed, there must be evidence that perceivers' false expectancies create either self-fulfilling prophecies or perceptual biases in order to examine whether those effects accumulate across perceivers. The following sections discuss the evidence for expectancy effects, possibilities for why no effects were found in this study, other possible procedures or designs that may be more successful in finding self-fulfilling prophecy and perceptual bias effects, and limitations of the current work.

### *Expectancy Processes: Self-Fulfilling Prophecies and Perceptual Biases*

This study failed to find support for the accumulation of self-fulfilling prophecy and perceptual bias effects. Perceivers who believed that targets were hostile did not influence the targets' behavior in a way consistent with the hostile expectancy, and perceivers' false expectancies did not influence their own impressions of the target in an expectancy-consistent manner. Although neither expectancy process materialized in this study, the empirical evidence supporting the existence of these processes is well documented. Literally hundreds of studies using experimental and naturalistic techniques have found evidence of these processes. These effects have been found across a wide array of contexts and types of relationships such as teachers and students in the classroom (Brattesani, Weinstein, &

Marshall, 1984; Jussim, 1989; Jussim & Eccles, 1992; Rosenthal & Jacobson, 1968; Smith et al., 1998; West & Anderson, 1976), parents and children in the home (Madon, Guyll, Spoth & Willard, 2004; Madon, Guyll, Spoth, Cross, & Hilbert, 2003; Madon, Willard, Guyll, Trudeau, & Spoth, 2006), and participants getting acquainted in the laboratory (Harris, Lightner & Manolis, 1998; Snyder & Haugen, 1994, 1995; Swann & Ely, 1984; Willard, 2006). Expectancy effects have also been found with varied outcomes such as alcohol use (Madon, Guyll, Spoth & Willard, 2004; Madon, Guyll, Spoth, Cross, & Hilbert, 2003; Madon, Willard, Guyll, Trudeau, & Spoth, 2006), personal characteristics such as attractiveness and friendliness (Farina, Allen, & Saul, 1968; Snyder, Tanke & Berscheid, 1977) and task performance of people and animals (Rosenthal & Fode, 1963, Rosenthal & Jacobsen, 1968). Expectancy confirmation processes have been shown to occur across contexts, with different types of expectancies, and with varied outcome measures, so the existence of these effects is not in question.

The fact that expectancy effects are well established in the psychological literature suggests that there were characteristics of the current research that prevented these processes from emerging. One potential explanation that I examined, but failed to find strong support for, was the possibility of a failed expectancy manipulation. If perceivers did not believe that the information they received about the target was truly reflective of the target's hostility, then there would have been no expectancy in the perceivers' minds to bias the targets' behavior or their own impressions of the target. Even though preliminary analyses testing the effectiveness of the expectancy manipulation indicated that there were some perceivers who reported suspicion about the target's level of hostility, these participants were excluded from the main analyses. The main analyses included only perceivers who appeared to have accepted, at face value, the information they received about the target's hostility. These perceivers' judgments of the target's feedback and their impressions of the target's hostility were all consistent with the expectancy that they received. Moreover, examination of these perceivers' responses to the suspicion checks failed to reveal any suggestion that they were suspicious about the target's level of hostility. Accordingly, a failed manipulation does not seem to be a likely explanation for the lack of significant results that were obtained.



A second reason that I considered as a potential explanation for the lack of expectancy effects in this research was the sample size. Researchers have consistently found only small self-fulfilling prophecy and perceptual bias effects. The average magnitude of experimental expectancy effects is only around .3 in terms of a correlation coefficient (Rosenthal, 2002, Rosenthal & Rubin, 1978). Power analyses that were based on these effect sizes indicated that 45 sessions – each including 3 participants per session – were required for each cell to reach the desired power level of  $\beta = 0.80$  (Cohen, 1977). This translated into a total of 270 groups (i.e., 810 participants). The power needed to detect the effects if they were occurring was not achieved in this study due to subject pool limitations. I did collect data for 114 groups (i.e. 342 participants) which could have detected a large effect size ( $d = 1.0$ ). But even if the original sample size requirement had been achieved, given the pattern of means observed it is highly unlikely that any significant effects would have emerged. The means were largely flat with no indication of the pattern that was expected. For example, targets' anger following the discussion task averaged 1.14, 1.12, and 1.15 across the no, single, and double expectancy conditions, respectively. The same pattern of means characterized targets' level of tenseness and perceivers' impressions of the target following the discussion task ( $M_{Post-Tense} = 1.51, 1.59, 1.54$ ;  $M_{Post-AdjMood} = 1.85, 1.87, 1.75$ ;  $M_{Perceiver\ impression} = 3.18, 3.61, 3.39$ ). The number of participants required to produce a statistically significant difference for a perceptual bias effect would be 720 total groups (i.e. 2160 participants) which is unreasonably large. Moreover, even if a significant effect was achieved by increasing the sample size to this number, an effect that requires such a large sample would not be very meaningful. I conclude that the number of sessions completed was sufficient to demonstrate the lack of effects in this study; further data collection would not have improved the results.

A third possible explanation for the lack of significant self-fulfilling prophecy and perceptual bias effects may have been that the hostile expectancy was not conducive to eliciting expectancy confirmation effects. Due to the negative nature of the hostile expectancy, social norms may have interfered with perceivers' selection of hostile questions and how they interacted with the target. Previous research has shown that perceivers are less willing to communicate negative expectancies than positive expectancies (Hilton & Darley,

1985), which may be because treating someone in a manner consistent with a negative expectancy goes against social norms. Even when perceivers did ask hostile questions, they may have asked the questions with a tone of voice that was inconsistent with the type of the question being asked.

If social norms did interfere with the perceivers' behavior, it would have served to break the sequence of events that are necessary for a self-fulfilling prophecy and perceptual bias to occur. For example, in order for a self-fulfilling prophecy to occur, perceivers must communicate or transmit their expectancies to a target. If this does not occur, then there is no mechanism through which the perceivers can shape the target's subsequent behavior. In this research, the primary mechanism through which perceivers could elicit hostile behavior from targets was through the types of questions that they asked during the discussion task. It was expected that perceivers in the hostile expectancy condition would choose more hostile questions to ask targets than perceivers in the non-hostile expectancy condition. Analyses that tested for differential treatment by the perceivers indicated that perceivers who received the hostile expectancy did choose to ask more hostile questions. Although the difference in number of hostile questions chosen by perceivers in the hostile versus non-hostile expectancy conditions was significant, it was a small difference (about one question) and perhaps it was not different enough to affect the targets' behavior to any meaningful degree. If this is the case, then social norms did play a role in the lack of significant findings. Examination of prior studies that examined the self-fulfilling effect of a hostile expectancy further supports this interpretation.

The hostile expectancy has been used in two other studies, one that found a self-fulfilling prophecy effect and one that did not. The study that did succeed in eliciting a self-fulfilling prophecy effect used a different paradigm that may have been more suited for the hostile expectancy and less susceptible to social norm interference. In this study participants competed in a reaction time task which included a noise weapon that could be set at one of six levels from mild to very obnoxious. Before the competition, perceivers were lead to believe that their opponents either described themselves as insensitive, self-assertive, cruel, aggressive, and competitive (hostile expectancy) or as submissive, sensitive, passive, kind, and cooperative (non-hostile expectancy). For the first three trials, the perceiver set the noise

weapon level, and the target set it for next three, and so on for a total of 24 trials. Perceivers who were lead to believe that the target was hostile used a higher intensity noise punishment than perceivers who thought the target was non-hostile. In return, targets who were treated as hostile responded in a more hostile manner by using a higher intensity sound blast than their neutral-target counterparts (Snyder & Swann 1978a).

Another study using a similar interview paradigm as the current research and a hostile expectancy also failed to find self-fulfilling prophecy effects, which further supports the idea that the interview paradigm simply does not work with a hostile expectancy (Willard, 2006). However, this study was successful in finding the accumulation of perceptual bias effects with hostility. Perceivers who were lead to believe the target was hostile were more convinced of their false expectancies after interacting with the target, especially if the other perceiver shared the hostile expectancy. If Willard's study found the effects using the same paradigm, then why did the current study fail to find perceptual bias? In Willard's study, targets and perceivers interacted with each other face to face, whereas in the current study, the discussion task took place using an intercom system. It is possible that perceivers' in Willard's study may have been able to interpret the targets' nonverbal signals in a way consistent with their expectancies. But perceivers in the current study did not have nonverbal signals to misinterpret, and therefore may have had less supportive evidence to convince themselves that their hostile expectancies were true.

