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The Developmental Interplay of Behavioral Confirmation and Self-Verification

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**The Developmental Interplay of Behavioral Confirmation and Self-
Verification**

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Dissertation

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Doctor of Philosophy

The University of Texas at Austin

December, 2006

Acknowledgments

The author would like to acknowledge all the children, families, and schools that participated in this research. She would also like to acknowledge her friends and colleagues at the Children's Research Lab. Lastly, she wishes to acknowledge her husband, parents, grandparents, and brother for all their support.

The Developmental Interplay of Behavioral Confirmation and Self-Verification

Publication No. _____

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The University of Texas at Austin, 2006

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Philosophers, psychologists, and authors have long pondered the question of whether others' expectations or one's own self-views are more important in determining behavior and personality. Researchers have designated these two processes behavioral confirmation and self-verification, respectively, and the interaction of these processes is often referred to as identity negotiation. Little research has examined the process of identity negotiation during adolescence, a period during which individuals are attempting to forge unique identities. Therefore, the primary purpose of the present studies was to examine the identity negotiation process during adolescence.

In Study 1, I examined whether adolescents (11-15 years of age) solicit self-verifying feedback. Adolescents first completed a measure of self-perceptions and then selected whether to receive positive or negative feedback from an unknown peer in areas of perceived strength and weakness. Adolescents desired feedback congruent with their own self-views; those with higher self-esteem tended to request more positive feedback

than those with lower self-esteem. Further, adolescents were more likely to seek negative feedback regarding a self-perceived weakness than a self-perceived strength.

In Study 2, I examined the joint operation of behavioral confirmation and self-verification in dyadic interactions among unacquainted adolescents. One member of each dyad (the target) completed a measure of self-perception. The second member of each dyad (the perceiver) was provided with false information regarding the attractiveness of their partner. I compared whether targets' self-views or perceivers' expectations of them were stronger determinants of behavior. Self-verification strivings were evident in these interactions; targets' self-views influenced the perceivers' final evaluations of their partners. Support for behavioral confirmation was lacking in same-sex dyads and dyads composed of male perceivers and female targets. Appearance based expectations influenced target behavior in dyads composed of female perceivers and male targets.

The current findings suggest that adolescents' self-views are important determinants of behavior. Significant implications for adolescent mental health and peer selection are discussed.

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Chapter One:

Introduction and Literature Review

"But you have no idea how frightfully interesting it is to take a human being and change her into a quite different human being by creating a new speech for her. It's filling up the deepest gulf that separates class from class and soul from soul."

". . . The difference between a lady and a flower girl is not how she behaves, but how she's treated."

-- George Bernard Shaw, Pygmalion (1914)

"The problem of Galatea is really the problem of any woman [person], in fiction or out, who gets crammed into the golden mould of someone else's stereotype: she scrambles out, swearing, as fast as she can."

-- Katharine Whitehorn, Only on Sundays (1966)

The ancient myth of Pygmalion and Galatea is one of the first recorded instances that examines whether behavior is determined more through the expectations of other people or internal expectations. According to the ancient Greeks, Pygmalion created a marble sculpture representing his ideal woman that he eventually fell in love with, going so far as to name the construct "Galatea." She eventually was brought to life through the power of a goddess, becoming everything that he wanted and expected. However, Galatea eventually began to exert her own will and independence. Philosophers, psychologists, and authors have long pondered the question of whether expectations

imposed by others onto the self or one's self-views are more important in determining behavior and personality. Researchers have designated these two processes behavioral confirmation and self-verification, respectively. The process through which expectations held by perceivers influence targets' behaviors and self-views is termed behavioral confirmation. This is also referred to as self-fulfilling prophecy, interpersonal expectancy effects, or the Pygmalion effect. The process through which the target's self-expectations guide the views and behavior of the perceiver is termed self-verification. This can also be referred to as the Galatea effect, alluding to the alternate perspective of the ancient myth.

The processes of behavioral confirmation and self-verification can operate in unison or opposition depending on the degree of agreement between the perceiver's view of the target and the target's self-views. Whenever a person is generally viewed by others in the same way the individual views him- or herself, behavioral confirmation and self-verification operate jointly. These two processes conflict if inconsistencies exist between the perceiver's expectations and the target's self-perceptions. In circumstances in which the perceiver views the target differently than the target views himself or herself, at least three different alternative outcomes are possible: the perceiver's expectations overcome the target's self-views, the target's self-views overcome the perceiver's expectations, or both perceiver and target are influenced by the other. Swann and colleagues refer to the course by which behavioral confirmation and self-verification interact as identity negotiation (McNulty & Swann, 1994; Swann, 1987; Swann & Ely, 1984), which they describe as "a battle of wills" (Swann & Ely, 1984, p. 1287) between these two

processes. Swann (1987) adopted the term identity negotiation to emphasize that individuals bring their own goals and backgrounds into interactions. During these interactions, individuals endeavor to establish agreed-upon identities that facilitate the exchange and allow them to accomplish their goals.

The current studies examine the interplay of behavioral confirmation and self-verification during early adolescence, which is a time when individuals are beginning to struggle to forge a unique identity (Erikson, 1956). Although there are several theories of adolescent identity formation (e.g., Erikson, 1956; Grotevant & Cooper, 1985; Marcia, 1966, 1993), I will focus on the manner in which behavioral confirmation and self-verification affect identity formation. Investigating these processes during early adolescence is essential because this is developmental period characterized by pubertal physical and emotional changes and is a common time for the emergence of deviant behavior and psychopathology (Angold, Costello, & Worthman, 1998; Ruuska, Kaltiala-Heino, Koivisto, & Rantanen, 2003).

During early adolescence, individuals often experiment with risky behaviors (Andrews, Tildesley, Hops, & Li, 2002). The statistics paint a picture of adolescence as an often dangerous time. Experimentation with illicit substances is common: 15% of middle school students report having smoked cigarettes (American Lung Association, 2006), 16% report having used marijuana (Maxwell, 2002), 36% report having begun to drink (National Center on Addiction and Substance Abuse at Columbia University, 2006), and 3% report using drugs such as cocaine, methamphetamines, and ecstasy

(SADD, n.d.). Many adolescents engage in other risky behaviors such as unprotected sex; 25% of sexually active adolescents have a sexually transmitted disease (American Social Health Association, n. d.). Physical aggression and social aggression are also common among individuals in middle school (Simons-Morton, Hartos, & Haynie, 2004; Underwood, 2003) and some early adolescents begin to become involved in gang activity (Dishion, Nelson, Yasui, 2005).

It is common for many types of psychopathology to first surface during adolescence (Angold et al., 1998). The incidence of depression increases as individuals transition from childhood to adolescence (Ma, Lee, & Stafford, 2005). Estimates of the number of adolescents diagnosed with major depressive disorder range from 4-8% of the population (Ma et al., 2005; National Institute of Mental Health, 2001). However, sub-clinical levels of depressive symptoms are extremely common among adolescence; 20-50% of adolescents experience sub-clinical depression (Hankin, 2006). Eating disorders also tend to first develop during early adolescence (Attie & Brooks-Gunn, 1989). Even though a small percentage of adolescents are diagnosed with eating disorders (Eating Disorder Coalition, n. d.), a large segment of the adolescent population display some symptoms of a subclinical eating disturbance (Graber, Tyrka, & Brooks-Gunn, 2003). Emergence of new psychopathologies during adolescence coincides with the developmental challenges of this period including puberty, greater autonomy from parents, and changing social dynamics at school (Attie & Brooks-Gunn, 1989; Jacobs, Vernon, & Eccles, 2004; Hankin, 2006).

Examining the interplay between behavioral confirmation and self-verification during adolescence will result in a better understanding of why adolescents engage in risky behavior and are prone to certain types of psychopathology. Adolescents' self-views may be different from others' perceptions of them. Imagine, for instance, an adolescent who views himself or herself to be a responsible individual who makes wise choices despite the fact that this individual's friends believe that he or she has antisocial tendencies and engages in risky behavior. There are three possible outcomes to this scenario: (1) the peers' expectations may create self-fulfilling effects and elicit the anticipated anti-social behavior from the target, (2) the target's self-views may prevail and he or she will act in a prosocial manner, or (3) both the perceiver and target may influence one another. If behavioral confirmation predominates during adolescence the first alternative is more likely whereas if self-verification predominates the second alternative is more likely.

A better understanding of the development of identity negotiation process will help identify the conditions under which adolescents' positive or negative self-views will remain dominant, even when others disagree. Potential dangers can result from either the dominance of behavioral confirmation or the dominance of self-verification. Peers, parents, and significant others in the environment can hold negative or anti-social expectations of targets. Expectations can elicit negative behaviors such as underage drinking through the process of behavioral confirmation (Madon, Gyll, Spoth, Cross, & Hilbert, 2003; Simons-Morton, Haynie, Crump, Eitel, & Saylor, 2001). Alternatively,

targets may view themselves in a negative light. Through the process of self-verification targets may seek out negative feedback and ignore positive feedback reinforcing their negative self-views. Seeking verification for negative self-views may result in increased feelings of depression (Joiner, 1995; Swann, Wenzlaff, & Tafarodi, 1992) or body dissatisfaction (Joiner, 1999). The emergence of depression and eating disorders during adolescence may be partially explained by adolescents' drive for feedback that is congruent with negative, global self-views and body image.

There is a dearth of developmental literature examining the process of identity negotiation; very few studies include child or adolescent participants. Therefore, I will first examine the processes of behavioral confirmation and self-verification separately as described in the social psychology literature, expounding on the nature of both processes. I will then review the developmental psychology literature and examine the occurrence of behavioral confirmation and self-verification in childhood and adolescence. After a brief introduction I will outline the conditions that affect both processes throughout development. I will conclude with a description of the current studies that examine the interplay of these processes during adolescence.

Behavioral Confirmation

Definition of Behavioral Confirmation

A colleague of Robert Merton made a chance remark that "if men define situations as real, they are real in their consequences," and Merton's reflection upon the truth of this statement led to his seminal piece on the self-fulfilling prophecy (1948, p.

193). Merton saw applications of this assertion to the contemporary events in his society. He used the Last National Bank as a case study – the bank was wildly successful until a rumor of financial difficulties emerged. Although there was no truth to the rumors, investors responded to the rumors by withdrawing their money from the bank, leading to actual financial difficulties and the bank’s eventual collapse. Thus, an initially false belief led these depositors to behave in such a manner as to make their beliefs become reality. Merton (1948) coined the term “self-fulfilling prophecy” to refer to this process.

Social psychologists drawing on Merton’s original conceptualization of the self-fulfilling prophecy began to ask whether a perceiver’s expectations could lead to social interactions in which the target behaved in accordance with the expectations, regardless of their accuracy (Swann & Ely, 1984; Snyder & Swann, 1978b; Snyder, Tanke, & Berscheid, 1977). These social psychologists designated the term “behavioral confirmation” to refer to this narrower subset of expectancy effects involving interpersonal perceptions.

The Process of Behavioral Confirmation

The process of behavioral confirmation has been conceptualized as a three stage model by several theorists (Jussim, 1986; Snyder & Swann, 1978b). First, perceivers form expectations about the target. Next, perceivers treat targets in a manner that is appropriate to their expectations. Lastly, targets respond in kind to the particular treatment offered by the perceiver and consequently confirm the original expectations (see Figure 1). Imagine a dyadic interaction in which two individuals at a party are

conversing. One of the conversation participants may have the expectation that the other is extremely extraverted (Snyder & Swann, 1978a, Snyder & Swann, 1978b). Regardless of the rationale behind this assumption, the perceiver will behave in a manner congruent with his or her belief concerning his or her interaction partner. This treatment will often evoke extraverted behavior from the target. This behavior will reinforce the initial belief of the perceiver, because it is now objective reality that the target is engaging in extraverted behavior – despite how outgoing the target may have felt before showing up at the party.

The first stage of the model involves the perceiver formulating initial assumptions about the target. These expectations can originate from a wide array of sources (Jussim, 1986). Perceivers' assumptions are most often based on previous information about the target made available to them by a third party such as a mutual friend or colleague (i.e., Pelletier & Vallerand, 1996; Rosenthal & Jacobson, 1966). Expectations may also be derived from surface characteristics of the target such physical attractiveness (Snyder, Tanke, Berscheid, 1977), gender (Skrypnek & Snyder, 1982), age (Musser & Graziano, 1991), race (Weinstein, Gregory, & Strambler, 2004), and socioeconomic status (Rist, 2000). Expectations can likewise emerge from targets' membership in an organization with a particular reputation (Rodgers & Maranto, 1989; Snyder & Swann, 1978) or a stereotyped group (Jussim, Fleming, Coleman, & Kohberger, 1996). Finally, perceivers may prematurely form expectations based on a brief and insignificant interaction with the target (Trouilloud, Sarrazin, Martinek, & Guillet, 2002).

According to Jussim (1986), perceivers' expectations should be analyzed along the dimensions of accuracy and flexibility to better understand the process of behavioral confirmation. Jussim (1989) asserts that if perceivers' expectations are accurate, any subsequent behavior is the natural outcome of the target's own characteristics rather than behavioral confirmation. Behavioral confirmation is seen by definition only when initially false assumptions become reality. The second evaluation criterion that Jussim (1986) uses is the flexibility of these initial expectations. He argues that less malleable perceptions will lead to behavioral conformation, because the perceiver will be less willing to abandon these beliefs in the face of contrary evidence.

In stage two of the model, perceivers treat the target in line with their initial expectations. Snyder and Swann (1978a, 1978b) describe this stage as a process of hypothesis testing. The perceiver's expectations are of heuristic value and allow for the generation of several hypotheses. They may preferentially seek out evidence to back their initial assumptions by means such as asking questions that presuppose the validity of their expectations (Snyder & Swann, 1978a). Returning to our example of two individuals interacting at a party, a perceiver expecting an extraverted target may ask questions examining what the target expects to do to liven up the party atmosphere such as starting a lively discussion. Alternatively, a perceiver expecting an introverted target may ask questions gently wondering why the target is uncomfortable at party settings. Rosenthal articulated additional types of differential treatment by the perceiver toward the target in what is now referred to as his four-factor theory (Harris & Rosenthal, 1985;

Rosenthal, 1998). This theory was initially applied to teacher-student relationships but its implications transcend the educational setting. The four factors espoused by Rosenthal are climate, input, output, and feedback. Climate refers to the affective component of the perceiver's treatment which can range from warm to aloof. Input refers to the amount of attention devoted to the target, while output refers to the numbers of opportunities in which a target is able to respond. Feedback refers to the manner in which a perceiver responds to the target, giving praise or criticism. The manifestation of these four factors during conversation helps to communicate the perceivers' expectations.

The third and final stage is reached when the target behaves in a manner congruent with the differential treatment. When perceivers begin looking for evidence to confirm their initial hypotheses about targets, they often create this outcome themselves by constraining the target. Asking a target highly biased questions results in answers that are congruent with original expectations (Snyder & Swann, 1978a). Snyder and Swann refer to this as "reality testing" becoming "reality construction" (p. 159). Perceivers typically remain unaware that their initial expectations largely caused the target's subsequent behavior and continue to operate under their assumptions in any future interactions.