Hostile behavior may not be optimally elicited through a conversation between mere acquaintances, but another paradigm using a situation more suited for hostile behavior may yield more support for the accumulation of expectancy effects. As noted previously, one paradigm that may work well with a hostile expectancy is Snyder & Swann's (1978a) "noise weapon" paradigm. Utilizing a paradigm similar to the noise weapon paradigm may yield more positive results for the current hypotheses. Research in the aggression literature has successfully used this paradigm and has found that the paradigm elicits hostility that can be measured behaviorally, physiologically and emotionally (Bond & Lader, 1986). These findings suggest that this paradigm would be successful in communicating the hostile expectancy to targets and eliciting hostile behavior from targets.

*Limitations*

There are a few limitations of this research that warrant discussion. First, considering the considerable literature in support of expectancy confirmation effects, I believe that the results of this research – in which no expectancy effects emerged – must be interpreted as an anomaly. As reviewed earlier, we know that expectancy effects exist inside and outside of the laboratory; both naturalistic studies (Madon, Guyll, Spoth & Willard, 2004; Madon, Guyll, Spoth, Cross, & Hilbert, 2003; Madon, Willard, Guyll, Trudeau, & Spoth, 2006) and experimental studies (Copeland, 1994, Neuberg, 1989, Skrypnek & Snyder, 1982; Snyder & Swann, 1978a, 1978b; Snyder, Tanke, & Berscheid, 1977; Word, Zanna & Cooper, 1974) have consistently found these effects. It is probable that with a suitable paradigm and expectancy, the accumulation of self-fulfilling prophecy and perceptual bias effects would emerge.

Second, the current study attempted to create a difference between the social interaction and no social interaction condition that was as large as possible, but social interaction could have been manipulated in any number of ways. I believe that the current manipulation of social interaction was best suited to finding the initial effect, leaving closer analysis of the process for later studies to investigate. For example, if in this study there had been accumulation of self-fulfilling prophecy or perceptual bias effects but no difference in moderation through social interaction, it would have provided the most stringent test of the pervasiveness of expectancy confirmation processes. If there had been moderation, successive studies could have altered the social interaction manipulation until it killed the effect, thereby demonstrating the limits of the effect.

Third, the expectancy manipulation may have been too extreme. Recently it has been shown that self-fulfilling prophecy effects can be reduced among perceivers who hold extreme expectancies (Reich, 2004). When expectancies are extreme, perceivers may make an effort to correct for their biases. The essay feedback used to induce the expectancy could have been so extreme that the perceivers corrected for it in their selection of the questions and their treatment of the target. In future research, a more subdued expectancy manipulation could be used, which hopefully would not cause the perceivers to compensate for the extremity of their expectancies.

*Conclusion*

This research examined the accumulation of self-fulfilling prophecy effects and perceptual biases across perceivers and moderation through social interaction. The findings of this inquiry did not support the accumulation hypotheses or the moderation hypothesis. Perceivers' expectancies did not influence targets' behavior or the perceivers' subsequent impressions of the targets. Although the absence of any effects is discouraging, it is likely that these effects could emerge using a more suitable paradigm for the hostile expectancy or by altering the extremity of the expectancy. Considering the tremendous literature supporting the confirmation of expectancy effects, further research in this area is needed to replicate previous naturalistic work on the accumulation of self-fulfilling prophecies across perceivers and to test the implicit hypothesis found in the expectancy literature of the pervasiveness of these effects.

## References

- Abele, A. (1985). Thinking about thinking: Causal, evaluative and fatalistic cognitions about social situations. *European Journal of Social Psychology, 15*, 315-332.
- Babad, E. Y., Inbar, J., & Rosenthal, R. (1982). Pygmalion, Galatea, and the Golem: Investigations of biased and unbiased teachers. *Journal of Educational Psychology, 71*, 459-474.
- Baumeister, R. F., Bratslavsky, E., Finkernauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology, 5*, 323-370.
- Bond, A. & Lader, M. (1986). A method to elicit aggressive feelings and behaviour via provocation. *Biological Psychology, 22*, 69-79.
- Brattesani, K. A., Weinstein, R. S., & Marshall, H. H. (1984). Student perceptions of differential teacher treatment as moderators of teacher expectation effects. *Journal of Educational Psychology, 76*, 236-247.
- Brophy, J. (1983). Research on the self-fulfilling prophecy and teacher expectations. *Journal of Educational Psychology, 75*, 631-661.
- Chaikin, A. L., Sigler, E., & Derlega, V. J. (1974). Non-verbal mediators of teacher expectancy effects. *Journal of Personality and Social Psychology, 30*, 144-149.
- Cohen, J. (1977). *Statistical power analysis for the behavioral sciences*. New York, NY: Academic Press.
- Cook, W. W., & Medley, D. M. (1954). Proposed hostility and pharisaic-value scale for the MMPI. *Journal of Applied Psychology, 38*, 414-418.
- Cooper, H., & Hazelrigg, P. (1988). Personality moderators of interpersonal expectancy effects: An integrative research review. *Journal of Personality and Social Psychology, 55*, 937-949.
- Copeland, J. (1994). Prophecies of power: Motivational implications of social power for behavioral confirmation. *Journal of Personality and Social Psychology, 67*, 264-277.

- Darley, J. M., & Fazio, R. H. (1980). Expectancy confirmation process arising in the social interaction sequence. *American Psychologist*, *35*, 867-881.
- Farina, A., Allen, J. G., & Saul, B. B. (1968). The role of the stigmatized person in affecting social relationships. *Journal of Personality*, *36*, 169-182.
- Graziano, W. G., Brothern, T., & Berscheid, E. (1980). Attention, attraction, and individual differences in reaction to criticism. *Journal of Personality and Social Psychology*, *38*, 193-202.
- Harris, M. J. (1993). Issues in studying the mediation of expectancy effects: A taxonomy of expectancy situations. In P. D. Blanck (Ed.), *Interpersonal expectations: Theory, research, and applications* (pp. 350-378) London: Cambridge University Press.
- Harris, M. J., Lightner, R. M., & Manolis C. (1998). Awareness of power as a moderator of expectancy confirmation: Who's the boss around here? *Basic and Applied Social Psychology*, *20*, 220-229.
- Harris M. J., & Rosenthal, R. (1985). Mediation of interpersonal expectancy effects: 31 meta-analyses. *Psychological Bulletin*, *97*, 363-386.
- Harris, M. J., & Rosenthal, R. (1986). Four factors in the mediation of teacher expectancy effects. In R. S. Feldman (Ed.), *The Social Psychology of Education: Current Research and Theory* (pp. 91-114). New York, NY: Cambridge University Press.
- Hilton, J. L., & Darley, J. M. (1985). Constructing other persons: A limit on the effect. *Journal of Experimental Social Psychology*, *21*, 1-18.
- Jussim, L. (1989). Teacher expectations: Self-fulfilling prophecies, perceptual biases, and accuracy. *Journal of Personality and Social Psychology*, *61*, 637-668.
- Jussim, L. (1991). Social perception and social reality: A reflection-construction model. *Psychological Review*, *98*, 54-73.
- Jussim, L., & Eccles, J. (1992). Teacher expectations: II. Construction and reflection of student achievement. *Journal of Personality and Social Psychology*, *63*, 947-961.

- Jussim, L., Eccles, J., & Madon, S. (1996). Social perception, social stereotypes, and teach expectations: Accuracy and the quest for the powerful self-fulfilling prophecy. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 28, pp. 281-388). San Diego, CA: Academic Press.
- Jussim, L., Palumbo, P., Chatman, C., Madon, S., & Smith, A. (2000). Stigma and self-fulfilling prophecies. In T. Heatherton, R. Kleck, J. Hull, & D. Cioffi (Eds.), *The social psychology of stigma* (pp. 374-418). New York, NY: The Guilford Press.
- Kanouse, D. E., & Hanson, L. R. (1971). Negativity in evaluations. In E. E. Jones, D. E. Kanouse, H. H. Kelley, R. E. Nisbett, S. Valines, & B. Weiner (Eds.) *Attribution: Perceiving the causes of behavior* (pp. 47-62). Morristown, NJ: General Learning.
- Klein, O., & Snyder, M. (2003). Stereotypes and behavioral confirmation: From interpersonal to intergroup perspectives. In M. P. Zanna (Ed.), *Advances in experimental social psychology*, 35, (pp. 153-234). Orlando, FL: Academic.
- Madon, S., Guyll, M., Spoth, R. L., Cross, S. E., & Hilbert, S. J. (2003). The self-fulfilling influence of mother expectations on children's underage drinking. *Journal of Personality and Social Psychology*, 84, 1188-1205.
- Madon, S., Guyll, M., Spoth, R., & Willard, J. (2004). Self-fulfilling prophecies: The synergistic accumulation of parents' beliefs on children's drinking behavior. *Psychological Science* 15, 837-845.
- Madon, S., Jussim, L., & Eccles, J. (1997). In search of the powerful self-fulfilling prophecy. *Journal of Personality and Social Psychology*, 72, 791-809.
- Madon, S., Willard, J., Guyll, M., Trudeau, L., & Spoth, R. L. (2006). The long-term self-fulfilling influence of mothers' beliefs on children's alcohol use. *Journal of Personality and Social Psychology*, 90, 911-926.
- McNair, P. M., Lorr, M., & Droppleman, L. F. (1981). *POMS manual* (2<sup>nd</sup> ed.) San Diego: Educational and Industrial Testing Service.
- Merton R. K. (1948). The self-fulfilling prophecy. *Antioch Review*, 8, 193-210.



- Miller, D. T., & Turnbull, W. (1986). Expectancies and interpersonal processes. *Annual Review Psychology, 37*, 233-256.
- Neuberg, S. L. (1989). The goal of forming accurate impressions during interactions: Attenuating the impact of negative expectancies. *Journal of Personality and Social Psychology, 56*, 374-384.
- Neuberg, S. L., Judice, T. N., Viridin, L. M., & Carrillo, M. A. (1993). Perceiver self-presentation goals as moderators of expectancy influences: Ingratiation and the disconfirmation of negative expectancies. *Journal of Personality and Social Psychology, 64*, 409-420.
- Reich, D. A. (2004). What you expect is not always what you get: The roles of extremity, optimism, and pessimism in the behavioral confirmation process. *Journal of Experimental Social Psychology, 40*, 199-215.
- Rosenthal, R. (1973). *On the social psychology of the self-fulfilling prophecy: Further evidence for Pygmalion effects and their mediating mechanisms*. New York: MSS Modular Publication, Module 53.
- Rosenthal, R. (1989). *Experimenter expectancy, covert communication, and meta-analytic methods*. Invited address at the annual meeting of the American Psychological Association, New Orleans.
- Rosenthal, R. (2002). Covert communication in classrooms, clinics, courtrooms, and cubicles. *American Psychologist, 57*, 839-849.
- Rosenthal, R. & Fode, K. L. (1963). The effect of experimenter bias on the performance of the albino rat. *Behavioral Science, 8*, 183-189.
- Rosenthal, R., & Jacobson, L. (1968). Teacher expectations for the disadvantaged. *Scientific American, 218*, 19-23.
- Rosenthal, R., & Rubin, D. B. (1978). Interpersonal expectancy effects: The first 345 studies. *Behavioral and Brain Sciences, 3*, 377-386.

- Shacham, S. (1983). A shortened version of the profile of mood states. *Journal of Personality Assessment, 47*, 305-306.
- Shekelle, R. B., Gale, M., Ostfeld, A. M., & Paul, O. (1983). Hostility, risk of coronary heart disease, and mortality. *Psychosomatic Medicine, 45*, 109-114
- Skrypnek, B. J. & Snyder, M. (1982). On the self-perpetuating nature of stereotypes about women and men. *Journal of Experimental Social Psychology, 29*, 17-41.
- Smith, T. W., & Frohm, K. D. (1985). What's so unhealthy about hostility? Construct validity and psychosocial correlates of the Cook and Medley Ho Scale. *Health Psychology, 4*, 503-520.
- Smith, A. E., Jussim, L., & Eccles, J. (1999). Do self-fulfilling prophecies accumulate, dissipate, or remain stable over time? *Journal of Personality and Social Psychology, 77*, 548-565.
- Smith, A. E., Jussim, L., Eccles, J., VanNoy, M., Madon, S., Palumbo, P. (1998). Self-fulfilling prophecies, perceptual biases, and accuracy at the individual and group levels. *Journal of Experimental Social Psychology, 34*, 530-561.
- Snyder, M., Campbell B. H., & Preston, E. (1982). Testing hypotheses about human nature: Assessing the accuracy of social stereotypes. *Social Cognition, 1*, 256-272.
- Snyder, M., & Haugen, J. A. (1994). Why does behavioral confirmation occur? A functional perspective on the role of the perceiver. *Journal of Experimental Social Psychology, 30*, 218-246.
- Snyder, M., & Haugen, J. A. (1995). Why does behavioral confirmation occur? A functional perspective on the role of the target. *Personality and Social Psychology Bulletin, 21*, 963-974.
- Snyder, M., & Stukas, A. A., Jr. (1999). Interpersonal processes: The interplay of cognitive, motivational, and behavioral activities in social interaction. *Annual Review of Psychology, 50*, 273-303.

- Snyder, M., & Swann, W. B., Jr. (1978a). Behavioral confirmation in social interaction: From social perception to social reality. *Journal of Experimental Social Psychology, 14*, 148-162.
- Snyder, M., & Swann, W. B., Jr. (1978b). Hypothesis-testing processes in social interaction. *Journal of Personality and Social Psychology, 36*, 1202-1212.
- Snyder, M., Tanke, E. D., & Berscheid, E. (1977). Social perception and interpersonal behavior: On the self-fulfilling nature of social stereotypes. *Journal of Personality and Social Psychology, 35*, 1202-1212.
- Snyder, M., & White, P. (1981). Testing hypotheses about other people: Strategies of verification and falsification. *Personality and Social Psychology Bulletin, 7*, 39-43.
- Sutherland, A., & Goldschmid, M. L. (1974). Negative teacher expectation and IQ change in children with superior intellectual potential. *Child Development, 45*, 853-856.
- Swann, W. B. Jr., & Ely, R. J. (1984). A battle of wills: Self-verification versus behavioral confirmation. *Journal of Personality and Social Psychology, 46*, 1287-1302.
- West, C. K., & Anderson, T. H. (1976). The question of preponderant causation in teacher expectancy research. *Review of Educational Research, 46*, 613-630.
- Willard, J. (2006). *An experimental test of the accumulation of perceptual biases across perceivers*. Unpublished manuscript, Iowa State University.
- Word, C. O., Zanna, M. P., & Cooper, J. (1974). The nonverbal mediation of self-fulfilling prophecies in interracial interaction. *Journal of Experimental Social Psychology, 10*, 109-120.
- Zuckerman, M., Knee, C. R., Hodgins, H. S., & Miyake, K. (1995). Hypothesis confirmation: The joint effect of positive test strategy and acquiescence response set. *Journal of Personality and Social Psychology, 68*, 52-60.