Why Behavioral Confirmation Occurs

The model of behavioral confirmation discussed above outlines the mechanisms through which perceivers elicit expected behaviors from their targets. After uncovering ample evidence for the existence of behavioral confirmation, researchers began to ask

what forces motivate perceivers to act in this fashion. Snyder and Haugen (1994) proposed two mechanisms that drive the process of behavioral confirmation. The first, termed the knowledge function, refers to perceivers' need to learn about and understand their interaction partner. Perceivers may feel that they are best able to satisfy their drive for gaining an understanding of the target by operating on their expectations. Perceivers therefore draw on any information that they possess about the target, be it through first impressions, beliefs, or stereotypes, to facilitate the acquisition of a sense of predictability and knowledge of the target. The second mechanism proposed by Snyder and Haugen, termed the adjustive function, refers to the perceivers' need to engage in smooth, pleasant interactions. Perceivers may assume that interacting based on their expectations will result in facile and agreeable interactions.

In order to assess their proposed mechanisms, Snyder and Haugen (1994) conducted an experiment to examine under what circumstances perceivers would elicit behavioral confirmation. Males were told that they would be interacting with an obese or normal-weight female. Since weight often evokes stereotypical thinking and differential treatment (Hebl, Xu, & Mason, 2003), this particular characteristic was selected as being ideal for studying the mechanism.

Snyder and Haugen (1994) gave the participants different goals in the experiment by assigning them to the basic, knowledge, or adjustive condition. In the basic condition, perceivers were given no special instructions and told to simply discuss anything they desired with their interaction partner. Perceivers in the knowledge condition were

specifically instructed to assess whether their first impressions of the target were accurate. These participants were also told to learn about the true nature of the target. Perceivers in the adjustive condition were instructed to rely on their initial impressions to facilitate conversation and amiable relations with the target. All perceivers then interacted with the targets and subsequently all the study participants rated each other along various dimensions. Naïve judges coded the interactions to further evaluate the exchange.

The findings of this study suggest that the knowledge function motivates perceivers' actions to elicit behavioral confirmation. Only the perceivers in the knowledge function believed that the targets behaved in a manner congruent with stereotypes regarding the obese. Likewise, naive raters only detected behavioral confirmation of the obesity stereotype in the knowledge group. Thus, Snyder and Haugen (1994) concluded that behavioral confirmation occurs when perceivers attempt to gain a sense of predictability and understanding of targets by relying on initially flawed assumptions.

Classic Behavioral Confirmation Studies with Adults

Research has extensively documented that expectations have profound effects on behavior. Merely giving an individual feedback along a certain dimension has a significant effect on the relevant behaviors and self-perceptions. In one such investigation, Sakamoto, Miura, Sakamoto and Mori (1995) provided participants with feedback indicating that they were extraverted or introverted. Those given extraverted feedback evaluated themselves higher on extraversion and engaged in more typically

extraverted behaviors than those told that they were introverted. Likewise, those given introverted feedback evaluated themselves higher on introversion and engaged in more typically introverted behaviors.

The self-fulfilling nature of beliefs can have physiological repercussions. The well documented placebo effect demonstrates that the mere expectation that one's health will improve is actually associated with physiological improvements. Those told they should expect to reap the benefits of pain medication often believe that placebos (with no pharmacologically active agent) are effective (Jones, 1977). Similar effects are evident in individuals who believe they are consuming large amounts of alcohol. These individuals begin to behave in a fashion typically associated with alcohol consumption despite the fact that they have consumed only nonalcoholic beverages (George, Stoner, Norris, Lopez, & Lehman, 2000).

The question that follows from these studies is whether our expectations for another can influence his or her behavior during social interactions. Snyder and Swann (1978b) conducted one of the first studies examining the occurrence of behavioral confirmation during social interaction. In this study, two participants engaged in a competitive task. During this task, participants had the option of using what was referred to as a "noise weapon" to distract their opponent. The participants were given one of two expectations: the target was hostile or the target was not hostile. Participants who expected a hostile interaction partner were more aggressive with their noise weapons than the participants who expected a non-hostile partner. This aggressive response led to

retaliatory aggression by the interaction partners with the result that those advertised as most hostile did in fact behave in the most aggressive fashion. This aggressive behavior carried over to a subsequent interaction with a naïve interaction partner when targets were encouraged to attribute their behavior to themselves rather than situational factors.

After initial demonstrations of behavioral confirmation such as the Snyder and Swann experiment (1978b), researchers began to examine whether this process could explain the perpetuation of stereotypes. Researchers hypothesized that behavioral confirmation could lead to differential treatment of members of the stereotyped group who in turn respond to this behavior by unintentionally confirming the stereotype (Jussim et al., 1996). Researchers thus embarked on a program of work to determine whether behavioral confirmation could partially explain stereotypes associated with physical attractiveness (Snyder et al., 1977), gender (Skrypnek & Snyder, 1982), age (Musser & Graziano, 1991), race (Weinstein et al., 2004) socioeconomic status (Rist, 2000), and psychological diagnoses and treatment (Harris, Milich, Corbitt, Hoover, & Brady, 1992; Sibicky & Dovidio, 1986).

The majority of these studies utilized the method and replicated the results of Snyder, Tanke, and Berscheid's (1977) classic investigation of the self-fulfilling nature of stereotypes. These researchers hypothesized that "stereotypes may create their own social reality by channeling social interaction in ways that cause the stereotyped individual to behaviorally confirm the perceiver's stereotype" (Snyder et al., 1977, p. 658). To test this proposition they examined the self-fulfilling nature of attractiveness stereotypes which

are pervasive and endorsed even by young children (Dion, 1973; Dion & Berscheid, 1974). Attractiveness is associated with positive characteristics such as intelligence, warmth, and sociability and therefore this bias has been termed the “beauty-is-good” stereotype. To test whether the beauty-is-good stereotype is self-fulfilling in nature, these researchers recruited previously unacquainted male-female dyads to interact via a phone conversation. Males always served as the perceivers in this study while females served as the targets. Perceivers received either a photograph of an attractive or unattractive female and were led to believe this was their interaction partner. Men possessing expectations of interacting with an attractive female were friendlier and treated their partner as possessing characteristics typically associated with attractive individuals. Men possessing expectations of interacting with an unattractive female were more aloof and treated their partner as possessing characteristics typically associated with unattractive individuals. Women reciprocated the men’s treatment; those thought to be attractive were more friendly and warm than those thought to be less attractive. Snyder and colleagues (1977) concluded that “what had initially been reality in the minds of men had now become reality in the behavior of women with whom they had interacted” (p. 661). Initially false beliefs based on a stereotype translated into actual behavioral differences, which confirmed the men’s original inaccurate conjectures.

Behavioral Confirmation in Applied Settings

The studies described above took place in laboratory settings and therefore additional research was necessary to examine behavioral confirmation in natural settings

as well. Researchers turned their attention to examining whether behavioral confirmation could be observed outside of the laboratory, focusing largely on three areas for which there would be profound implications: the work place, the military, and the courtroom.

Behavioral confirmation could impact all facets of the work environment from who is hired as an employee to the productivity of the organization. Interviewers may possess certain expectations at the beginning of the interview. These expectations may be communicated to the interviewee through information gathering strategies or general expressiveness on the part of the interviewer. This in turn may affect the interviewee's behavior and confirm the interviewer's initial expectations (Judice & Neuberg, 1998).

Expectations do not cease to influence the workforce at hiring decisions. The expectations held by managers greatly influence their subordinates. Managers who hold high expectations for their employees communicate these expectations to employees directly or indirectly. Employees learn that their supervisors hold high expectations for them, and come to believe that they are capable of meeting these expectations. This in turn facilitates work performance confirming the manager's initial expectations (Baxter & Bowers, 1985; Pelletier & Vallerand, 1996). A recent meta-analysis found that managers' expectations do have a self-fulfilling effect, with higher expectations leading to higher employee performance (Kierein & Gold, 2000).

Managers' expectations are not the sole source of self-fulfilling beliefs impacting organizations. Outsiders such as customers have some degree of influence on the success of organizations. If clients believe a business will be unsuccessful, they will not invest or

interact with the corporation, which can cause a decline in a business with no objective original problems (Edwards, McKinley, & Moon, 2002).

Behavioral confirmation has also been studied extensively in military settings. The findings in the military setting echo those found in business organizations. High expectations from military commanders lead to increases in performance of cadets who are the subject of these beliefs (Davidson & Eden, 2000). In fact, larger effect sizes are associated with self-fulfilling prophecy studies conducted in military than in business settings. The authors of the meta-analysis suggest that this difference in effect size may be a function of the power leaders hold over subordinates (Kierein & Gold, 2000).

The effects of behavioral confirmation are not limited to supervisor-subordinate relationships. Behavioral confirmation can be seen in the interrogation room. Interrogators who believe that a suspect is guilty will ask more biased questions and in others ways communicate their assumptions. This behavior elicits defensive behavior from the suspect, which is then associated with increased ratings of guilt by naïve judges (Kassin, Goldstein, & Savitsky, 2003).

Behavioral Confirmation Studies with Children and Adolescents

Behavioral confirmation is a robust finding among adults both in and outside of the laboratory setting. After examining behavioral confirmation in depth with adult participants, researchers began to focus on children. The first research area was whether behavioral confirmation would occur when children interacted with adults possessing

expectations of them. The second was whether behavioral confirmation would occur when children interacted with other children possessing expectations of them.

A great deal of the work examining behavioral confirmation between child targets and adult perceivers involves parent-child dyads. One particular investigation tested the self-fulfilling effects of maternal expectations on their children's underage drinking (Madon et al., 2003). Researchers assessed maternal expectations at the beginning of the study and followed mother-child dyads longitudinally. At each session they assessed the amount each child regularly drank, as well as a host of other factors such as peer influence. Mothers tend to know a great deal about their children, so the current examination controlled maternal expectations for predictors of drinking as well as past alcohol consumption. This was done so that the focus was on the effects of the invalid expectations -- only inaccurate assumptions can produce self-fulfilling effects. Even after controlling for other factors, maternal expectations influenced child drinking in a self-fulfilling fashion. Follow-up research by this team of investigators has also demonstrated the reverse; that is, children can have certain self-fulfilling effects on their mothers (Madon, Gyll, & Spoth, 2004).

Children can also elicit self-fulfilling effects from other children. Musser and Garaziano (1991) examined whether behavioral confirmation occurred based on age-related expectations. Children adjust their interaction styles based on the age of their partner. Children are, for instance, more likely to imitate an older child and allow them to control the interaction, but offer assistance to younger children while controlling the

conversation. To test the self-fulfilling effects of age-related stereotypes, Musser and Graziano examined four types of same-sex dyads: second graders as perceiver and target, second grader as perceiver and fourth grader as target, fourth grader as perceiver and second grader as target, and fourth graders as perceiver and target. The perceiver was provided with the expectation that he or she was interacting with a younger or older target at random. The dyad then faced the task of creating similar pictures without seeing each other and being limited to verbal communication. The effect of the manipulation was dependent on the sex of the perceiver. Female perceivers acted based on their expectation of the target; females as perceivers exerted more control over the interaction when the target was labeled as younger, and allowed the target to exert more control over them when the target was labeled as older. The target responded to this treatment with behavior appropriate to the relevant age-related stereotypes. There was no evidence for behavioral confirmation in male dyads. Males exerted the same amount of control over their interaction partner despite age-related expectations.

A similar investigation examined the self-fulfilling effects of diagnostic labels among child dyads (Harris, Milich, Corbitt, Hoover, & Brady, 1992). This study used targets that were hyperactive or normal controls. The perceivers, who had no known behavioral problems, were sometimes given the expectation that their interaction partner had behavioral difficulties. Perceivers and targets, both of whom were male, completed a building block task together. The expectation held by the perceiver affected the manner in which the perceivers treated the targets. Boys who believed that their interaction partners

had behavior problems were less friendly during the joint activity. This differential treatment affected the targets. Normal targets who were labeled as hyperactive reported lesser enjoyment of the interaction.

Examples of Behavioral Confirmation in School Settings

A great deal of research has been done on self-fulfilling prophecies for adults in business settings, and since the equivalent for children is the classroom, a program of research seeks to examine whether behavioral confirmation transpires at school. In their seminal investigation, Rosenthal and Jacobson (1966) examined the influence of teachers' expectations on their pupils' performance. In order to make these expectations realistic, students first took an intelligence test with which the teachers were unfamiliar. Researchers told the teachers that based on the performance on this test they had identified several students who would show large intellectual gains in the coming year. In actuality, Rosenthal and Jacobson randomly selected these children. At the end of the year, students who were expected to do well showed higher than average gains on a follow-up test. Although these findings held for all ages tested, the effect was especially large for the younger students.

Rosenthal and Jacobson's pioneering study has been subject to a great deal of criticism throughout the years. The majority of these critiques have focused on statistical analyses or the reliability of the intelligence test used to assess students at the conclusion of the study (e.g. Snow, 1995). Rosenthal (1995) responded to these criticisms by acknowledging that the initial results remain the same despite different analyses, and

pointing out that these results have been replicated by many other studies. Rosenthal and Jacobson's finding appear to be quite replicable and have been demonstrated in multiple academic areas unrelated to intelligence tests, such as physical education (Trouilloud et al., 2002).

Behavioral confirmation is a robust finding evident throughout the course of development in a wide array of situations. Rosenthal, one of the pioneers in the field, called attention to the number of replications of self-fulfilling effects in a recent chapter. He claimed that "additional new replications will add little" (Rosenthal, 2002, p. 33). However, he views examining potential moderators of the behavioral confirmation to be a potentially fruitful and significant endeavor.

Potential Moderators of Behavioral Confirmation

A variety of factors have been proposed as moderators of the behavioral confirmation process including characteristics of the situation, the perceiver, and the target (see Figure 3). The following analysis is not an exhaustive list but rather a selection of the most commonly proposed moderators.

The goals which the target and perceiver bring to the interaction setting have an immense influence on whether, and to what extent, behavioral confirmation will occur. Perceivers behave in a much less biased fashion and elicit less behavioral confirmation if they desire to form an accurate impression of the target. Support for this assertion comes from a series of studies by Neuberg. In one such study (Neuberg, 1989), two participants were assigned to the role of interviewer-interviewee. The perceiver (the interviewer) was

provided with either no expectation or a negative expectation of the target (the interviewee). In addition, researchers instructed half of the perceivers that they should strive toward forming accurate impressions whereas the other perceivers were given no formal goal. After this information was provided by the researchers, perceivers conducted a mock job interview. Perceivers motivated by accuracy behaved in a less biased fashion than those lacking a formal goal; those with a goal attempted to learn about the target and spent more time listening. Behavioral confirmation only occurred when the perceiver was not motivated by accuracy. When the perceiver was motivated by accuracy, behavioral confirmation did not take place because the targets were able to behave in a manner that was self-reflective rather than confirming the perceivers' expectations.