## Appendix A

## Preliminary Question Pool

## Hostile:

1. Have you ever genuinely wanted to kill someone or wished someone dead? If so, describe the situation.
2. If you could use a voodoo doll to hurt anyone you chose, would you? Why or why not?
3. Would you be willing to kill a beautiful butterfly by pulling off its wings for an all-expense-paid, one-week vacation anywhere in the world? Why or why not?
4. Have you ever hated anyone? If so, why and for how long?
5. When were you last in a fight? What caused it, and who won?
6. What is the worst psychological torture you can imagine inflicting on someone else?
7. A good friend pulls off a well-conceived practical joke that makes you look ridiculous. How would you react?
8. When did you last yell at someone? Why?
9. How do you react when you aren't thanked for going out of your way for someone?
10. When you do something embarrassing, how much does it bother you to have other people notice it and laugh at you?
11. Someone you love deeply is brutally murdered and you know the identity of the murderer, who is acquitted of the crime. Would you seek revenge? If so, how?
12. While arguing with a close friend on the telephone, s/he gets angry and hangs up. Assuming s/he is at fault and makes no attempt to contact you, how long would you wait to get in touch with him/her?
13. Would you try to undermine someone who was luckier or more successful than you?
14. What is the angriest you can remember being this semester?
15. What do you do when sales people try to pressure you into buying something you don't want?
16. If a friend continually showed up late, what would you say to him/her?
17. What would you do if someone purposely insulted you?
18. When you're in a bad mood, what is the one thing that people do that tends to irritate you the most?
19. If a person near you in a movie theater was talking loudly throughout the movie, what would you do about it?
20. If you were given a black box and told that if you opened it, any wish you wanted would be granted, but one person in the world would die because of it, would you do it?

## Non-hostile

21. If you could spend one year in perfect happiness but afterward would remember nothing, would you do it? Why or why not?
22. Do you think the world will be a better place 100 years from now? In what way?
23. What would constitute a "perfect" evening for you?
24. Whom do you admire most? In what way does that person inspire you?
25. If you could wake up tomorrow having gained any one ability or quality, what would it be? What would you do with that ability?

26. What is the most memorable dream you've had?
27. Given the choice of anyone in the world, whom would you want as your dinner guest?  
As your close friend? As your lover?
28. Would you like to be famous? In what way?
29. If you could choose the sex and appearance of your soon-to-be-born child, would you do it? Why or why not?
30. If you could travel into the past, where would you go and what would you try to accomplish if you knew you might change the course of history?
31. If you were able to wake up in the body of someone else tomorrow, whom would you pick? Why?
32. If you went to a beach and it turned out to be a nude beach, would you stay and go swimming? Would you swim nude?
33. What do you value most in a relationship?
34. If you could script the basic plot for your dream tonight, what would the story be?
35. If a crystal ball would tell you the truth about any one thing you wished to know concerning yourself, life, the future, or anything else, what would you want to know?
36. Tell me about a recent time that you had a lot of fun with your friends.
37. What do you do when you want to "let your hair down" and really have fun?
38. Dr. Seuss (Theodore Seuss Geisel) once said: "Be who you are and say what you feel, because those who mind don't matter and those who matter don't mind." What do you think he meant by that?
39. If you had three wishes, what would they be?
40. Who are three historical people you would like to meet?

Appendix B

*Blank Profile*

In interview-type situations, interviewers typically use personality measures to help them make judgments about the people they are interviewing. You are going to receive personality information about the respondent.

Below is the Cook-Medley Personality Profile which assesses a person's level of hostility and aggressiveness in everyday life. Generally, about a third of the people who take this survey are classified as hostile, a third as neutral, and a third as friendly.

We will be assigning you to interview a respondent who is classified as \_\_\_\_\_ on this particular measure.

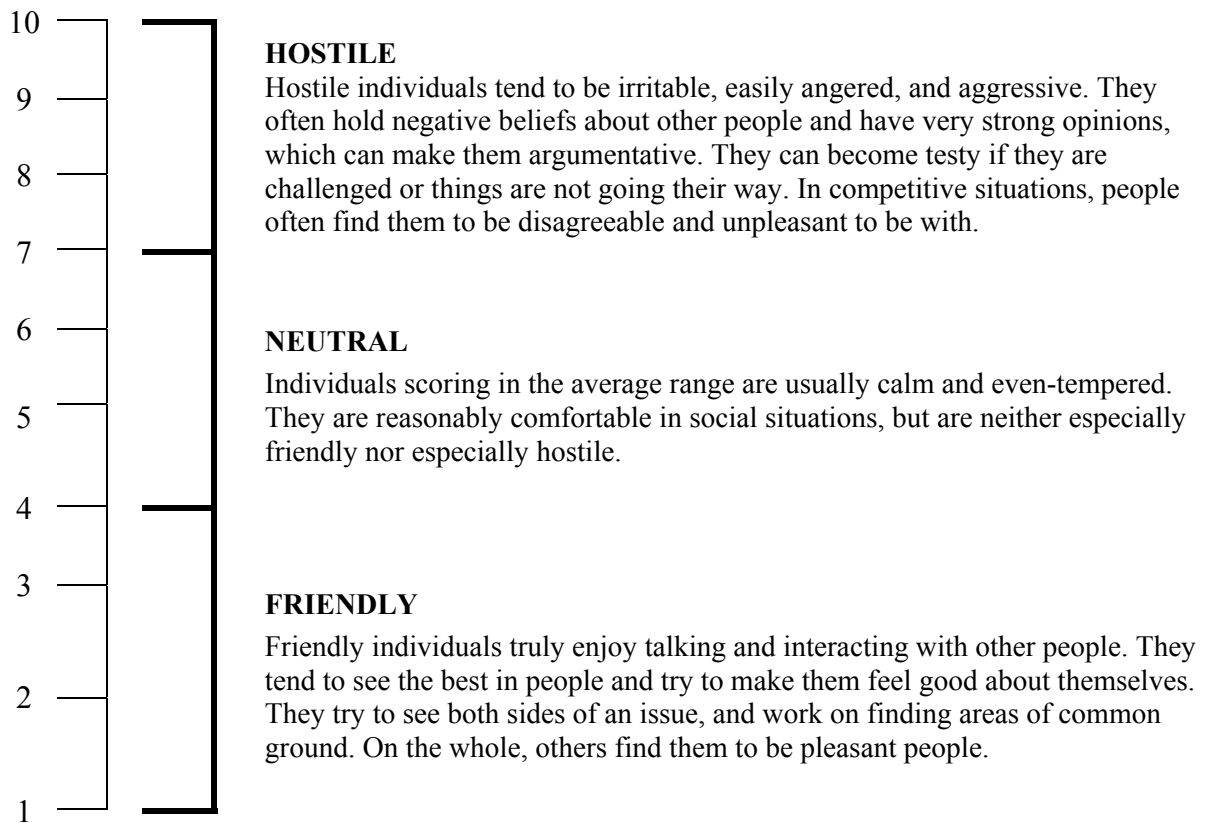
Your task is to determine if the respondent behaves in a manner consistent with his or her classification during the interview. You'll do this during the upcoming interview by asking him or her several questions. We've made this task a little bit easier for everyone by coming up with the questions ourselves. You will simply choose which questions you would like to ask in order to get the information you need to accomplish your task. However, you should feel free to ask the respondent to elaborate. For example, you can ask, "What do you mean by that?" or "Can you tell me more about why you would respond that way?"

Please read the classification descriptions below before selecting questions.

085-C7D

**COOK-MEDLEY RESULT  
PERSONALITY PROFILE**

**Descriptions:**



### *Hostile Profile*

In interview-type situations, interviewers typically use personality measures to help them make judgments about the people they are interviewing.

Below is the Cook-Medley Personality Profile which assesses a person's level of hostility and aggressiveness in everyday life. Generally, about a third of the people who take this survey are classified as hostile, a third as neutral, and a third as friendly.

Your task is to determine which personality type best describes the respondent.

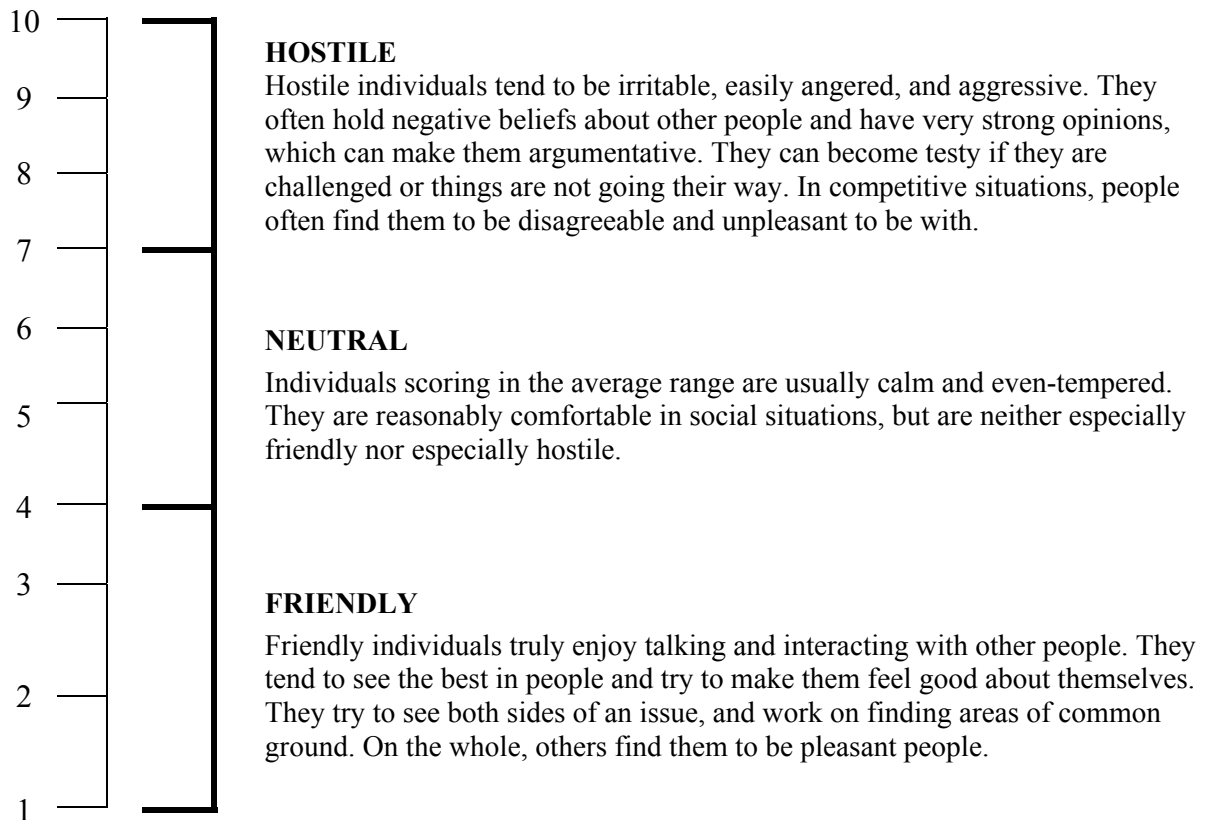
You'll do this during the upcoming interview by asking him or her several questions. We've made this task a little bit easier for everyone by coming up with the questions ourselves. You will simply choose which questions you would like to ask in order to get the information you need to accomplish your task. However, you should feel free to ask the respondent to elaborate. For example, you can ask, "What do you mean by that?" or "Can you tell me more about why you would respond that way?"

Please read the classification descriptions below before selecting questions.

085-C7D

<b>COOK-MEDLEY RESULT</b> <b>PERSONALITY PROFILE</b>
---------------------------------------------------------

**Descriptions:**



## Appendix C

**Hostile Questions:**

1. What do you do when sales people try to pressure you into buying something you don't want?
2. What is the angriest you can remember being this semester?
3. When did you last yell at someone? Why?
4. Have you ever genuinely wished someone dead or wanted to kill someone? If so, describe the situation.
5. When were you last in a fight? What caused it, and who won?
6. When you're in a bad mood, what is the one thing that people do that tends to irritate you the most?
7. While arguing with a close friend on the telephone, s/he gets angry and hangs up. Assuming s/he is at fault and makes no attempt to contact you, how long would you wait to get in touch with him/her?
8. What would you do if someone purposely insulted you?
9. What is the worst psychological torture you can imagine inflicting on someone else?
10. If you could use a voodoo doll to hurt anyone you chose, would you? Why or why not?
11. If a friend continually showed up late, what would you say to him/her?
12. Would you try to undermine someone who was luckier or more successful than you? Why or why not?
13. Describe a time when someone spread a rumor about you.
14. Someone you love deeply is brutally murdered and you know the identity of the murderer, who is acquitted of the crime. Would you seek revenge? If so, how?
15. A good friend pulls off a well-conceived practical joke that makes you look ridiculous. How would you react?
16. If a person near you in a movie theater was talking loudly throughout the movie, what would you do about it?
17. Have you ever hated anyone? If so, why and for how long?
18. What would you do or say to a drunk driver that killed your parents in a car crash?
19. What is your worst pet peeve?
20. If you got charged extra for something that you didn't buy, order, or want, what would you do?
21. What would you do if you thought your "friend" was talking about you behind your back?
22. What would you do if your roommate threw out your homework?
23. How would you respond if someone you were dating seriously, cheated on you?
24. What would you do if a person you didn't know kept rudely staring at you?
25. What would you do if your teacher accused you of cheating when you actually hadn't?
26. What kinds of people do you find really difficult to get along with?
27. People express their anger in different ways. How do you express yours?
28. If you knew that someone had stolen from you and you decided to confront him/her about it, what would you say to him/her?
29. What would someone have to do for you to punch them in the face?



30. Imagine someone spread a rumor about you, what would you do to get back at them?
31. If you were in a fight, what's a dirty move you might pull to win?
32. Tell me about a time when someone damaged or lost something that was important to you.
33. Imagine a friend told one of your biggest secrets, what would you say or do?
34. What would you do if another student borrowed your class notes and then lost them?
35. When someone close to you really makes you mad, what do you do to piss them off in return?
36. When someone cuts in-line in front of you, what do you want to do to them?
37. If someone rear-ended you in a parking lot, what would you say to them?
38. Have you ever felt disrespected by someone? What did they do that made you angry?
39. Describe a co-worker or boss that you did not get along with. What kinds of things did you not like about this person?
40. Would you ever slap someone for something they said? Why or why not?
41. What kinds of things can make you lose your temper and why?
42. What would you do if someone undermined your authority?
43. Who is the most annoying person you know? Why do they annoy you?
44. Imagine you're at a party and another person is hitting on your boy/girlfriend. You tell him/her to back off, but he/she doesn't. What would you do?

#### **Non-hostile Questions:**

1. What is the most memorable dream you've had?
2. Would you like to be famous? In what way?
3. Do you think the world will be a better place 100 years from now? In what way?
4. Tell me about a recent time that you had a lot of fun with your friends.
5. If a crystal ball would tell you the truth about any one thing you wished to know concerning yourself, life, the future, or anything else, what would you want to know?
6. If you could wake up tomorrow having gained any one ability or quality, what would it be? What would you do with that ability?
7. What would constitute a "perfect" evening for you?
8. Who are three historical people you would like to meet?
9. If you went to a beach and it turned out to be a nude beach, would you stay and go swimming? Would you swim nude?
10. If you were able to wake up in the body of someone else tomorrow, whom would you pick? Why?
11. If you could spend one year in perfect happiness but afterward would remember nothing, would you do it? Why or why not?
12. If you could choose the sex and appearance of your soon-to-be-born child, would you do it? Why or why not?
13. What do you value most in a relationship?
14. Given the choice of anyone in the world, whom would you want as your dinner guest?  
As your close friend? As your lover?
15. What do you do when you want to "let your hair down" and really have fun?

16. Dr. Seuss (Theodore Seuss Geisel) once said: "Be who you are and say what you feel, because those who mind don't matter and those who matter don't mind." What do you think he meant by that?
17. Whom do you admire most? In what way does that person inspire you?
18. If you had one physical feature you could change, what would it be?
19. Imagine you had to give a surprise speech. What would you do?
20. What was your favorite childhood game to play during recess?
21. What is your favorite thing to do on a Friday night?
22. What's the most exciting thing you have done in your life?
23. How do you make your new friends feel welcome when interacting with your old friends?
24. When someone does a favor for you, how do you show him/her that you really appreciate it?
25. Would you prefer your life to be secure and comfortable, or would you like it to be exciting and dangerous? Why?
26. Who is the person that you usually go to when you're upset and why do you go to this person?
27. If you were interested in meeting new people, what kinds of things would you do?
28. What kind of things do you do to let others who are close to you really know you care?
29. What kind of career plans do you have?
30. If you were looking for a thrill, what would you do?
31. What is one of the best things about being a college student and why?
32. How do you let others know that you're open to listening to their opinions?
33. What is your favorite hobby and what makes it a favorite hobby of yours?
34. If you knew that you only had 24 hours left to live, how would you spend those hours?
35. What are three qualities you look for in a mate?
36. Would you rather be famous during your lifetime, or would you rather be remembered for years to come? Why?
37. At the end of your life how do you want people to remember you?
38. If you could see any band or person perform live from anytime in history, who would it be?
39. What particular movie role from any Hollywood movie would you want to play?
40. What would you do to liven up a party?
41. If you could know one secret about the government what would it be and why?
42. You're offered either 5 million dollars or the job of your dreams. Which do you take and why?
43. Would you donate an organ in order to save other person's life? Why or why not?
44. What is your all-time favorite movie? Why is it your favorite?