Unbiased processing requires greater attentional effort than merely relying on prior expectations. When perceivers have limited attentional resources or time, even if they are motivated by accuracy, they revert to biased questioning and behavioral confirmation occurs (Biesanz, Neuberg, Smith, Asher, & Judice, 2001)

The relationship dynamics of the situation also influence the process of behavioral confirmation. The balance of power between the perceiver and target may be especially important. Copeland (1994) manipulated the power in same-sex, dyadic interactions. In this study, perceivers were provided with the expectation that the target was introverted or extraverted. Participants were told that this was a three-phase study; they would first interact with their current partner, next they would interact with a second partner, and finally some combination of participants would take part in a game that required an

extraverted nature for success. The balance of power was altered by placing either the perceiver or the target in the position to select members for the later game in which successful performance was to be rewarded. Perceivers in positions of power worked to learn about and understand their interaction partners. In contrast, perceivers lacking power desired smooth interactions in which they would be able to win the favor of the target. This behavior on the part of the perceiver affected target behavior. Targets only confirmed expectations when the perceiver possessed greater power in the situation. Copeland suggested that it may be advantageous for targets lacking power to behave in line with perceivers' expectations of them. This may lead to more facile interactions in which the perceiver would evaluate them more positively; the targets are more likely to be rewarded in these situations by the powerful perceiver. Conversely, if the target possesses the situational power, they would be less concerned about the fluidity of interactions and focus more attention on learning about the perceiver.

Characteristics of the perceiver and target also play a moderating role in the behavioral confirmation process. Meta-analytical findings suggest that the personality of the perceiver has a greater influence on behavioral confirmation than does the personality of the target (Cooper & Hazelrigg, 1988). This meta-analysis found three characteristics of perceivers associated with an increased ability to elicit behavioral confirmation from the target. The first factor is a strong need to control the behavior of others. Second, those perceivers who are highly expressive with their voices, facial expressions, and body movements elicit more behavioral confirmation from targets. Third, perceivers with

likable attributes such as friendliness and honesty are better able to evoke confirmation in their expectations. Targets want to please these amiable perceivers and are thus more likely to confirm their expectations.

Characteristics of the target also influence susceptibility to perceiver expectations. Most notably, the degree to which a target is vulnerable to the influence of others has a large role in whether they will confirm others' expectations of them. Targets that are submissive and sensitive to others' evaluations are more likely to confirm others' expectations than those who are assertive and self-assured (Cooper & Hazelrigg, 1988). Targets that are high on measures of self-monitoring, particularly other-directedness, are more likely to confirm the expectations of others than are targets low on measures of self-monitoring. Targets high on other-directedness strive to make others happy and adapt easily to the social situation at hand, in which they are likely to agree with others' expectations of them (Rotenberg, Gruman, & Ariganello, 2002). Targets' ability to read the cues of others is also associated with increases in behavioral confirmation. Targets high in cue-reading ability are better able to detect perceivers' subtle communication of their expectations (Cooper & Hazelrigg, 1988).

As discussed above, certain characteristics of the situation, perceiver, and target can act together to make the process of behavioral confirmation likely or unlikely. Targets do not always accept the identities offered to them by the perceiver and can act in ways to refute the expectations of others. This often occurs when targets actively dislike the identity offered to them. For instance, baby-faced individuals are often assumed to be

honest, submissive, and naïve. Adolescent males strive to be viewed as powerful and competent. This drive is especially strong among baby-faced males who try to refute the stereotype by striving toward high academic achievement as well as potentially being involved in delinquent activities (Zebrowitz, Androletti, Collins, Lee, & Blumenthal, 1998). Targets can also actively refute expectations during dyadic interactions. Stukas and Snyder (2002) manipulated perceiver expectations so that they had a positive or negative view of the target. These expectations were further directed to be either attributed to the situation or the disposition of the target. Targets worked to refute negative expectations reflective of their disposition.

Behavioral confirmation does not always occur during the process of identity negotiation. One of the main reasons for this is that targets can assume an active role in the process of identity negotiation. Targets can work to reject the identities offered by perceivers. This may occur if the expectations of the perceiver are negative and if it benefits the target to disconfirm them. Targets may also work to disconfirm others' expectations if they believe that they are inaccurate. The process by which targets work to communicate their self-views to perceivers is termed self-verification, which is the other half of the identity negotiation process (e.g., Swann, 1990; Swann & Schroeder, 1995).

Self-Verification

Definition of Self-Verification

Self-verification theory was proposed by Swann in the 1980's after he noted that targets do not always act in accord with perceivers' expectations. He noted from his studies investigating behavioral confirmation that "targets had their own ideas about themselves and social reality, and at least on occasion, they took active steps to ensure that perceivers shared those ideas" (Swann, 1987, p. 1038). In other words, targets desired for perceivers to view them in the same manner as they viewed themselves. This process has been termed self-verification and its defining feature is that targets' self-views channel perceiver's views and treatment of them (Swann & Ely, 1984). It is essentially the opposite of behavioral conformation in that the target actively changes the perceiver's idea of how the target will behave.

Self-verification results from the target's motivation to be known by others in his or her environment (Swann, 1990). Individuals seek feedback from others that is congruent with their own self-conceptions. Targets even prefer negative but accurate feedback to positive feedback which is incongruent with their self-perceptions (Swann, Pelham, & Krull, 1989). Individuals take active measures in order to ensure successful self-verification (Swann, 1983). I now provide an explanation of how individuals work toward creating an environment conducive to self-verification as well as an explanation for why individuals self-verify.

The Process of Self-Verification

The driving force behind self-verification theory is that individuals are motivated to preserve a stable sense of self and thus will actively work toward maintaining

unwavering self-views. According to Swann, “we can maintain stable self-views only insofar as we receive- or at least think we have received-a steady supply of self-verifying feedback from others” (Swann, Rentfrow, & Guinn, 2003, p.369). Individuals can self-verify through one of two mechanisms (Swann, 1983; Swann, 1990; Swann et al. 2003). First, targets can create a social environment conducive to self-verification. Swann refers to this as creating an “opportunity structure” for gathering self-congruent feedback (Swann, 1983). Secondly, if individuals are unable to create self-verifying environments, they are often able to revert to information processing biases to make feedback appear more congruent with their self-conceptions than an objective observer would report (Swann & Read, 1981).

Targets actively work to create self-verifying environments by employing three different strategies (see Figure 2). The first strategy is to seek out interaction partners and contexts that are likely to be self-verifying. Individuals select interaction partners who see them as they see themselves, even along lines encompassing their self-perceived weakness (Swann et al., 1989). Evidence from naturalistic settings suggests that targets gravitate toward partners whose views of them are congruent with their own self-perceptions. Individuals prefer self-verifying roommates and are more likely to continue self-verifying relationships (Swann & Pelham, 2002). Individuals also gravitate to self-verifying romantic partners. Some studies find greater intimacy among self-verifying dating partners, (Katz & Joiner, 2002). However, other investigations have found that this effect limited to married couples (De La Ronde & Swann, 1998; Swann, De La Ronde, &

Hixon, 1994) as dating individuals strive to present themselves favorably to their romantic partner on relationship particular dimensions (Swann, Bosson, Pelham, 2002). Verifying romantic partners also help individuals maintain stable self-views by offering support when information is encountered that threatens self-views (Swann & Predmore, 1985). Thus, verifying partners play a large role in creating one's opportunity structure.

Identity cues are a second means used to create self-verifying environments. Individuals can alter their appearance to convey how they would like to be seen by others (Swann et al., 2003). A leather jacket, tattoos, and piercings convey a much different image than a sweater set and pearls. One can also communicate further information by his or her choices of occupation and physical possessions, or even by choosing to purchase certain brands of goods. Marketing research indicates that self-verification is involved in the selection of certain brands (Escalas & Bettman, 2003). People believe that certain brands are able to reflect who they are and tend to prefer brands associated with the groups with which they identify.

The final common means used to create a favorable environment is reliance on interpersonal prompts to elicit self-verifying feedback (Swann, et al., 2002). Individuals can take certain measures during interactions to extract congruent responses from others. This is accomplished by asking for specific feedback congruent with one's self-concept. Individuals seeking self-verifying feedback prefer to ask questions likely to elicit such responses (Swann et al., 1989). Furthermore, targets can work to alter perceptions of themselves when they disagree with these views (Swann & Read, 1981). In one

investigation of this assertion, targets first evaluated their self-perceptions as globally positive or negative. Researchers led targets to believe that their interaction partner viewed them either favorably or unfavorably. Targets then interacted with a partner unaware of the expectancy manipulation. Greater attempts at self-verification were evident when the targets assumed that the perceiver's view of them was incompatible with their self-conceptions. Those with positive self-views actively worked to make their partner see them in a favorable light through compliments and praise.

The above are just some of the ways in which individuals endeavor to create self-verifying environments. Although they are often successful, these techniques are not fool-proof. If these techniques are unsuccessful targets may resort to biased information processing. These cognitive biases result in “seeing more self-confirmatory evidence than actually exists” (Swann et al., 2003, p. 373) and enable the individual to maintain stable self-views. Individuals commonly employ three cognitive biases to this end: selective attention, selective encoding and retrieval, and selective interpretation (Swann, 1983; Swann, 1990; Swann et al. 2002).

With selective attention, individuals allot greater attentional resources to feedback that is congruent with their self-conceptions but devote minimal attention to incongruent feedback (Swann, 1983; Swann, 1990; Swann et al., 2002). Swann and Read devised a method to empirically test this proposition (1981). They began by assessing participants' self-views with a focus on whether these were positive or negative. Investigators then informed participants that they would be interacting with a partner who had reviewed a

previously completed personality inventory of the participant and had already formed a positive or negative impression. Participants were subsequently given the opportunity to examine evaluative statements ostensibly made about them by their partner. As was hypothesized, participants attended more to statements that they believed came from a verifying partner. Thus, participants with positive self-concepts spent more time attending to statements ostensibly made by a positive evaluator than a negative evaluator. The converse also held true; participants with negative self-concepts spent more time attending to statements ostensibly made by a negative evaluator than by a positive evaluator.

The second bias suggests that individuals are more likely to encode as well as recall information that is congruent with their self-concept (Swann, 1983; Swann, 1990; Swann et al., 2003). Swann and Read (1981) examined whether individuals would selectively encode and recall verifying feedback by using a similar experimental setup as in the previous example. They began by assessing participants' self-views as globally positive or negative. Participants were once more falsely led to believe that they would interact with a partner who had either a favorable or unfavorable impression of them. Participants listened to evaluative statements made about them by their supposed interaction partner before the alleged interaction. Following a brief distracter task, participants were asked to recall as many statements as possible. Participants with positive self-concepts recalled significantly more positive than negative statements. The converse held again; participants with negative self-concepts recalled more negative than

positive statements, however, this effect did not reach conventional levels of significance. Participants further recalled more statements when they had anticipated evaluations congruent with their self-views. Participants with positive self-concepts recalled significantly more statements when they believed their partner also saw them in a positive light. The reverse was also true; participants with negative self-concepts recalled more statements when they believed their partner saw them in a negative light, however, this effect did not reach conventional levels of significance. Swann and Read's initial hypotheses were therefore confirmed: individuals were better able to remember statements that were congruent with their self-conceptions. In addition, participants recalled more information from those they imagined to be a verifying rather than non-verifying partners. Swann and Read speculated that individuals might attend more to and better encode information expected to be verifying.

Lastly, individuals selectively interpret feedback in ways that are compatible with their self-conceptions. This can be accomplished either through distorting information to match the self-concept or discounting incongruent feedback (Swann, 1983; Swann, 1990; Swann et al., 2003). Swann and colleagues found evidence for this selective interpretation of self-relevant feedback (Swann, Griffin, Predmore, & Gaines, 1987). Participants with high or low social self-esteem were asked to deliver a speech which was ostensibly being viewed by another participant. Following this performance, participants received either favorable or unfavorable feedback regarding their sociability. Participants believed feedback consistent with their self-perceptions to be more accurate than

inconsistent feedback. They rated evaluators delivering this congruent feedback as more insightful than those delivering incongruent feedback and believed that the former evaluations were truthful assessments of their nature.

In sum, individuals actively work toward maintaining a stable self-concept. They can do so either by creating an environment conducive to obtaining self-verifying feedback or processing information in a way that makes it appear consistent with their self-perceptions. Why do individuals exert such effort in maintaining their self-concept? Swann proposes that individuals are motivated to do so for multiple reasons.

Why Self-Verification Occurs

According to Swann, individuals self-verify because “being perceived in a self-congruent manner may bolster feelings of existential security and calm the waters of social interaction” (Swann et al., 2003, p. 369). Self-verification is seen as a multiply determined process guided by both intrapsychic and interpersonal factors (Swann, 1990). Swann refers to the former as epistemic concerns and the later as pragmatic concerns. These two sources of motivation for self-verification will be discussed next and are analogous to Snyder and Haugen’s (1994) conceptualization of the knowledge and adjustive functions proposed to drive behavioral confirmation.

The old maxim “if I don’t know myself, what can I know” beautifully captures the epistemic motivation behind self-verification (Cassidy, Ziv, Mehta, & Feeney, 2003, p. 613). The motivation suggests that individuals self-verify because it provides them with a sense of psychological coherence. Self-congruent feedback provides a sense of self

control regarding correct self-perceptions (e.g., Swann, Stein-Seroussi, & Giesler, 1992). A lack of perceived self-knowledge, on the other hand, is associated with psychological distress (Riley & Burke, 1995) and may even prove hazardous to one's health (Shimizu & Pelham, 2004). For individuals with low self-esteem, positive life events tend to be associated with negative health outcomes, possibly as a result of creating incongruence with self-views (Shimizu & Pelham, 2004).

A second and equally likely question is "If my interaction partner does not know me, how smooth and enjoyable can our interaction really be?" This question illustrates the interpersonal, or pragmatic, sources of motivation behind self-verification (Swann, 1990). If an individual is perceived to have strengths that he or she does not actually have, then an interaction partner may be disappointed and their conversation is bound to be awkward. A similar awkwardness will arise if an individual's actual talents are not recognized or appreciated. If an individual is perceived in a self-consistent fashion by his or her interaction partner, he or she gains a sense of harmonious interaction.

Swann and colleagues sought to empirically study rationales for selecting various types of interaction partner (Swann et al., 1992). They recruited college students for this study who had been pre-tested and showed exceptionally high or low self-esteem. Participants were led to believe that the study's purpose was to investigate how different individuals become acquainted. Researchers then presented participants with the choice of one of two interaction partners: one who viewed them positively and one who viewed them negatively. During their selection, participants thought aloud and explained the

rationale for their decisions. Responses were then coded into different classifications. The majority of participants selected a verifying partner, indicating an epistemic or pragmatic reason for doing so. For this study, epistemic responses were operationally defined as those indicating that “the evaluator put the speaker at ease by confirming his self-view” (Swann et al., 1992, p.394) and pragmatic responses were those indicating that “the speaker expected that he and the evaluator would interact smoothly” (Swann et al., 1992, p.395).

This research group conducted further studies to better understand pragmatic accuracy. In particular, they hypothesized that it is important to know about an individual only in situations where the individual is likely to be encountered, rather than to know everything about the individual. Interactions will be facilitated if interaction partners know the other’s relationship-relevant characteristics, but there is little added benefit from predicting how he or she will behave outside the relationship context (Swann, 1984). To test this theory, Gill and Swann (2004) examined members of a fraternity. Fellow members of the fraternity knew more about the targets in the context of the fraternity than other contexts. The family of the targets had more knowledge within the domain of family interactions. Increases in relationship quality were associated with greater consistency with the target’s self-ratings on relationship relevant dimensions. A second investigation (Gill & Swann, 2004) with romantic partners replicated the importance of pragmatic accuracy. Romantic partners knew more about their partners’

self-perceptions in domains relevant to the relationship, and this knowledge was associated with increased relationship quality.

Individuals are motivated to seek self-verifying partners. This drive stems from both epistemic and pragmatic concerns. Swann does caution that self-verification strivings are not the sole motivator of all behaviors. Individuals are also guided by positivity strivings which encourage self-enhancement. According to Swann, these positivity strivings are independent of self-verification strivings, and each striving has its own unique functions. The one that will prevail can be determined in a three phase process (Swann & Schroeder, 1995). In the first stage, individuals identify the valence of evaluative feedback and are automatically drawn toward positive feedback. If adequate cognitive resources such as information processing capacity and time are available, individuals will progress to stage two in which feedback is compared to self-perceptions, encouraging the process of self-verification. When cognitive resources are unavailable, individuals tend to self-enhance. Nevertheless, when making critical decisions, individuals tend to ponder them and self-verify (Swann, Hixon, Stein-Seroussi, & Gilbert, 1990). In the final stage, which also requires additional cognitive resources, individuals engage in a cost-benefit analysis to determine whether self-enhancement or self-verification will occur (Swann & Schroeder, 1995). Then again, receiving feedback regarding self-perceived strengths satisfies both self-enhancement and self-verification strivings (Swann et al., 1989).

Classic Self-Verification Studies with Adults

Many studies have examined the process of self-verification in adults. These studies assume from the outset that individuals assess themselves separately along various domains such as level of sociability, intelligence, and physical attractiveness. These specific self-views are correlated with perceived general self-worth, but are not redundant with global self-appraisal (Pelham & Swann, 1989). Individuals may accordingly seek self-verifying feedback in these different areas based on specific self-perceptions, which can be independent of their assessment of global self-worth (Swann et al., 1989). Individuals with high global self regard should still desire negative feedback in areas in which they hold negative self-views and positive feedback only in areas in which they hold positive self-views, and likewise for individuals with low global self regard (Swann et al., 1989).

Swann, Pelham, and Krull (1989) conducted three pioneering studies to test self-verification theory. In the first study in this series, participants indicated the type of feedback they wanted from a computer program based on initial questionnaires they had completed. Two different measures of feedback seeking were included. In what was referred to as the between-attribute feedback seeking measure, participants selected one of five areas (intellectual, athletic, appearance-related, artistic, and social abilities) in which to receive feedback. In the second assessment, referred to as the within-attribute feedback seeking measure, participants examined a list with questions tapping each of these same five dimensions of self. For each domain, some of the questions were intended to elicit positive feedback and others intended to elicit negative feedback. For

instance, a positive question in the domain of intellectual ability was “What is this person’s greatest intellectual strength?” (Swann et al. 1989, p.785). A negative question, on the other hand, was “What about this person makes you think she would have problems in academia?” (Swann et al. 1989, p.785). In this condition, participants chose to receive feedback about strengths or weaknesses in the particular domains. The results indicated that participants were driven by both self-enhancement and self-verification motives. The between-attribute feedback seeking measure indicated that participants desired feedback in areas considered to be their strongest ones. This response pattern demonstrates both self-enhancement and self verification, because the participants wanted positive feedback in areas in which they already believed themselves to be skilled. The within-attribute feedback seeking measure indicated that when forced to select feedback regarding self-perceived strengths as well as weaknesses, the way the participants viewed their abilities in each area was critical. Participants with both high and low global self worth asked for negative feedback in domains that were self-perceived weaknesses and positive feedback in domains that were self-perceived strengths. These findings from the within-attribute measure support Swann and colleagues’ original hypotheses that individual area self-views are more critical than global self-worth in determining the type of feedback that will be sought.

Individuals were driven by both self-enhancement and self-verification motives when soliciting feedback from a computer. Swann, Pelham, and Krull (1989) examined whether the above pattern of results would apply in a person-to-person context. The

procedure was almost identical to that used in their first study; participants were asked to complete the same between-attribute and within-attribute measures of feedback seeking. The only difference was that participants were requesting feedback from another person rather than a computer. Individuals sought feedback for their self-perceived strengths when possible, replicating the results from the first study. However, when forced to select feedback along various dimensions, they selected favorable feedback for their self-perceived strengths and unfavorable feedback for their self-perceived weaknesses. Participants sought self-enhancing feedback that was also verifying when possible. When forced to address a weakness, participants preferred verifying rather than overly positive feedback.

Swann, Pelham and Krull (1989) then tested whether these same motives would operate in a different type of task, namely, selection of an interaction partner. Four participants arrived at the laboratory at the same time and had the opportunity to become acquainted. Participants then completed evaluations of one another and were told that these would be shared. Rather than assigning the actual feedback, the researcher provided each participant with three bogus evaluations ostensibly from their interaction partners. Each of these three assessments was designed to vary the degree to which it was verifying and enhancing. The three evaluations included one which was enhancing-nonverifying (positively described a self-perceived weakness), one enhancing-verifying (positively described a self-perceived strength), and one nonenhancing-verifying (negatively described a self-perceived weakness) appraisal. Participants selected which

partner they would prefer based on the evaluations provided. Participants again preferred the enhancing-verifying partner to the nonenhancing-verifying partner. When given the option, they preferred to interact with someone who viewed them positively in areas that they perceived to be one of their strengths. However, participants preferred a nonenhancing-verifying partner to an enhancing-nonverifying partner. When forced to address a self-perceived weakness, individuals preferred to interact with a partner who saw them accurately. Individuals' selections were therefore driven by both self-enhancement and self-verification motives.

Individuals define themselves at the personal and group levels of self-definition, among others. Past research indicates that individuals seek self-verification at the personal level of self-definition (e.g., Swann et al., 1989). Chen, Chen, and Shaw (2004) sought to examine whether self-verification drives also operate at the collective level. In order to avoid the influence of preexisting notions, these researchers used the minimal group paradigm. They created an imaginary group, the "Sookas", rather than relying on participants' actual group membership. Researchers asked the participants to pretend that they were members of a group called Sookas that was lacking in social skills. After outlining the vignette, researchers asked participants to imagine another character that held or did not hold similar views about the Sookas. They assessed self-verification by examining the extent to which participants wished to interact with a verifying or nonverifying partner. Participants preferred to interact with verifying partners who saw their group in a manner that was congruent with their own collective self-view.

Moreover, this preference for self-verification was more pronounced when the potential interaction partner was a member of the in-group and when group views were held with a high degree of certainty.

Self-verification at the collective level of self-definition is also evident in reference to individuals' beliefs about real groups to which they belong. In a follow-up study to the one just described, Chen, Chen, and Shaw (2004) examined self-verification of gender identity. Based on pre-testing, researchers pre-selected female participants to be either high- or low-gender identified. Participants completed two sets of questionnaires: one examining how they viewed themselves and the second indicating how they would like to be viewed by another woman (a member of the same gender group). Self-verification was operationalized as the degree to which one's own self-evaluations matched those desired from others. Women whose gender was central to their identity had a large degree of correspondence in these two evaluations on traits relevant to gender. High-gender identified women wanted another woman to view them as they viewed themselves in terms of traits essential to their gender identity.

Self-verification is a powerful motivator of behavior. This drive operates at multiple levels of self-definition and is evident using a variety of measures and procedures. The question remains whether this motivator is a factor in interactions outside the laboratory setting.

Self-Verification in Applied Settings

Self-verification has been studied most extensively in the applied settings of business and therapy. Studies of self-verification in business have focused largely on the performance of diverse groups. Previous research at the group level has suggested that individuals will be more productive if they identify with the group at large and work toward mutual goals rather than view themselves as individuals working toward specific goals (Sherif, 1956). The predictions of self-verification theory run counter to this claim. Self-verification theorists claim that exceptional performance on group tasks will result from fellow group members recognizing each person and verifying individual views. When individuals feel known and accepted by members of their group, they are more likely to share their unique ideas and positions (Swann, Polzer, Seyle, & Ko, 2004). Support for this theory comes from a study examining groups of master's of business administration (MBA) students who worked on projects together throughout the semester. Groups high on individualization and self-verification often were the most creative and successful (Swann et al., 2004).

Self-verification theory also has important implications in the therapeutic context. Self-verification theory has been examined extensively in regards to depression. Depressed individuals view themselves in a negative light and are consequently more likely to seek out negative feedback from others. When given the choice between selecting a favorable or unfavorable interaction partner, depressed individuals prefer to interact with those who view them negatively (Swann, Wenzlaff, Krull, & Pelham, 1992). In fact, depressed individuals would still rather interact with a negative evaluator than

engage in some other type of activity (Swann et al., 1992). Individuals suffering from depression perceive negative evaluations to be most self-descriptive favoring them largely for epistemic reasons (Giesler, Josephs, & Swann, 1996) and desire this type of evaluation from friends and significant others such as roommates (Swann et al., 1992). These preferences for negative feedback lead depressed individuals to maintain a negative environment, which may in turn worsen their depression (Joiner, 1995). Several implications for therapy follow from these findings. Effective treatment of depression requires teaching depressed individuals to discontinue seeking out negative, harmful feedback and interaction partners (Swann et al., 1992). As therapy works to increase feelings of self-worth, progress is hampered to the extent that depressed individuals seek negative feedback in their quotidian social contexts (Swann, 1997).

Researchers in the clinical field are currently investigating the application of self-verification to conditions other than depression. For instance, self-verification may have a role in bulimia. Individuals suffering from bulimia cling to their self-perceptions, despite efforts for change. In one investigation, women with bulimic symptoms desired more negative feedback regarding their physical appearance. This negative feedback in turn was associated with greater bulimic symptoms at a later time (Joiner, 1999).

Self-verification occurs in naturalistic settings such as business and therapy. Applying the tenets of self-verification to these areas hold significant implications for business performance and therapeutic success. Self-verification is still a relatively recent

theory (i.e., Swann, 1983) and is currently being investigated in new areas such as marketing (Escalas & Bettman, 2003).

Self-Verification Studies with Children and Adolescents

After discovering that self-verification was a motivator of adult behavior inside and outside the laboratory, research focus gradually shifted to children. Researchers began to examine if children and adolescents are also motivated by self-verification. Cassidy and colleagues (Cassidy, Aikins, & Chernoff, 2003) conducted the first known examination of self-verification of young children in third grade ($M = 8.6$ years). Children first completed the Perceived Competence Scale for Children designed by Harter (1982) to assess self-perceptions in various domains (e.g., scholastic activities, physical appearance, behavioral conduct, peer acceptance) as well as global self-worth. The study used a puppet show paradigm to assess self-verification strivings along the specific dimensions of competence as well as global self-worth in this young sample. To assess self-verification along the particular dimensions, one puppet described a child with the same name as the participant who excelled in one domain and a second puppet described a child with the same name as the participant who was challenged in this same domain. To assess global self-worth, one puppet described a child who had a positive sense of global self-worth and a second puppet described a child who had a negative sense of global self-worth. Researchers instructed children to imagine the puppets were real people and to select the one with which they would like to interact and to explain the rationale behind this decision. Children wanted a self-verifying partner when asked about

specific dimensions of the self. Those children who viewed a certain area as one of their strengths wanted to interact with someone who also viewed them positively along this dimension. Children with negative self-views likewise desired to interact with another who saw them as they saw themselves. The most frequent explanation given by these children for their decisions could be described as epistemic in nature. The children claimed their selections were made to choose a partner who viewed the child as he or she viewed him/herself. A different pattern of findings emerged for evaluations of global self-worth. The vast majority of children preferred the positive evaluator, suggesting that self-enhancement striving guided decisions regarding global appraisals of the self.

Surprisingly, self-verification strivings were not as pronounced in a similar investigation with older children in seventh grade ($M = 12.9$ years). Cassidy and colleagues (Cassidy, Aikins, & Chernoff, 2003) first led children to believe that they would have the opportunity to interact with seventh graders at a different school. Prior to this ostensible interaction, researchers had the children complete questionnaires including assessments of their self-perceptions along the different domains of self as well as global self-worth. The subjects were led to believe that these evaluations would be shared with the alleged seventh graders from a different school. The researchers returned to the classroom at a later time with feedback that they themselves had prepared for the participants, but the participants were informed that the feedback was produced by the eventual interaction partners at the different school. Participants then selected interaction partners based on the feedback provided. The first choice participants made involved

selecting a peer who viewed them positively along a certain dimension or negatively along this same dimension. The majority of participants selected the positive evaluator, indicating self-enhancement strivings. A small subset of participants with negative self-views preferred the negative evaluator, providing limited support for self-verification theory. The second choice was between a peer who viewed them positively on a self-perceived strength or positively on a self-perceived weakness. The majority of participants wanted to interact with the peer who saw them favorably in their self-perceived area of strength. Because participants wanted to be seen by a peer as they saw themselves, this was taken as evidence for self-verification. The third and final choice was between a peer who evaluated them favorably or unfavorably on global worth. Almost all participants selected the favorable evaluator and this choice suggests that they are self-enhancing. In summing across these peer selection tasks with seventh graders, the support for self-verification is weak at best with more self-enhancement evident.

In order to further evaluate self-verification in this age group, seventh-grade participants completed a second measure of self-verification indicating how they wished to be evaluated by a peer along various dimensions of self. Comparisons of this measure to their own self-assessments suggest that participants would like for a peer to see them in a manner very similar to how they see themselves. This pattern of results is predicted by self-verification theory.

Comparison of these two studies in different age groups suggests that self-verification strivings are stronger in third graders than seventh graders. Cassidy and

colleagues (Cassidy, Aikins, & Chernoff, 2003) acknowledged that this difference may stem from methodological differences involved in testing these two age groups.

Alternatively, they propose that self-verification strivings may lessen later in childhood perhaps because of increased importance devoted to being viewed favorably by peers.

Evidence for self-verification in seventh graders was mixed and awaited further investigation. Cassidy and colleagues (Cassidy, Ziv, Mehta, & Feeney, 2003) conducted a second study with seventh graders using a methodology similar to that used in adult studies of self-verification (i.e., Swann et al., 1989). Seventh graders completed the Harter Self Perception Profile for Adolescents which evaluated self-perceptions along the specific domains of self as well as global self-worth. Researchers again led children to believe that they would share these questionnaires with students at a different school. At a later time, researchers falsely told participants that they had shared the questionnaires collected previously with students at a different school and provided the participants with pre-written feedback. Participants examined a list of three positive questions and three negative questions for each domain of self as well as global worth and selected three questions for which they wanted feedback. Participants desired more positive feedback in areas that they perceived to be their strengths and more negative feedback in areas that they perceived as their weak areas. The results were less clear when selecting global appraisals, with no clear support found for self-verification in seventh graders.