## Appendix D

INSTRUCTIONS: You are completing this questionnaire for one extra credit point in Psychology 280. Print out this 2 page questionnaire and complete it. Return your completed questionnaire to Ashley Buller's mailbox (Lagomarcino Hall, W112) no later than 4:00 pm Friday December 8<sup>th</sup>. No email attachments will be accepted.

QUESTIONNAIRE

1. What is your full name? \_\_\_\_\_
2. Circle the section of 280 that you are enrolled in. 11:00      12:10
3. Do you think it is okay to illegally download music from the internet (circle your answer)?  
Yes   No
4. Give a few reasons for your opinion.

---



---



---



---



---

5. Imagine that you are a participant in a research study with two other participants. Five things happen in this study.

First, you and both of the other participants are given a few minutes to each write your own persuasive essay about if it is okay for people to illegally download music from the internet. Second, each of you reads another participant's essay and gives feedback on it. Third, you are shown the feedback about one of the other participant's essay (not your own). This is what it the feedback says:

*This is by far the worst essay I've ever read. It was a waste of time for me to read it and I could tell the person put absolutely no effort or thought into this. The only thing I was "convinced" of was that they should never try to write again. Good job.*

Fourth, you find out that the participant who wrote this feedback scored high on a hostility measure meaning that s/he has a hostile personality. Fifth, now you are told to prepare for a

discussion with the participant who wrote the feedback. Your task in the discussion is to find out if the person is hostile. Circle **15** questions from the following list of 44 that you would ask during the discussion. Please read all 44 of the questions before making your selections.

45. What is the most memorable dream you've had?
46. Would you like to be famous? In what way?
47. What do you do when sales people try to pressure you into buying something you don't want?
48. What is the angriest you can remember being this semester?
49. Do you think the world will be a better place 100 years from now? In what way?
50. Tell me about a recent time that you had a lot of fun with your friends.
51. When did you last yell at someone? Why?
52. If a crystal ball would tell you the truth about any one thing you wished to know concerning yourself, life, the future, or anything else, what would you want to know?
53. If you could wake up tomorrow having gained any one ability or quality, what would it be? What would you do with that ability?
54. Have you ever genuinely wished someone dead or wanted to kill someone? If so, describe the situation.
55. What would constitute a "perfect" evening for you?
56. Who are three historical people you would like to meet?
57. When were you last in a fight? What caused it, and who won?
58. When you're in a bad mood, what is the one thing that people do that tends to irritate you the most?
59. If you went to a beach and it turned out to be a nude beach, would you stay and go swimming? Would you swim nude?
60. While arguing with a close friend on the telephone, s/he gets angry and hangs up. Assuming s/he is at fault and makes no attempt to contact you, how long would you wait to get in touch with him/her?
61. What would you do if someone purposely insulted you?
62. If you were able to wake up in the body of someone else tomorrow, whom would you pick? Why?
63. What is the worst psychological torture you can imagine inflicting on someone else?
64. If you could use a voodoo doll to hurt anyone you chose, would you? Why or why not?
65. If you could spend one year in perfect happiness but afterward would remember nothing, would you do it? Why or why not?
66. If a friend continually showed up late, what would you say to him/her?
67. If you could choose the sex and appearance of your soon-to-be-born child, would you do it? Why or why not?
68. Would you try to undermine someone who was luckier or more successful than you? Why or why not?
69. What do you value most in a relationship?
70. Describe a time when someone spread a rumor about you.
71. Given the choice of anyone in the world, whom would you want as your dinner guest? As your close friend? As your lover?
72. What do you do when you want to "let your hair down" and really have fun?

73. Someone you love deeply is brutally murdered and you know the identity of the murderer, who is acquitted of the crime. Would you seek revenge? If so, how?
74. A good friend pulls off a well-conceived practical joke that makes you look ridiculous. How would you react?
75. Dr. Seuss (Theodore Seuss Geisel) once said: "Be who you are and say what you feel, because those who mind don't matter and those who matter don't mind." What do you think he meant by that?
76. If a person near you in a movie theater was talking loudly throughout the movie, what would you do about it?
77. Whom do you admire most? In what way does that person inspire you?
78. Have you ever hated anyone? If so, why and for how long?
79. If you had one physical feature you could change, what would it be?
80. What would you do or say to a drunk driver that killed your parents in a car crash?
81. Imagine you had to give a surprise speech. What would you do?
82. What is your worst pet peeve?
83. If you got charged extra for something that you didn't buy, order, or want, what would you do?
84. What was your favorite childhood game to play during recess?
85. What would you do if you thought your "friend" was talking about you behind your back?
86. What is your favorite thing to do on a Friday night?
87. What would you do if your roommate threw out your homework?
88. What's the most exciting thing you have done in your life?

Return your completed questionnaire to Ashley Buller's mailbox (Lagomarcino Hall, W112) no later than 4:00 pm Friday December 8<sup>th</sup>. No email attachments will be accepted.

QUESTIONNAIRE

1. What is your full name? \_\_\_\_\_
2. Circle the section of 280 that you are enrolled in. 11:00      12:10
3. Do you think it is okay to illegally download music from the internet (circle your answer)?  
Yes   No
4. Give a few reasons for your opinion.

---



---



---



---



---

5. Imagine that you are a participant in a research study with two other participants. Four things happen in this study.

First, you and both of the other participants are given a few minutes to each write your own persuasive essay about if it is okay for people to illegally download music from the internet. Second, each of you reads another participant's essay and gives feedback on it. Third, you are shown the feedback about one of the other participant's essay (not your own). This is what it the feedback says:

*This is a pretty good essay, especially given how little time there was to write it. I could tell that the person put some effort and thought into this. I thought that the essay was convincing. Good job.*

Fourth, now you are told to prepare for a discussion with the participant who wrote the feedback. Your task in the discussion is to find out what the person's personality is like. Circle **15** questions from the following list of 44 that you would ask during the discussion. Please read all 44 of the questions before making your selections.

1. How would you respond if someone you were dating seriously, cheated on you?
2. How do you make your new friends feel welcome when interacting with your old friends?
3. When someone does a favor for you, how do you show him/her that you really appreciate it?

4. What would you do if a person you didn't know kept rudely staring at you?
5. Would you prefer your life to be secure and comfortable, or would you like it to be exciting and dangerous? Why?
6. Who is the person that you usually go to when you're upset and why do you go to this person?
7. What would you do if your teacher accused you of cheating when you actually hadn't?
8. What kinds of people do you find really difficult to get along with?
9. If you were interested in meeting new people, what kinds of things would you do?
10. People express their anger in different ways. How do you express yours?
11. What kind of things do you do to let others who are close to you really know you care?
12. What kind of career plans do you have?
13. If you knew that someone had stolen from you and you decided to confront him/her about it, what would you say to him/her?
14. What would someone have to do for you to punch them in the face?
15. Imagine someone spread a rumor about you, what would you do to get back at them?
16. If you were looking for a thrill, what would you do?
17. What is one of the best things about being a college student and why?
18. If you were in a fight, what's a dirty move you might pull to win?
19. How do you let others know that you're open to listening to their opinions?
20. Tell me about a time when someone damaged or lost something that was important to you.
21. Imagine a friend told one of your biggest secrets, what would you say or do?
22. What is your favorite hobby and what makes it a favorite hobby of yours?
23. What would you do if another student borrowed your class notes and then lost them?
24. When someone close to you really makes you mad, what do you do to piss them off in return?
25. If you knew that you only had 24 hours left to live, how would you spend those hours?
26. What are three qualities you look for in a mate?
27. When someone cuts in-line in front of you, what do you want to do to them?
28. If someone rear-ended you in a parking lot, what would you say to them?
29. Would you rather be famous during your lifetime, or would you rather be remembered for years to come? Why?
30. At the end of your life how do you want people to remember you?
31. Have you ever felt disrespected by someone? What did they do that made you angry?
32. If you could see any band or person perform live from anytime in history, who would it be?
33. Describe a co-worker or boss that you did not get along with. What kinds of things did you not like about this person?
34. Would you ever slap someone for something they said? Why or why not?
35. What particular movie role from any Hollywood movie would you want to play?