Self-verification was then examined in late adolescence using a similar methodology (Cassidy, Ziv, Mehta, & Feeney, 2003). For this older group, participants

with high global self-worth sought positive feedback on global appraisals and those with low global self-worth sought negative feedback. Cassidy concludes that adolescents “actively seek to confirm their existing [global] self-views” (Cassidy, Ziv, Mehta, & Feeney, 2003, p. 622).

There is some evidence that children self-verify their personal self-views. Recent research has examined whether children also verify their collective self-views (Bigler & Patterson, 2005). Researchers using a method similar to that of Chen and colleagues (Chen et al., 2004) randomly assigned children to one of two novel groups in a classroom, the red or blue group. Soon after this assignment was made, researchers assessed children’s views of their group in a pre-testing phase. Pre-test measures indicated that children expected their self-views to be reflective of their group as predicted by self-verification theory. For instance, if they viewed themselves as proficient at school they were also more likely to believe that their group was academically skilled. After this initial pre-testing, teachers made functional use of the groups and hung posters in the classroom suggesting that one group excelled at sports and the second group excelled at academics. In accordance with self-verification theory, the children were more satisfied with their group membership if they saw themselves as being proficient in that particular area. Children who believed they excelled in a certain area preferred to be in a group that excelled in that area rather than a group excelling in a different area.

Examples of Self-Verification in School Settings

Research has also examined whether children self-verify in the classroom context. Children do endeavor to maintain a stable academic self-concept. One investigation examined children who were more proficient in either mathematics or reading (Hay, Ashman, van Kraayenoord, & Stewart, 1999). The study found these students to have low self-perceptions in both areas despite discrepant performance, as would be predicted by self-verification theory. Viewing the self similarly along different academic domains allowed children to maintain a stable academic self-view.

Self-verification strivings have been found to motivate behavior in children as young as eight years old. Research findings are mixed with little evidence for self-verification in children along global domains. Self-verification may be more pronounced in individual domains of self rather than global self assessments but this is a fairly barren area of research awaiting additional investigations.

Potential Moderators of Self-Verification

Multiple factors have been proposed to moderate the process of self-verification, including characteristics of the target's self-concepts, attributes of the evaluator, and the nature of the response (Swann, 1990, see Figure 3). Individuals are more likely to seek verification for self-views with a great deal of psychological investment. Psychological investment is indexed by both the degree of confidence and importance attributed to self-views. Empirical support for this assertion is provided by an investigation of roommate relationships (Swann & Pelham, 2002). Investigators assessed each roommate's desire to continue the relationship and found that individuals preferred roommates who verified

those self-views in which they were confident and which they ascribed a great deal of personal importance. Self-verification strivings are often intensified when individuals are confident about the self-views in question, and this drive for self-verification is further heightened when individuals are considering self-views that are of great importance to them.

Characteristics of the evaluator can also moderate self-verification strivings. Individuals are more likely to seek self-verifying feedback from evaluators viewed as credible. Verifying feedback from reliable sources helps bolster feeling of psychological coherence. According to Swann, “from an epistemic perspective, relatively credible evaluations will be particularly comforting if they are self-verifying and particularly unsettling if they are non-verifying” (Swann, 1990, p. 436). Verification seeking amplifies when the evaluator is considered an important interaction partner. Little concern is granted to seeking verification from a partner with whom one will interact for just a brief period. More effort will instead be focused on attaining verification from a long-standing partner (i.e., Swann et al., 2004). Especially strong verification strivings are evident in those in a particularly close and significant relationship such as marriage (e.g., Swann et al., 1994).

Lastly, the nature of the response itself may have an important moderating role on the process of self-verification. Individuals are more likely to seek verification for critical decisions. When making important choices, individuals allot a great amount of cognitive

resources to the process which in turn is associated with increased efforts for self-verification (Swann, 1990).

Joint Operation of Behavioral Confirmation and Self-Verification

Behavioral confirmation theory suggests that perceivers hold a variety of expectations regarding the target and that these beliefs come to influence the behavior of the target. Self-verification theory, on the other hand, suggests that targets use their own self-conceptions to influence perceivers. How do these two processes interact? Swann (1987) refers to the interaction of these two processes as identity negotiation. He notes that perceivers and targets come into a relationship with their own goals and perceptions about themselves and others, at which point a mutual process of identity negotiation ensues. The selection of the term identity negotiation “was intended to encourage researchers to consider simultaneously how the activities of both perceivers and targets are woven into the fabric of social interaction” (Swann, 1987, p.1048). Despite such encouragement, very few studies have examined behavioral confirmation and self-verification jointly, instead focusing on just one of the two processes in isolation.

The first known study to explicitly examine both behavioral confirmation and self-verification was conducted by Swann and Ely (1984). When perceivers’ views of the target are congruent with the target’s own self-views, interactions unfold smoothly. Swann and Ely were interested in what takes place when the perceivers’ expectations come into direct conflict with the targets’ self-views. They suggested two possible outcomes in this battle of wills -- that the perceivers’ views would win out and behavioral

confirmation would occur, or the targets' self views would win out, leading to self-verification. Swann and Ely hypothesized that psychological investment, in particular the element of certainty, would determine which process predominated. According to their hypothesis, behavioral confirmation would likely occur when perceivers were highly certain of their expectations for the targets. Alternatively, self-verification should occur when targets are quite certain of their self-views.

In order to test this hypothesis, Swann and Ely (1984) invited pairs of female college students to interact in what was ostensibly a study regarding the interviewing process. Targets rated themselves along dimensions of introversion and extraversion prior to the study, indicating the degree of certainty with which they held these self-conceptions. In order to determine what occurs when self-views come into conflict with others' expectations, the researchers always presented the perceiver with an expectation directly counter to that of the target's self-views. If a particular target viewed herself as extraverted, her interaction partner would always be informed that she was extremely introverted. Researchers also manipulated the certainty of perceivers' views. Perceivers believed that assessments of introversion/extroversion came from assessments by the targets' family, friends, and a psychologist's observation. Perceivers were sometimes told that all raters agreed, and sometimes that only sixty percent of the raters agreed. Perceivers and targets then had three interaction sessions where the perceiver was allowed to ask questions. These questions probed for introversion or extraversion. Naïve raters later listened to the recorded interactions to assess perceiver and target behavior.

The results from these analyses show that the identity negotiation process is largely a function of the certainty with which individuals hold on to their views. Self-verification was evident more often than behavioral confirmation. Self-verification always ensued when the targets were highly certain of their self-views, regardless of the certainty with which the perceivers adhered to their erroneous expectations. The outcome tended to differ when targets were uncertain of their self-views. Under these conditions, self-verification would occur when the perceivers had no strong expectation, but behavioral confirmation would follow if the perceiver had firm expectations.

Rotenberg, Gruman, and Ariganello (2002) conducted a similar study. Rather than introversion and extraversion per se, these researchers examined the closely related construct of loneliness in mixed-sex dyads. They were interested in the role of self-monitoring in the identity negotiation process; self-monitoring refers to the degree to which an individual alters his or her behavior so that it is congruent with interpreted situational cues (Snyder & Gangestad, 1996). To conduct this study, researchers informed perceivers that they would interact with an individual who was described as either lonely or not lonely. This manipulation of expectations affected how perceivers viewed and treated targets. Behavioral confirmation and self-verification were only evident in dyads in which the target was male. Males low in self-monitoring engaged in self-verification. If the male did not feel lonely, he acted even friendlier when the perceiver assumed otherwise. Males high in self-monitoring were extremely sensitive to the expectations of the perceiver. They behaved in manner confirming the perceiver's

expectations of their loneliness. These findings suggest that identity negotiation is largely a function of characteristics of the target.

Swann further investigated the relationship between behavioral confirmation and self-verification in the context of a more meaningful and lasting relationship than can be conjured in the laboratory. This was accomplished by examining the identity negotiation process in college roommates during their freshman year (McNulty & Swann, 1994). Participants rated themselves and their roommates on various abilities and characteristics at both the beginning and end of the semester. Of particular interest was participant's change in perceptions of themselves and his or her roommate. The pattern of results suggested that both behavioral confirmation and self-verification took place in the naturally-occurring roommate relationship. Participants' self-views over the semester were influenced by their roommates' appraisals of them. Participants' self-views likewise influenced their roommates' appraisal of them. Some of the roommate pairs tested engaged in both processes of behavioral confirmation and self-verification. However, the majority of dyads did not engage in both processes simultaneously. A second study with a larger number of roommates participating replicated these results. This second study also examined the role of perceived knowledgeable. Roommates perceived to be knowledgeable about the target exerted greater influence on the target's self-perceptions. Swann concludes from this investigation that "the self is both an architect and consequence of others' appraisals" (McNulty & Swann, 1994, p.1020).

Only one known study has examined both behavioral confirmation and self-verification in children (Madon et al., 2001). This study focused on identity negotiation in the context of the naturally-occurring student-teacher relationship. Students evaluated their own academic ability and motivation at the beginning and end of the semester. Teachers also evaluated each student along these dimensions at the beginning and end of the semester. Results indicate that both behavioral confirmation and self-verification occurred in the context of the student-teacher relationship. There was a positive correlation between the teacher's initial expectation and the students' self-views at the end of the year, implying that some behavioral confirmation occurred. There was also a positive correlation between the students' initial self-views and the way the teacher perceived the student at the end of the year, demonstrating that some self-verification occurred as well. Both teachers and students in a school setting have access to highly accurate information provided from past performance, which often leads to similar evaluations by both students and teachers. Both behavioral confirmation and self-verification were seen in student-teacher relationships.

Swann's studies illustrate the conditions influencing which one of these two processes is likely to predominate including: psychological investment, type of relationship, goals of interaction partners, and the nature of the expectancy. I believe that personality characteristics of the perceiver and target should be added to this list. Each of these factors is explained further below (see Table 1).

Confidence in Expectancies and Self-Views

Which of the processes of self-verification and behavioral confirmation will occur is influenced by the degree of certainty with which the targets adhere to their self-views, as well as how strongly perceivers are invested in their expectancy (Swann, 1984). As illustrated by Swann and Ely (1984) behavioral confirmation is likely to result when perceivers hold fast to their expectations and targets are uncertain of their self-views. Self-verification is likely when targets are unwavering in their self-views. This drive for self-verification is intensified when these self-views are of great importance to the target. Swann suggests that in many situations, the target has more investment in their self-view than the perceiver has in an expectation. In many cases, the perceiver will not know anything about the target or even particularly care. Swann elaborates “whereas people possess a lifetime of evidence on which to base their views of the self, their expectancies may often dangle on a precariously thin thread of evidence” (Swann & Ely, 1984, p.1299). Swann and Ely do highlight several conditions under which perceivers’ certainty may exceed that of targets. Perceivers are especially certain about beliefs when there is a great deal of converging evidence, the source of the perceiver’s information is extremely credible, or the belief is endorsed by the majority of individuals, such as a stereotype. Swann and Ely also speculate that behavioral confirmation may be more common than self-verification among children because they are less certain of their self-views.

Nature of Expectancies or Self-Views

The nature of expectations held by perceivers is a significant factor contributing to the balance of behavioral confirmation and self-verification (Swann, 1984).

Confirming or disconfirming evidence may be readily apparent for certain types of expectations. An intellectually challenged individual, for instance, is never going to excel in his or her academic endeavors. However, certain expectations can be especially hard to refute. This is especially true of expectations for which contradictory evidence would be observable on an extremely rare basis. Swann (1984) illustrates an individual believed to be dangerous or violent. A violent person may only behave aggressively when extremely upset. Perceivers may hold on to their expectations despite a dearth of evidence as they expect deviant acts to be rare in nature and only elicited under certain circumstances. Certain expectations are therefore particularly resistant to change and behavioral confirmation will likely result.

The nature of targets' self-views play a pivotal role in the identity negotiation process. Striving for verification often drives critical decisions. Individuals often ensure that important decisions such as career choice are self-verifying (Swann, 1990).

Relationship Dynamics

Relationship dynamics likely play a large role in determining whether behavioral confirmation or self-verification will result (Swann, 1984). A target can act in ways to correct an inaccurate expectation of a perceiver. Targets can simply explain to perceivers how they view themselves as was the case in the investigation by Swann and Ely (1984). In that study, targets answering perceiver's probing questions often offered corrections for what they believed to be flawed expectancies. Swann and Ely speculated that their procedure was especially conducive to self-verification because "targets could provide

perceivers with explicit verbal feedback concerning the validity of perceivers' expectancies" and further hypothesized that "whenever it is so easy for targets to provide perceivers with corrective feedback, expectancy effects will be rare" (1984, p. 1299).

Corrective feedback is common where interaction partners can communicate openly and have equal power in a relationship. Several types of relationships prevent targets from overtly correcting the perceivers' misperceptions, however. If perceivers expect a certain target to have an extremely unpleasant character, they may actively avoid contact. The target will consequently not have the opportunity to correct any misperceptions held by the perceivers (Swann, 1984). Targets may have little chance to offer corrective feedback in relationships with an unequal balance of power that is not in their favor. When interacting with a perceiver in a position of authority and power, targets may feel uncomfortable or have little opportunity to offer feedback (Swann, 1984). Copeland (1994) further suggests that it may actually be to the benefit of targets to act in line with powerful perceivers' expectations. The credibility of the perceiver may also play a role in whether targets feel able to offer corrective feedback. Participants are more likely to confirm expectations of a credible perceiver rather than try to alter their expectancies (McNulty & Swann, 1984). The importance the target ascribes to the relationship may influence the amount of feedback the target offers. Verification seeking intensifies when the evaluator is considered an important interaction partner. Targets commonly put little effort into seeking verification from a partner who they will interact with for just a short time but exert more effort toward attaining verification for a long-

standing partner (Swann et al., 2004). Targets are especially likely to offer corrective feedback to significant and long-standing relationship partners such as spouses (Swann et al., 1994).

Interaction Goals

The goals of the target and perceiver also influence the balance of behavioral confirmation and self-verification (Swann, 1984). Behavioral confirmation is less likely when perceivers are motivated to form accurate impressions of targets (Neuberg, 1989). Under these circumstances, perceivers are often receptive to the information that targets provide about themselves. Nonetheless, perceivers are still sometimes motivated to maintain inaccurate expectancies of the target. For example, perceivers may hold positive expectations of a significant interaction partner such as a spouse and may be slow to accept information counter to their assumptions. Perceivers may instead hold negative expectations of significant others and be quick to accept contradictory information (Swann, 1984). Targets may be motivated to portray an accurate or inaccurate picture of themselves. Targets often wish for others to see them as these see themselves because this offers a sense of psychological coherence and facilitates interactions with others (i.e., Swann et al., 2002). In certain situations, targets may want to portray an inaccurate impression of themselves such as wanting to seem less skilled at an academic, athletic, or other endeavor, in order to receive help from an attractive, more advanced partner.

Personality Characteristics of the Interaction Partners

Personality characteristics of the target and perceiver also help determine whether behavioral confirmation or self-verification is likely to result. In particular, the degree to which the target engages in self-monitoring may be important; targets that are high on self-monitoring are more likely to confirm the expectations of perceivers whereas targets low on self-monitoring are more likely to engage in self-verification. High and low self-monitoring individuals are motivated by different goals. High self-monitors are guided by the question of “What does the situation want me to be and how can I be that person?” (Graziano et al., 1987, p.571). Low self-monitors, on the other hand, are guided by the alternative question of “Who am I and how can I be me in this situation?” (Graziano, et al., 1987, p. 571). These divergent motivators would likely lead high self-monitors to confirm others’ expectation and low self-monitors to verify their self-conceptions.

This hypothesized moderating role of self-monitoring on the balance between behavioral confirmation and self-verification was examined empirically by Rotenberg, Gruman, and Ariganello (2002). As there is no widely agreed upon definition of self-monitoring, these researchers adapted the conceptualization of self-monitoring as “the extent to which individuals regulate their behavior in accordance with external events (i.e., the reactions of others) as opposed to internal factors (i.e., their own beliefs of attitudes)” (Rotenberg et al., 2002, p. 83). In particular, they were interested in one of the sub-constructs of self-monitoring, other-directedness, which they conceptualized as “the extent to which individuals attempt to please others, conform to the social situation and mask their true feelings” (Rotenberg et al., 2002, p. 83). These researchers measured the

degree to which targets engaged in self-monitoring, specifically as related to other-directedness. Targets then engaged in dyadic interactions in which the perceiver expected them to be either lonely or not lonely. As was hypothesized, those high on other-directedness confirmed the expectations of the perceivers whereas those low on other-directedness sought self-verification. Rotenberg and colleagues acknowledge that these findings were limited to dyads in which the male served as the target as the stereotype of loneliness has more profound implications for men.

Along these same lines, the results of a meta-analysis (Cooper & Hazelrigg, 1988) suggest that characteristics associated with self-monitoring may render a target especially likely to confirm the expectancies of his or her interaction partner. They found that there are particular targets who are more impressionable by others' expectations. As is suggested by the self-monitoring hypothesis, those targets that are particularly attentive to social evaluations may be more susceptible to behavioral confirmation. Further, this meta-analysis found support for increased tendencies for behavioral confirmation among targets that are more subservient and compliant.

Likewise, characteristics of the perceiver can render behavioral confirmation more likely. Perceivers who feel powerful and able to influence others often elicit behavioral confirmation. Similarly, those perceivers who are more expressive are better able to convey their expectations to the target which in turn is associated with increased behavioral confirmation. Lastly, targets are more likely to confirm the expectations of a perceiver who they consider likeable rather than unpleasant (Cooper & Hazelrigg, 1988).

Developmental Changes that Influence the Balance between Behavioral Confirmation and Self-Verification

The above factors render either behavioral confirmation or self-verification more likely depending on circumstance. These factors change with development and likely result in behavioral confirmation being a more probable occurrence during childhood. Numerous studies examining behavioral confirmation have found these effects to be more pronounced earlier in development (e.g., Rosenthal and Jacobson, 1966). Self-verification may be the less frequent of the two identity negotiation processes during childhood, but eventually becomes predominant during adulthood. It is uncertain as to which of the identity negotiation processes may be more dominant during adolescence. Adolescence may serve as a transitional period during which either behavioral confirmation or self-verification may be more probable, depending on the developmental tasks that have been reached and the social context.

Empirical work is needed to better understand the identity negotiation process during adolescence. This is an important period typified by several developmental milestones. I now discuss the major changes experienced during adolescence and in so doing follow the definitions espoused by Smetana, Campione-Barr, and Metzger (2006) dividing adolescence into three developmental stages: early adolescence (10-13 years of age), middle adolescence (14-17 years of age), and late adolescence (18 years of age-early adulthood).

Puberty and early adolescence is a period characterized by dramatic physical, cognitive, and social changes (Remschmidt, 1994). Adolescents are cognizant of the changes that their bodies are undergoing and these changes influence them in a psychosocial fashion as well (Boxer, Tobin-Richards, & Petersen, 1983). For example, early maturing girls are more likely to be friends with older males and females and consequently are more likely to engage in risky behavior than girls who mature at an average rate (Cavanagh, 2004). Although physical, cognitive, and social domains interact constantly during adolescence, I have divided my discussion along these lines for ease of exposition.

In terms of strictly physical transformations, puberty and early adolescence in particular is the second most rapid period of physical change preceded only by infancy (Boxer et al., 1983). Pubertal changes are initiated by increases in hormonal (e.g., testosterone and estrogen) levels. Adolescents experience many changes during puberty including: growth toward adult body size, development of secondary sex characteristics (e.g., breasts and facial hair), and the emergence of body odor and acne. Girls and boys mature at different rates with girls entering puberty two years earlier than boys, on average (Boxer et al., 1983). Girls often enter puberty between the ages of 7 and 14 whereas boys enter puberty between the ages of 9 and 15 (University of Michigan Health System, n. d.). During puberty, girls experience menarche and boys experience a deepening of their voice (Boxer et al., 2001).

In addition to the dramatic physical changes, several cognitive developments occur during adolescence. The majority of individuals transition into Piaget's stage of formal operations during early adolescence. Those in formal operations become able to think abstractly, employ logic, and consider all scenarios and relationships (Enright & Deist, 1979). Adolescents also become better able to express themselves and they become more skilled at argumentation (Felton, 2004).

Early adolescents enter middle school, which is associated with a great many academic changes (Wigfield, Lutz, & Wagner, 2005). There are large differences in the educational objectives and pedagogy of middle school as compared to elementary school. It is common for achievement motivation to decline during this period (Wigfield et al., 2005). Adolescents also begin to engage in a great many extracurricular activities, which may or may not be academic in nature (Fredricks & Eccles, 2005).

Social changes are also widespread during the transition from childhood to adolescence. Adolescents become able to understand others' points of view, an ability referred to as social-perspective taking (Enright & Deist, 1979; Remschmidt, 1994). This ability enables adolescents to see themselves in a more objective fashion and from the perspective of other individuals in their environment. Consequently, adolescents are able to compare the self to others and identify their distinctive strengths and weaknesses (Enright & Deist, 1979).

Furthermore, the nature of relationships changes during adolescence. The importance of peers greatly increases; adolescents begin to spend more time with peers

and less time with parents (Larson & Richards, 1991; Smetana et al., 2006). Romantic relationships also become important during this period (Collins, 2003). Early adolescence is the time during which individuals are extremely concerned about peers' opinions and are most susceptible to peer influence (Berndt, 1979; Jacobs et al., 2004). Conformity follows a curvilinear trajectory with a marked increase during middle school as compared with elementary school and a decrease from middle school to high school (Berndt, 1979).

At the same time that peers and romantic partners are taking on greater importance, adolescents begin to seek autonomy from their parents (Goldstein, Davis-Kean, & Eccles, 2005; Spear & Kulbok, 2004). Adolescents begin to desire behavioral, cognitive, and emotional freedom from their parents (Spear & Kulbok, 2004) and become less likely to conform to parental requests with age (Berndt, 1979).

As a result of the many developmental changes occurring during adolescence, this could be a transitional period in the identity negotiation process. In childhood, behavioral confirmation is the more likely outcome of the identity negotiation process whereas self-verification is more likely to prevail during adulthood. Either behavioral confirmation or self-verification may be more likely during adolescence depending on those developmental milestones that have been reached as well as the situational context.

Below I discuss how the factors that moderate the processes of behavioral confirmation and self-verification develop. The developmental trajectories of these factors likely results in self-verification becoming the more predominant process with development. Since very little empirical work has been done examining the interplay of

behavioral confirmation and self-verification during childhood and adolescence, the following section is largely speculative and discursive.

Increasing Certainty in Self-Views

Very little empirical work has investigated developmental changes in the certainty with which self-views are held. I speculate that the development of confidence in self-views follows a U-shaped pattern. Young children are often overly confident and positive in their self-evaluations (Brewer & Day, 2005; Powel, Morelli, Nusbaum, 1994). This confidence wanes in middle childhood as children begin receiving feedback about their strengths and weaknesses (Newman & Wick, 1987). Experiencing the dramatic changes that accompany adolescence may further reduce confidence in self-views. By adulthood, confidence in self-views likely increases as the result of gained experience. This increasing certainty in self-views renders self-verification more likely.

Increasingly Differentiated Self-Views

Children's sense of self is less differentiated from that of adults. At first, children view themselves in a holistic fashion. The self-concept of children gradually becomes more differentiated. For instance, the self-concept of preschoolers is differentiated into both academic and nonacademic domains (Marsh, Ellis, & Craven, 2002). During the elementary school years, the self-concept becomes even further differentiated to encompass more specific domains such as physical attractiveness and peer relations (Marsh & Ayotte, 2003; Marsh, Craven, & Debus, 1991). The self-concept continues to

become increasingly multi-faceted as individuals gain experiences in new contexts and relationships (Harter, Waters, & Whitesell, 1998).

Self-verification theory assumes that individuals view themselves along different dimensions rather than merely in terms of global self-worth (Swann et al., 1989). Increasing differentiation of self-views is likely associated with a growing drive for self-verification. As individuals come to learn their own strengths and weaknesses, they become able to seek verification for these self-views. They are able to seek positive feedback regarding their self-perceived strengths and negative feedback for their self-perceived weaknesses (i.e., Swann et al., 1989). Children with less differentiated self-views are unlikely to self-verify as they are largely unaware of their strengths and weaknesses. As self-views become more multi-faceted with development, self-verification becomes possible.

Investment in Decision Outcomes

Children are largely dependent on their parents to make decisions for them. Parents guide their children along different developmental trajectories and children may have little involvement in choices that are made. This would likely result in behavioral confirmation being more likely during childhood.

Upon reaching adolescence, individuals begin seeking autonomy from their parents (Goldstein et al., 2005). Consequently, adolescents face an environment much different from that of their childhood; they have more responsibilities and opportunities to make decisions. In fact, adolescents often begin making a number of important

decisions that influence their future (Spear & Kulbok, 2004). For instance, adolescents are beginning to make decisions about school and careers. This increasing investment in making decisions for oneself should result in self-verification being more likely.

Relationship Dynamics

Children commonly interact with adult authority figures such as teachers and parents. In these types of interactions, children regularly accept adults as legitimate authority figures (e.g., Laupa & Turiel, 1986). Children may feel uncomfortable providing an adult with corrective feedback when expectations of them are incongruent with their self-views. During adulthood, individuals often are on equal footing with their interaction partners (except in the context of superior-subordinate positions in the workforce). Thus, behavioral confirmation may be more common early in development as youth interact with significant adult partners who serve as authority figures (e.g., Copeland, 1994). Self-verification may be more prevalent during adulthood, when individuals often communicate with their equals.

Interaction Goals

Children develop a more sophisticated conception of social relationships, such as friendship, with age (Furman & Bierman, 1983). The importance of peer relationships increases with development (e.g., Hay & Ashman, 2003). Adolescents, especially females, are driven by communal social goals such as nurturance and intimacy (Jarvinen & Nicholls, 1996). The increasing importance of relationships during adolescence might lead adolescents to attempt to preserve smooth interactions and often leads to increased

conformity to peers (Berndt, 1979). To this end, adolescents may be more likely to confirm expectations held by their interaction partners. Alternatively, self-verification theory suggests that individuals will seek verification for their self-views in order to ensure smooth interactions. Adolescents may also self-verify when interacting with significant partners. Social interactions remain an important concern of adults.

Personality Characteristics of the Interaction Partners

Certain characteristics are associated with increased susceptibility to confirming the expectations of others. In particular, research has focused on the construct of self-monitoring. Children commonly engage in self-monitoring, although individual differences exist (Graziano, et al., 1987). These self-monitoring behaviors increase throughout adolescence. Examination of individuals aged 12 to 18 with the Adolescent Self-Monitoring Scale suggest that overall self-monitoring behavior increases during this period. Throughout adolescence, individuals become better able to detect the expressive behavior of others (Pledger, 1992). This heightened self-monitoring during adolescence likely increases tendencies for behavioral confirmation at the expense of self-verification. At later periods of development, individual differences in self-monitoring may play a role in determining whether behavioral confirmation or self-verification prevails (Rotenberg et al., 2002)

Current Studies

The process of identity negotiation may largely be a function of development. Behavioral confirmation should be more common than self-verification among those in

early and middle childhood. On the other hand, self-verification is expected to be more typical of adults than is behavioral confirmation. It is less clear whether adolescence is a time when either behavioral confirmation or self-verification should prevail. Adolescents view relationships as extremely important (Hay & Ashman, 2003), are high on self-monitoring (Pledger, 1992), and are likely to conform to peers (Berndt, 1979). These factors facilitate the process of behavioral confirmation. Conversely, some hallmarks of adolescence should render self-verification more likely. Adolescents are progressively gaining increasing independence and power in relationships (Goldstein et al., 2005) and, in turn, are becoming increasingly involved in making decisions for themselves (Spear & Kulbok, 2004). Adolescents' self-concepts are becoming more differentiated (Marsh & Ayotte, 2003). Consequently, it remains uncertain as to whether behavioral confirmation or self-verification is more likely during adolescence. It is possible that adolescence may be a transitional period where both behavioral confirmation and self-verification are likely; however, empirical studies are needed to examine this developmental period.

In order to address this gap in the literature, the primary objective of the current studies is to examine the identity negotiation process during adolescence. To this end, I will examine the nature of adolescent self-views and the processes of behavioral confirmation and self-verification. My specific research questions are discussed below.

Research Questions Pertaining to Adolescent Self-Views (Study 1)

There are very few empirical investigations of the identity negotiation process in adolescence. I first investigated the nature of adolescent self-views in order to better

understand the findings of the current studies and to make predictions for future research. Strong investment in self-views is associated with greater self-verification strivings (Swann & Pelham, 2002). When individuals lack certainty or attribute little importance to their self-views, behavioral confirmation becomes the more likely outcome of the identity negotiation process (Swann & Ely, 1984). My first three research questions explore adolescents' specific and global self-perceptions and are intended to inform investigations of identity negotiation during this developmental period.

Question 1: How do adolescents frame their specific self-views in terms of importance and certainty? Adolescence is a period characterized by rapid change. Most notably, adolescents are experiencing transformations in their physical selves (Boxer et al., 1983) as well as in their social environments (Collins & Repinski, 1994). I hypothesized that the developmental changes of adolescence would be associated with shifts in which domains of self are considered to be most important. I specifically expected that the transition from childhood to adolescence would be accompanied by increasing importance attributed to the domains of appearance and social interaction. I also hypothesized that wide-ranging changes during adolescence would be associated with a decreased sense of certainty in one's own abilities and weaknesses. In particular, I expected adolescents to be less certain of their intellectual capacity as they transitioned from elementary to middle school.

Question 2: How do objective ratings of appearance relate to adolescents' ratings of self-perceived attractiveness? And how do objective and subjective ratings of

appearance contribute to global self-appraisals? Adolescents are experiencing wide-ranging physical changes such as the development of acne and transformation of facial features (Boxer et al., 1983). It may be that adolescents base their self-perceptions on their history of appearance, incorporating how they look at various points in development. Thus, objective measures of appearance during adolescent may be very different from subjective impressions based on both childhood and adolescence. In addition, I expected that subjective ratings of appearance would have a stronger influence on adolescents' global self-perceptions than would objective ratings of appearance.