36. What kinds of things can make you lose your temper and why?
37. What would you do to liven up a party?
38. If you could know one secret about the government what would it be and why?
39. What would you do if someone undermined your authority?
40. You're offered either 5 million dollars or the job of your dreams. Which do you take and why?
41. Would you donate an organ in order to save other person's life? Why or why not?
42. Who is the most annoying person you know? Why do they annoy you?
43. What is your all-time favorite movie? Why is it your favorite?
44. Imagine you're at a party and another person is hitting on your boy/girlfriend. You tell him/her to back off, but he/she doesn't. What would you do?



## Appendix E

## Final Question Pool

**Hostile Questions:**

- 1.If you knew that someone had stolen from you and you decided to confront him/her about it, what would you say to him/her?
- 2.How would you respond if someone you were dating seriously, cheated on you?
- 3.Have you ever hated anyone? If so, why and for how long?
- 4.What kinds of things can make you lose your temper and why?
- 5.What would you do if you thought your “friend” was talking about you behind your back?
- 6.Tell me about a time when someone damaged or lost something that was important to you.
- 7.What would you do if your roommate threw out your homework?
- 8.Someone you love deeply is brutally murdered and you know the identity of the murderer, who is acquitted of the crime. Would you seek revenge? If so, how?
- 9.What would you do if someone undermined your authority?
10. Imagine someone spread a rumor about you, what would you do to get back at them?
11. If a person near you in a movie theater was talking loudly throughout the movie, what would you do about it?
12. When did you last yell at someone? Why?
13. Would you ever slap someone for something they said? Why or why not?
14. If you could use a voodoo doll to hurt anyone you chose, would you? Why or why not?
15. When someone cuts in-line in front of you, what do you want to do to them?
16. Imagine you're at a party and another person is hitting on your boy/girlfriend. You tell him/her to back off, but he/she doesn't. What would you do?
17. Have you ever genuinely wished someone dead or wanted to kill someone? If so, describe the situation.
18. What would someone have to do for you to punch them in the face?
19. What is the angriest you can remember being this semester?
20. What is the worst psychological torture you can imagine inflicting on someone else?
21. When were you last in a fight? What caused it, and who won?
22. If someone rear-ended you in a parking lot, what would you say to them?
23. When someone close to you really makes you mad, what do you do to piss them off in return?
24. What would you do if a person you didn't know kept rudely staring at you?

**Non-hostile Questions:**

- 1.Would you like to be famous? In what way?
- 2.If you went to a beach and it turned out to be a nude beach, would you stay and go swimming? Would you swim nude?
- 3.What kind of things do you do to let others who are close to you really know you care?
- 4.What would constitute a “perfect” evening for you?
- 5.If you were interested in meeting new people, what kinds of things would you do?
- 6.What are three qualities you look for in a mate?
- 7.Would you donate an organ in order to save other person's life? Why or why not?

8. Would you rather be famous during your lifetime, or would you rather be remembered for years to come? Why?
9. What would you do to liven up a party?
10. Whom do you admire most? In what way does that person inspire you?
11. What kind of career plans do you have?
12. If you could spend one year in perfect happiness but afterward would remember nothing, would you do it? Why or why not?
13. If you could wake up tomorrow having gained any one ability or quality, what would it be? What would you do with that ability?
14. If a crystal ball would tell you the truth about any one thing you wished to know concerning yourself, life, the future, or anything else, what would you want to know?
15. What is one of the best things about being a college student and why?
16. What is your favorite thing to do on a Friday night?
17. What do you do when you want to “let your hair down” and really have fun?
18. What’s the most exciting thing you have done in your life?
19. If you knew that you only had 24 hours left to live, how would you spend those hours?
20. What do you value most in a relationship?
21. What is your favorite hobby and what makes it a favorite hobby of yours?
22. You're offered either 5 million dollars or the job of your dreams. Which do you take and why?
23. At the end of your life how do you want people to remember you?
24. Would you prefer your life to be secure and comfortable, or would you like it to be exciting and dangerous? Why?

## Appendix F

*Profile of Mood States*

Please answer for how you are feeling RIGHT NOW.

1. How tense do you feel now? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely
2. How angry do you feel now? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely
3. How on edge do you feel now? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely
4. How peeved do you feel now? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely
5. How uneasy do you feel now? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely
6. How annoyed do you feel now? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely
7. How restless do you feel now? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely
8. How resentful do you feel now? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely
9. How nervous do you feel now? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely
10. How bitter do you feel now? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely
11. How anxious do you feel now? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely
12. How furious do you feel now? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely

*Adjective Mood Survey*

1. How nice do you feel now? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely
2. How frustrated do you feel now? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely
3. How suspicious do you feel now? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely
4. How unsociable do you feel now? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely
5. How agreeable do you feel now? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely
6. How understanding do you feel? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely
7. How hostile do you feel now? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely
8. How friendly do you feel now? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely
9. How mean do you feel now? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely
10. How cooperative do you feel ? (1)Not at all (2)A little bit (3)Moderately (4)Quite a bit (5)Extremely

## Appendix G

*Cook-Medley Trait Hostility*

For each of the items indicate whether the answer is True (T) or False (F) for you.

1. When I take a new job, I like to be tipped off on who should be gotten next to..... T...F
2. When someone does me wrong, I feel I should pay him back if I can, just for the principle of the thing..... T...F
3. I prefer to pass by school friends, or people I know but have not seen for a long time unless they speak to me first. .... T...F
4. I have often had to take orders from someone who did not know as much as I did. .... T...F
5. I think a great many people exaggerate their misfortunes in order to gain the sympathy and help of others. .... T...F
6. It takes a lot of argument to convince most people of the truth..... T...F
7. I think most people would lie to get ahead. .... T...F
8. Someone has it in for me. .... T...F
9. My relatives are nearly all in sympathy with me. .... T...F
10. Most people are honest chiefly through fear of being caught..... T...F
11. Most people will use somewhat unfair means to gain profit or an advantage, rather than to lose it..... T...F
12. I commonly wonder what hidden reason another person may have for doing something nice for me. .... T...F
13. It makes me impatient to have people ask my advice or otherwise interrupt me when I am working on something important. .... T...F
14. I feel that I have often been punished without cause. .... T...F
15. I am against giving money to beggars. .... T...F
16. Some of my family have habits that bother and annoy me very much. .... T...F
17. My way of doing things is apt to be misunderstood by others..... T...F
18. I can be friendly with people who do things which I consider wrong. .... T...F
19. I don't blame anyone for trying to grab everything he can get in this world..... T...F
20. No one cares much what happens to you. .... T...F
21. It is safer to trust nobody. .... T...F
22. I do not blame a person for taking advantage of someone who lays himself open to it. .... T...F
23. I have often felt that strangers were looking at me critically..... T...F
24. Most people make friends because friends are likely to be useful to them..... T...F
25. I am sure I am being talked about..... T...F
26. I am not likely to speak to people until they speak to me..... T...F
27. Most people inwardly dislike putting themselves out to help other people. .... T...F
28. I tend to be on my guard with people who are somewhat more friendly than I had expected. T...F
29. People often disappoint me. .... T...F
30. I have often met people who were supposed to be experts who were no better than I. .... T...F
31. It makes me feel like a failure when I hear of the success of someone I know well. .... T...F
32. I am not easily angered. .... T...F
33. People generally demand more respect for their own rights than they are willing to allow for others..... T...F
34. I am quite often not in on gossip and talk of the group I belong to. .... T...F
35. I have often found people jealous of my good ideas just because they had not thought of them first. .... T...F
36. I have sometimes stayed away from another person because I feared doing or saying