Question 3: How do (a) tendencies to experience positive and negative affective states, (b) specific self-views, and (c) the manner in which these self-views are framed contribute to adolescents' global self-appraisals? Young children's sense of self-worth is largely holistic and affective in nature. This incipient sense of self is a function of early experiences such as treatment by the primary caregiver (Bowlby, 1988); children with secure attachments to their caregivers tend to view themselves more positively than those with insecure attachments (Verschueren, Marcoen, & Schoefs, 1996). Children's sense of self becomes more differentiated with development (Marsh et al., 1991). When children enter school they begin receiving feedback from more varied sources in multiple realms such as academics, athletics, and social interactions. At the same time that children are gaining more information about themselves, they are also gaining greater cognitive abilities with which to process this information. In adolescence, individuals move beyond thinking in concrete terms into what Piaget termed the formal operations stage, in which

they become able to reason and consider hypothetical situations (Miller, 2002).

Adolescents are able to combine, compare, and weight different sources of abstract information. I consequently hypothesized that adolescents would begin to integrate various sources of information that were both affective and cognitive in nature across multiple dimensions of self in the manner that they believe is appropriate to form global self-evaluations. Pelham and Swann (1989) found that positive affect, negative affect, specific self-views, and the manner in which these self-views are framed all uniquely predict global self-appraisals in adults. I sought to examine whether each of these factors is a unique predictor of adolescent global self-worth. I expected to replicate the findings of Pelham and Swann (1989) in an adolescent sample.

Research Questions Pertaining to Self-Verification (Study 1)

There is very little empirical work examining self-verification in child and adolescent samples. I will therefore examine basic self-verification strivings in adolescents.

Question 4: Do adolescents solicit self-verifying feedback from an unknown peer?

The social psychology literature suggests that adults prefer feedback that is congruent with their self-perceptions (e.g., Swann et al., 1989). Adults prefer negative feedback regarding self-perceived weaknesses and positive feedback regarding self-perceived strengths. Young children are overly confident in their abilities (Powel et al., 1994) and as a result likely only seek positive feedback. This tendency for overly positive self-evaluations among young children creates a challenge for research investigating self-

verification theory during this developmental period. If children are seeking only positive feedback, researchers are unable to separate self-enhancement and self-verification strivings. By adolescence, self-views have become more differentiated and better informed. I tested whether adolescents solicit positive feedback for their self-perceived strengths and negative feedback for their self-perceived weaknesses as adults do. I expected that adolescents would prefer feedback congruent with their self-views.

Research Questions Pertaining to the Interplay of Behavioral Confirmation and Self-Verification (Study 2)

In examining behavioral confirmation, I centered my attention on self-perceived attractiveness. I decided to focus the investigation on physical attractiveness for two reasons. First, one of the earliest and most seminal investigations in the behavioral confirmation literature examined expectations for physical attractiveness in adults (Snyder, Tanke, Berscheid, 1977). As of yet, expectations for physical attractiveness have not been examined in adolescents' interactions. Secondly, perceived attractiveness is very important to children and adolescents; self-appraisal in this domain is most predictive of general self-worth throughout middle school and high school (Marsh & Ayotte, 2003; Shapka & Keating, 2005).

Question 5: Do perceivers' expectations about appearance drive the behavioral confirmation process in adolescent dyads? Or, do target's self-views drive the self-verification process in adolescent dyads? Attractive and unattractive individuals are treated differently; this differential treatment in favor of attractive individuals becomes

evident during infancy. Infants are more likely to approach and demonstrate positive affect toward an attractive as opposed to a less attractive stranger (Langlois, Roggman, & Rieser-Danner, 1990). By early childhood, a rudimentary form of the beauty-is-good stereotype is evident. Individuals attribute positive characteristics such as intelligence, sociability, and honesty to attractive individuals. Conversely, negative characteristics are attributed to unattractive individuals (Dion, Berscheid, & Walster, 1972). This bias guides behavior across development in multiple realms including social interactions (Langlois et al., 2000), educational settings (Elovitz & Salvia, 1982), and the workplace (Hamermesh & Biddle, 1994; Hosoda, Stone-Romero, & Coats, 2003).

Individuals expect attractive people to have positive characteristics and unattractive people to have negative characteristics. I investigated whether differential expectations based on attractiveness would elicit behavioral confirmation in adolescent dyads. Behavioral confirmation is conceptualized as a three-stage process (Jussim, 1986). This investigation examined each phase in the progression of behavioral confirmation: (1) the development of expectations regarding a target, (2) differential treatment of the target in response to these expectations, and (3) behavior on the part of the target consistent with the initial expectation in response to treatment by the perceiver. I expected to observe the three stages of the behavioral confirmation process in adolescent dyads as a function of attractiveness. Specifically, I predicted that: (1) adolescent perceivers would develop expectations about an unknown peer based on the peers' appearance, (2) these expectations would guide behavior of the perceiver, and (3) this

differential treatment would result in behavior on the part of the target that is congruent with the beauty-is-good stereotype.

Behavioral confirmation was not the only potential outcome; targets may respond in a manner congruent with their self-views without regard to the expectations of the perceiver. This outcome is counter to behavioral confirmation theory but would be predicted by self-verification theory. I expected that this alternative outcome would be unlikely because expectations based on appearance are pervasive and strongly held (Dion et al., 1972) rendering behavioral confirmation a likely outcome (Jussim et al., 1996).

Chapter Two:

Study 1

Study 1 examined adolescent self-perceptions and self-verification strivings during adolescence. This study specifically examined the first three research questions which focused on adolescent self-views: (1) how do adolescents frame their specific self-views in terms of importance and certainty, (2) how accurately do adolescents judge their own attractiveness, and (3) how do (a) tendencies to experience positive and negative affective states, (b) specific self-views, and (c) the manner in which these self-views are framed contribute to adolescents' global self-appraisals? In addition, this study examined the fourth research question which focused on self-verification strivings: do adolescents solicit self-verifying feedback from an unknown peer?

Method

Participants

Participants were 90 early adolescents (51 female; $M = 12.9$ years, $SD = 1.7$ years; see Table 2 for distribution of ages). An additional two adolescents participated, but their data were excluded from the analyses because they failed to complete the questionnaires. Parents identified the ethnicity of adolescent participants as: Caucasian ($n = 54$), Hispanic ($n = 5$), Asian ($n = 3$), African American ($n = 2$), Native American ($n = 1$), and other ($n = 10$). The parents of 15 adolescents did not indicate ethnicity. The majority of participants were recruited from local private schools ($n = 85$) and are assumed to be from families that are middle class or above. The remaining participants (n

= 5) were recruited from the local chapter of Boys and Girls Club which primarily serves families of low socioeconomic status.

Measures

Self-Perception Profile for Adolescents. The Self-Perception Profile for Adolescents was used to assess participant's perceived aptitude in the areas of scholastic competence, social acceptance, athletic competence, physical appearance, job competence, romantic appeal, behavioral conduct, close friendship, and global self-worth (Harter, 1988; see Appendix A for sample question). The internal consistency values of the subscales as assessed by Cronbach's alpha range from .74 to .93 and indicate a high degree of consistency among individual items in each subscale (Harter, 1988). This measure uses the term "teenager" and I selected this measure because it includes additional domains such as perceptions of romantic appeal and close friendship not included in the Self-Perception Profile for Children (Harter, 1985). The Self-Perception Profile for Adolescents is commonly used in research with participants in early adolescence because it affords this additional information (e.g., Paquette & Underwood, 1999).

Adolescent Self-Attribute Questionnaire (ASAQ). I included a second measure of adolescents' perceptions of self that was designed for use in this study (see Appendix B). I modified the short version of the Self-Attribute Questionnaire (Pelham & Swann, 1989) for use with adolescents. The Adolescent Self-Attribute Questionnaire includes assessment of self-perceived intellectual/academic ability, social competence, artistic/musical ability, athletic competence, and physical attractiveness. I added this

measure because it allows for adolescents to indicate their degree of psychological investment in their self-views as indexed by ratings of certainty and importance. This measure also allows individuals to differentiate between their actual and ideal self-perceptions.

I calculated a composite self-attribute score by summing participants' self-ratings across the various domains of self. A high score indicated that participants viewed themselves positively along the specific domains of self. I also calculated a differential certainty and importance index for each participant. The differential certainty index was calculated by correlating self-ratings in each domain of self with the certainty ratings for the respective domains. A high score indicated that individuals were more certain of their self-perceived strengths. Likewise, a differential importance index was calculated by correlating self-ratings in each domain of self with the importance ratings for the respective domains. A high score on this index indicated that individuals weighed their strengths as more important than their weaknesses.

Positive and Negative Affect Scale for Children (PANAS-C). The PANAS-C (Laurent et al., 1999; see Appendix C for sample question) measures two dimensions: negative affect (e.g., fear, sadness, anger) and positive affect (e.g., interest, engagement, and energy). This measure was included to assess the affective component of self-esteem. This measure was designed for use with participants as young as 9 years old and has been validated using adolescent samples. The internal consistency values of the subscales as assessed by Cronbach's alpha are .90 or higher. Self-report measures of depression and

anxiety are positively correlated with the negative affect scale and negatively correlated with the positive affect scale. Factor analyses confirmed the two factors of negative affect and positive affect (Laurent et al., 1999).

Self-Rating Scale for Pubertal Development. The Self-Rating Scale for Pubertal Development (Carskadon & Acebo, 1993; see Appendix D for sample question) was included to assess participants' pubertal status. Separate forms exist for males and females. The form for males includes questions regarding body hair growth, changes in voice, and facial hair growth. The form for females includes questions regarding body hair growth, breast development, and menarche. Participants were classified as prepubertal, peripubertal and postpubertal based on their responses to these questions. Adolescents do not always provide an accurate assessment of their pubertal development on self-report measures such as the Self-Rating Scale for Pubertal Development (Rockett, Lynch, & Buck, 2004); however, clinical examination using the Tanner Sexual Maturity Scale was not a viable option for this study because it would have made many participants uncomfortable.

Adolescent Feedback-Seeking Questionnaire (AFSQ). In order to assess self-verification strivings in adolescents, I revised the Feedback Seeking Questionnaire (Swann et al., 1989). The Adolescent Feedback Seeking Questionnaire (see Appendix E) is comprised of language and examples appropriate for use with adolescent participants. This measure includes six questions corresponding to each dimension of the Adolescent Self-Attribute Questionnaire (intellectual/academic ability, social competence, artistic/musical ability,

athletic competence, and physical attractiveness). For each dimension of self, half of the questions elicit positive feedback (e.g., what is my greatest athletic talent) and the other half elicit negative feedback (e.g., what is my greatest athletic weakness). Participants were instructed to select two questions from each area for which they would most like to receive feedback from a peer. I calculated a composite positive feedback seeking score by summing the number of positive questions that participants selected across the various domains. A high score indicated that participants desired a great deal of positive feedback along the various dimensions of self.

Filler Items. I included various questions tapping participant's interests and background characteristics (see Appendix F). These items were included in order to make it appear that there is sufficient information for a peer to provide the participant with feedback.

Procedure

Participants were tested in their school/after-care setting. A research assistant introduced the study as a project intended to examine life in middle school. While introducing the study, the research assistant mentioned that some students may have the opportunity to interact with a student from a different school at a later date.

After introducing the study, the research assistant distributed a packet of questionnaires to each student. The packet of questionnaires included the following measures: the Self-Perception Profile for Adolescents, ASAQ, PANAS-C, AFSQ, and filler items. The research assistant instructed participants to answer the questions

included in the packet. As participants completed the questionnaires, research assistants circulated around the room to answer any questions that participants encountered.

Following completion of the packet of questionnaires, a research assistant photographed each participant. Each participant was posed with a neutral expression in front of a white backdrop. For the photograph, each participant wore a blue t-shirt to mask clothing cues. Photographs were later standardized for brightness and color contrast using Adobe PhotoshopTM. These images were then rated by undergraduate students on a Likert scale ranging from 1 (extremely unattractive) to 5 (extremely attractive). Previous studies have shown that raters of different ages and cultures agree on who is and is not attractive (see Langlois et al., 2000 for a meta-analysis).

After each participant was photographed, he or she completed the Self-Rating Scale for Pubertal Development. I separated this measure from the packet because of its sensitive nature. In order to make participants comfortable and retain a sense of anonymity, each participant was given an identification number to write on their copy of the Self-Rating Scale for Pubertal Development and upon completion he or she deposited the measure in a ballot box.

Results and Discussion

Overview

Separate analyses were conducted to answer each of the four principal research questions addressed by Study 1. The first research question examined how adolescents frame their specific self-views in terms of importance and certainty. I conducted

multivariate analyses of variance to examine developmental changes and gender differences in importance and certainty ratings for the different domains of self. The second research question examined how accurately adolescents judge their own attractiveness. In order to examine the relationship between objective and subjective ratings of attractiveness during adolescence, I correlated adolescents' perceptions of their attractiveness with judges' ratings. The third research question examined how tendencies to experience positive and negative affective states, specific self-views, and the manner in which these self-views are framed contribute to adolescents' global self-appraisals. I conducted a multiple regression to predict which of these factors uniquely contributed to adolescent global self-worth. The fourth and final research question of this study examined self-verification strivings during adolescence. In order to determine whether adolescents with high self-esteem desired more positive feedback than adolescents with low self-esteem, I examined the correlation between self-evaluations and feedback seeking. For a more comprehensive examination of these data, I also examined how characteristics of the person (i.e., gender and grade level) and self-ratings in the different domains along various dimensions (i.e., ability, certainty, and importance) relate to desire for positive feedback. A more detailed description of these analyses and a summary of the results are provided below.

Importance and Certainty Ratings of Specific Self-Views

I analyzed importance and certainty ratings separately. To examine developmental changes in importance ratings, I conducted a multivariate analysis of variance with

importance ratings in the different domains of self as the dependent variables and gender as the independent variable. Age in months was analyzed as a covariate. There were no significant developmental differences. I did, however, find a significant main effect for gender, Wilk's lambda $F(5, 80) = 3.69, p < .01$. I used univariate analyses of variance to examine the distinct effect for each dependent variable and found that significant gender differences were manifested in the domains of sports ($F(1, 84) = 17.71, p < .001$) and appearance ($F(1, 84) = 4.30, p < .05$). Boys attributed greater importance to both sports and appearance than did girls (see Table 3 for mean values).

I also examined developmental changes in certainty ratings with a multivariate analysis of variance, examining certainty ratings in the different domains of self as the dependent variables and gender as the independent variable. Age in months was analyzed as a covariate. I found no significant developmental or gender differences in certainty (see Table 4 for mean values).

Gender differences existed in the importance ratings that adolescents attributed to the different domains of self. Boys attributed greater importance to sports than did girls. This finding is consistent with previous studies examining gender differences in extracurricular activities (e.g., Klomsten, Marsh, Herb, & Skaalvik, 2005). Boys also attributed greater importance to appearance than did girls. Past research has indicated that appearance is important to males and females (Langlois et al., 2000). It is possible that boys were considering appearance to be indexed by strength because they also rated the

importance of sports. Previous work indicates that boys will attribute greater importance to appearance as indexed by strength while girls do not (e.g., Klomsten et al., 2005).