- something I might regret afterwards. .... T ...F
37. I would certainly enjoy beating a crook at his own game. .... T ...F
38. I have at times had to be rough with people who were rude or annoying. .... T ...F
39. There are certain people whom I dislike so much that I am inwardly pleased when they  
are catching it for something they have done. .... T ...F
40. I am often inclined to go out of my way to win a point with someone who has opposed me. T ...F
41. The man who had most to do with me when I was a child (such as my father,  
stepfather, etc.) was very strict with me. .... T ...F
42. I like to keep people guessing what I'm going to do next. .... T ...F
43. When a man is with a woman, he is usually thinking about things related to sex. .... T ...F
44. I do not try to cover up my poor opinion or pity of a person so that  
he won't know how I feel. .... T ...F
45. I strongly defend my own opinions as a rule. .... T ...F
46. I frequently ask people for advice. .... T ...F
47. I have frequently worked under people who seem to have things arranged so that they  
Get credit for good work but are able to pass off mistakes onto those under them. .... T ...F
48. People can pretty easily change me even though I thought my mind was already  
made up on a subject. .... T ...F
49. Sometimes I am sure that other people can tell what I am thinking. .... T ...F
50. A large number of people are guilty of bad sexual conduct. .... T ...F

Appendix H  
Hostile Profile

**COOK-MEDLEY RESULT  
PERSONALITY PROFILE**

<b>Session #</b>	65
<b>Date/Time</b>	02/25/05
<b>Supervisor</b>	05
<b>Assistant</b>	02

UNIT	Computer Pro	Program	CODE ID
INT1	1	3	122
INT2	2	2	231
RES	3	2	305

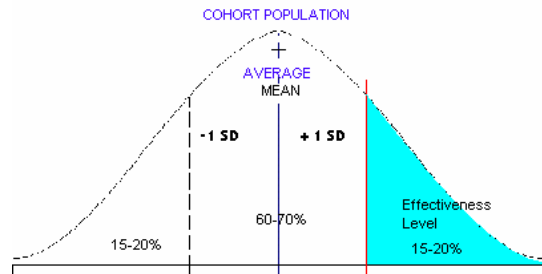
Responses:

Question #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3
2	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
3	3	4	4	4	4	4	4	4	4	4	4	4	5							
4	0	0	1	2	3	4	5	6	7	8	9	0								

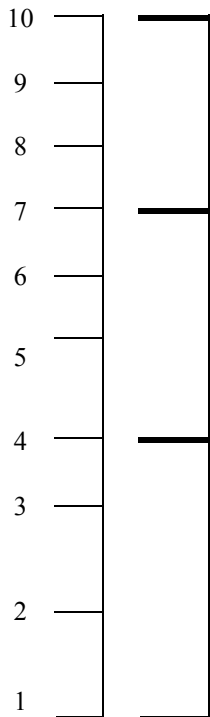
Shaded questions indicate hostile answer

Results:

<b>Hostile Answers</b>	31
<b>Total Questions</b>	50
<b>Hostile</b>	8.25



Descriptions:



**HOSTILE**

Hostile individuals tend to be irritable, easily angered, and aggressive. They often hold negative beliefs about other people and have very strong opinions, which can make them argumentative. They can become testy if they are challenged or things are not going their way. In competitive situations, people often find them to be disagreeable and unpleasant to be with.

**NEUTRAL**

Individuals scoring in the average range are usually calm and even-tempered. They are reasonably comfortable in social situations, but are neither especially friendly nor especially hostile.

**FRIENDLY**

Friendly individuals truly enjoy talking and interacting with other people. They tend to see the best in people and try to make them feel good about themselves. They try to see both sides of an issue, and work on finding areas of common ground. On the whole, others find them to be pleasant people.

## Appendix I

*Essay Feedback Assessment*

For each of the following adjectives, please rate the essay feedback that you have just read.

- |                      |               |                 |               |                |              |
|----------------------|---------------|-----------------|---------------|----------------|--------------|
| 1. How PLEASANT?     | (1)Not at all | (2)A little bit | (3)Moderately | (4)Quite a bit | (5)Extremely |
| 2. How MEAN?         | (1)Not at all | (2)A little bit | (3)Moderately | (4)Quite a bit | (5)Extremely |
| 3. How HARSH?        | (1)Not at all | (2)A little bit | (3)Moderately | (4)Quite a bit | (5)Extremely |
| 4. How CONSTRUCTIVE? | (1)Not at all | (2)A little bit | (3)Moderately | (4)Quite a bit | (5)Extremely |
| 5. How APPROPRIATE?  | (1)Not at all | (2)A little bit | (3)Moderately | (4)Quite a bit | (5)Extremely |
| 6. How HELPFUL?      | (1)Not at all | (2)A little bit | (3)Moderately | (4)Quite a bit | (5)Extremely |
| 7. How HURTFUL?      | (1)Not at all | (2)A little bit | (3)Moderately | (4)Quite a bit | (5)Extremely |

*Expectancy Manipulation Check*

Even though you haven't met the person you will be interviewing, on the following screens please rate how well each adjective describes what you think the RESPONDENT will be like.

- |                                                     |                |     |     |     |               |
|-----------------------------------------------------|----------------|-----|-----|-----|---------------|
| 1. How NICE do you expect the Respondent to be?     | (1) Not at all | (2) | (3) | (4) | (5) Very Much |
| 2. How ANGRY do you expect the Respondent to be?    | (1) Not at all | (2) | (3) | (4) | (5) Very Much |
| 3. How FRIENDLY do you expect the Respondent to be? | (1) Not at all | (2) | (3) | (4) | (5) Very Much |
| 4. How CRUEL do you expect the Respondent to be?    | (1) Not at all | (2) | (3) | (4) | (5) Very Much |
| 5. How HOSTILE do you expect the Respondent to be?  | (1) Not at all | (2) | (3) | (4) | (5) Very Much |

## Appendix J

*Impression Assessment*

1. Please rate the extent to which the following adjectives describe the RESPONDENT.
2. Hostile (1) Not at all (2) (3) (4) (5) (6) (7) (8) (9) (10) Very much
3. Kind (1) Not at all (2) (3) (4) (5) (6) (7) (8) (9) (10) Very much
4. Considerate (1) Not at all (2) (3) (4) (5) (6) (7) (8) (9) (10) Very much
5. Unfriendly (1) Not at all (2) (3) (4) (5) (6) (7) (8) (9) (10) Very much
6. Dislikable (1) Not at all (2) (3) (4) (5) (6) (7) (8) (9) (10) Very much
7. Warm (1) Not at all (2) (3) (4) (5) (6) (7) (8) (9) (10) Very much
8. Rude (1) Not at all (2) (3) (4) (5) (6) (7) (8) (9) (10) Very much
9. Insulting (1) Not at all (2) (3) (4) (5) (6) (7) (8) (9) (10) Very much
10. Sympathetic (1) Not at all (2) (3) (4) (5) (6) (7) (8) (9) (10) Very much
11. Pleasant (1) Not at all (2) (3) (4) (5) (6) (7) (8) (9) (10) Very much
12. Impolite (1) Not at all (2) (3) (4) (5) (6) (7) (8) (9) (10) Very much
13. Aggressive (1) Not at all (2) (3) (4) (5) (6) (7) (8) (9) (10) Very much
14. Competitive (1) Not at all (2) (3) (4) (5) (6) (7) (8) (9) (10) Very much
15. Helpful (1) Not at all (2) (3) (4) (5) (6) (7) (8) (9) (10) Very much
16. Excited (1) Not at all (2) (3) (4) (5) (6) (7) (8) (9) (10) Very much
17. Sociable (1) Not at all (2) (3) (4) (5) (6) (7) (8) (9) (10) Very much
18. Sensitive (1) Not at all (2) (3) (4) (5) (6) (7) (8) (9) (10) Very much



Appendix K

*Demographics*

Gender  
Age  
Year in School

*Suspicion Checks*

1. In a sentence or two, please indicate what you believe this experiment was about.
2. If you believe that you were misled, please describe how.
3. Please indicate what you knew about this experiment before participating.
4. Is there any reason why we should not use your data?
5. Did you recognize any of the other participants in this study by sight or voice before interacting with them today?