Contrary to my hypotheses, I found no developmental differences across the period of middle school in ratings of importance and certainty. It is possible that I found no developmental differences in the analyses because there are vast individual differences among middle school students at each age. In order to gain a more specific sense of how development influences ratings of importance and certainty, I considered stage of pubertal development and grade level. Sixth graders are experiencing an important transition and this may influence their importance and certainty ratings. Likewise, the transitions accompanying the onset of puberty may also influence importance and certainty ratings.

In the previous analyses examining importance and certainty, I did not include pubertal status because of lack of variability; the majority of boys in middle school were peripubertal and the majority of girls in eighth grade were postpubertal (see Figure 4)¹. The only variability in pubertal status existed among girls in sixth and seventh grades. Thus, I conducted two additional analyses to examine how early maturing girls differed from later maturing girls. I limited the data that I analyzed to girls in sixth and seventh grade.

In order to examine the influence of pubertal timing, I conducted a multivariate analysis of variance examining importance ratings in the different domains of self as the

¹ I was unable to distribute the Self-Rating Scale for Pubertal Development in two of the schools.

dependent variables and grade and pubertal status as the independent variables. There was a significant main effect for pubertal status, Wilk's lambda $F(5, 11) = 5.64, p < .01$. Follow-up univariate analyses of variance indicated that differences in pubertal status were evident in the domain of social competence, $F(1, 15) = 14.40, p < .01$. Postpubertal girls attributed greater importance to social competence ($M = 4.80, SD = .42$) than peripubertal girls ($M = 3.78, SD = .67$).

I conducted a similar parallel analysis for ratings of certainty. I used a multivariate analysis of variance, examining certainty ratings in the different domains of self as the dependent variables and grade and pubertal status as the independent variables. There was a significant interaction between pubertal status and grade, Wilk's lambda $F(5, 11) = 3.26, p < .05$. Follow-up univariate analyses of variance indicated that significant differences existed in the domains of intellectual competence ($F(1, 15) = 8.20, p < .05$) and athletic competence ($F(1, 15) = 6.09, p < .05$). Post-hoc paired comparisons indicated that early maturing sixth grade girls were less certain of their self-views in the domains of academics and sports than were later maturing sixth grade girls (see Table 5).

Early adolescent girls differed in their ratings of importance and certainty based on their current stage of pubertal development. Postpubertal girls attributed greater importance to social competence than did later developing girls. Following puberty, girls tend to associate with older peers of both sexes (Cavanagh, 2004). As they begin to associate with older peers and become involved in romantic relationships, it is not

surprising that postpubertal girls ascribe greater importance to their social competence. Early maturing girls in sixth grade were less certain of their abilities than later maturing girls. Because early maturing girls are experiencing dramatic changes in their bodies that their peers are not undergoing, it is not surprising that they are less certain of their abilities in various domains of self. For instance, after undergoing many changes in their figures, early maturing girls may be uncertain of their athletic ability. Reduced certainty in self-views is associated with greater conformity to peers' expectations (e.g., Swann & Ely, 1984). This reduction in certainty may partially explain adverse outcomes such as the higher involvement in risky behaviors observed in early maturing girls (Cavanagh, 2004). Early maturing girls that are less certain of their self-views may be more likely to conform to negative peer pressure. Future work with a larger sample is needed to better understand the relationships between timing of pubertal development, reductions in certainty, and antisocial behavior.

Relationship between Objective and Self-Perceived Ratings of Attractiveness

I first examined the reliability of judges' ratings of adolescent attractiveness. Ratings were highly reliable ($\alpha = .97$).

In order to examine the relationship between objective and self-perceived ratings of attractiveness, I correlated adolescents' subjective ratings of appearance with the ratings made by objective judges. I had two different measures of subjective appearance: a single item from the ASAQ and the appearance scale from the Self-Perception Profile for Adolescents (Harter, 1988). There was a strong, positive relationship between both

subjective measures of appearance ($r = .52, p < .001$), but because they were not redundant, I conducted the analysis separately for each measure.

Adolescent ratings of self-perceived attractiveness as indexed by the ASAQ did not relate strongly to ratings made by objective judges ($r = .20, p = .1$). Adolescents' self-ratings of attractiveness were higher than the ratings made by objective judges, $t(65) = 8.6, p < .01$. I conducted a multiple regression to examine the factors that contributed to global self-worth in adolescence as measured by the Self-Perception Profile for Adolescents. I entered objective ratings of appearance and subjective ratings of appearance as indexed by the ASAQ as predictors. Objective ratings of appearance did not significantly predict adolescents' perceptions of global self-worth. Subjective ratings of appearance as indexed by the ASAQ, however, significantly predicted global self-worth ($\beta = .45, t = 3.9, p < .01$).

I repeated these analyses using the appearance scale of the Self-Perception Profile for Adolescents as a subjective measure of appearance. Unlike the previous analysis, there was a significant, positive correlation between subjective perceptions of appearance as indexed by the Self-Perception Profile for Adolescents and objective ratings of appearance ($r = .40, p < .01$). I again conducted a multiple regression to predict global self-worth from objective ratings of attractiveness and subjective ratings of appearance as indexed by the Self-Perception Profile. As was the case in the previous analysis, subjective rating of appearance, this time indexed by the Self-Perception Profile for

Adolescents, was the only significant predictor of global self-worth ($\beta = .68, t = 6.44, p < .01$).

Subjective perceptions of appearance as assessed by both measures were better predictors of global self-worth than were objective measures of appearance. The nature of the relationship between objective and subjective ratings of appearance depended on the self-perception measure used. The ASAQ included one appearance item; participants indicated how nice he or she looked. The appearance scale of the Self-Perception Profile for Adolescents consisted of five items (see Appendix A) and was likely a better measure of self-perceived appearance because the score was based on the average of five different items. The discrepancy between ASAQ appearance scores may merely be the result of methodological differences in collecting subjective and objective ratings of appearance. Other explanations may be that adolescents are striving to enhance their self-opinions, or that the adult raters may judge them too harshly. Future work is needed to better clarify the relationship between subjective and objective ratings of adolescent appearance.

Predictors of Global Self-Worth

In order to examine which affective and cognitive factors predict global self-appraisals during adolescence, I used the analytic strategy employed by Pelham & Swann (1989). I conducted a multiple regression in which global self-worth as assessed by the Self-Perception Profile for Adolescents was the dependent variable. Positive affect, negative affect, specific self-views, differential importance index, differential certainty index, and ideal-actual self-discrepancy were entered into the analyses as predictors. The

overall regression was significant, $F(6, 49) = 5.38, p < .001$ and $R^2 = 0.40$. Both negative affectivity ($\beta = -.41$) and specific self-views ($\beta = .30$) were significant predictors of global self-worth ($t = -3.50, p = .001$; $t = 2.24, p = .03$, respectively). The other predictors did not significantly contribute a unique amount to the variance in global self-worth (see Table 6).

These results differ from Pelham and Swann's (1989) findings that positive affect, negative affect, specific self-views, differential importance index, differential certainty index, and ideal-actual self discrepancy each explain a significant and unique portion of the variance in global self-worth. In this adolescent sample, negative affect and specific self-views were the only significant predictors of global self-worth. Negative affect was the strongest predictor of global self-worth suggesting that early affective experiences (Verschuere et al., 1996) are important determinants of adolescent self-perceptions. Beyond affect, the manner in which adolescents evaluated themselves along various domains of self also predicted global self-worth. This finding is consistent with accounts that self-perceptions become more differentiated with development (Marsh et al., 1991). Adolescents are able to integrate their assessments of themselves along various domains to formulate a global sense of self-worth. Thus, there are both affective and cognitive components of adolescents' global self-appraisals. It appears that adolescents do not possess self-views of equivalent complexity to that of adults; the degree to which adolescents considered a domain of self to be important or the certainty with which they held their specific self-views did not significantly predict global self-worth. Weighing

self-views along the dimensions of certainty and importance may require cognitive abilities beyond those of early adolescents.

Feedback Seeking

I assessed whether adolescents solicited verifying feedback from a peer using an analytic strategy similar to that employed by Swann, Pelham, and Krull (1989). I conducted three different analyses to determine whether adolescents desire universally positive feedback or feedback that is congruent with their self-views. First, I correlated the composite self-attribute score (higher scores indicated higher self-perceptions across the various domains of self) with the composite positive feedback seeking score (higher scores indicated that participants desired more positive feedback across the various domains of self). A positive relationship existed ($r = .25, p < .05$) such that individuals with high self-esteem tended to desire more positive feedback than individuals with low self-esteem.

As a further test of self-verification theory, I compared the type of feedback adolescents selected for self-perceived strengths and weaknesses. In this particular analysis, I only examined individuals who had both a self-perceived strength and weakness. I considered individuals to have a self-perceived strength if they assigned themselves a rating of 4 or 5 on one of the dimensions of the ASAQ and a self-perceived weakness if they assigned themselves a rating of 1 or 2 on the ASAQ. I limited my analysis to individuals with a discrepancy in self-ratings of at least three points (e.g., 1-5, 1-4, 2-5) between their strength and weakness. If adolescents had multiple strengths or

weaknesses, I either used the areas with most disparate ratings; if the rating in various domains were identical, I selected the areas using a random number generator. Because the data were not normally distributed, I used a Wilcoxon Signed Ranks Test and found that adolescents were more likely to seek negative feedback for a self-perceived weakness than a self-perceived strength, $Z = -2.78$, $p < .01$.

Lastly, I employed hierarchical linear modeling using HLM software to examine the predictive influence of ratings of self-perceived ability, certainty, and importance on feedback seeking. Ratings along these different dimensions were nested within the domains of self and the domains were nested within people. At the domain level, I examined ratings of self-perceived ability, certainty, and importance. At the person level, I examined gender and age in months. The dependent measure was the number of positive questions that participants selected on the AFSQ. Participants were only able to select up to two positive questions per domain and consequently this variable was considered an ordinal variable for the analyses. There was a significant effect of self-perceived ability on feedback seeking ($b = -.47$, $SE = .18$, $t(425) = -2.58$, $p < .05$). These results suggest that individuals with high self-ratings are more likely to select a greater number of positive questions than individuals with low self-ratings. There were no significant effects of ratings of certainty or importance. Likewise, there were no significant effects of gender or age.

The findings of the three analyses suggest that adolescents seek self-verifying feedback. Adolescents with high self-ratings desire more positive feedback than

adolescents with low self-ratings. Further, adolescents are more likely to desire negative feedback for their self-perceived weaknesses than their self-perceived strengths.

Summary of Findings

Study 1 examined the nature of adolescent self-views and feedback seeking. I specifically focused on the four guiding research questions outlined above. The first research question addressed the manner in which adolescents frame their specific self-views in terms of importance and certainty. The findings of Study 1 indicated that the certainty with which adolescents hold their self-views remains stable across the middle school grades. Similarly, there were no significant changes across middle school in the degree of importance adolescents attribute to the different domains of self.

The second research question examined the accuracy with which adolescents judge their own attractiveness. There was no significant relationship between self-ratings as assessed by the one appearance question of the ASAQ and objective ratings of attractiveness. However, there was a significant relationship between self-ratings as assessed by the appearance scale of the Self Perception Profile and objective ratings of attractiveness.

The third research question examined which factors uniquely predicted adolescent global self-worth. Specific self-views in the various domains as well as the tendency to experience negative affective states were unique predictors of adolescent global self-worth.

The fourth and final research question examined self-verification strivings in adolescents. Those adolescents who viewed themselves positively tended to desire more favorable feedback from an unknown peer than those who viewed themselves negatively. Adolescents also wanted more negative feedback for a self-perceived weakness than for a self-perceived strength; this additional finding provided converging evidence for the operation of self-verification strivings during adolescence.

Chapter Three:

Study 2

Study 2 was designed to assess whether perceivers' expectations about appearance elicit the behavioral confirmation process in adolescent dyads or if the targets' self-views drive the self-verification process. This study is a conceptual extension of Snyder, Tanke, and Berscheid's (1977) seminal investigation of the self-fulfilling effects of the beauty-is-good stereotype in adult dyads. I sought to extend this work to adolescent dyads and furthermore, broaden the scope of the investigation to also examine targets' self-views for better understanding of the joint operation of behavioral confirmation and self-verification.

I therefore made several adjustments to the original design employed by Snyder, Tanke, and Berscheid (1977). In order to ensure the age-appropriateness of the procedure for younger participants, I amended the questionnaires and procedures for easy completion by adolescent participants. In addition to age-appropriate modifications, I also included measures of targets' self-views so that I could examine the interplay of behavioral confirmation and self-verification. Lastly, I included modifications to make the design ecologically valid some 30 years later. Snyder, Tanke, and Berscheid's original design involved dyadic interactions over the phone. Today, on average, individuals spend more time on the Internet than on their landlines and cell phones combined (Finberg, 2005). Adolescents are one of the largest users of the Internet; 87% of American teenagers between the ages of 12 and 17 report using the Internet and over

50% report daily usage (Pew Internet & American Life Project, 2005). Online technologies enable individuals to communicate using instant messaging in “an almost synchronous, one-to-one style” (Huffaker, 2004). This style of communication is becoming increasingly popular, especially among adolescents; estimates of percentage of online adolescents who use instant messaging range from 74% (Kaiser Family Foundation, 2002) to 90% (American Online, 2004). Sharing photographs over instant messaging is also common among adolescents (Pew Internet & American Life Project, 2005). Because of its increasing popularity and the frequency with which it is used to share photographs, I chose to employ instant messaging technology to test the self-fulfilling effects of appearance-based stereotypes and self-verification strivings in adolescent dyads.

Method

Participants

Participants were 96 early adolescents (38 female; $M = 13.1$ years, $SD = 1.1$ years; see Table 2 for distribution of ages) recruited from Study 1 ($n = 12$), summer camps, and the database maintained by the Children’s Research Lab at the University of Texas at Austin. Birth records published in the Austin American Statesman provided the initial source for names entered into the Children’s Research Lab database. An additional five dyads participated, but their data were excluded for the following reasons: experimenter error (1 dyad), one member of the dyad suffered from developmental disabilities including Asperger’s Syndrome and Anxiety Disorder (1 dyad), and one

member of the dyad had previously participated in the current study and was serving as partner for another participant because of scheduling constraints (3 dyads). Parents identified the ethnicity of adolescent participants as: Caucasian (n = 66), Hispanic (n = 2), Asian (n = 4), African American (n = 1), and other (n = 2). The parents of 21 adolescents did not indicate ethnicity. I assume that the majority of participants are from families that are middle class or above based on the sources of recruitment.

Measures

Adolescent Self-Attribute Questionnaire (ASAQ). The ASAQ was used to assess self-views. This measure was also used in Study 1 and is described above.

Adolescent Impression Formation Questionnaire (AIFQ). I modified the questions of the ASAQ so that in this measure adolescents rated a peer rather than themselves (see Appendix G). This measure was used to assess a peer along the dimensions of intellectual capacity, social competence, artistic/musical ability, athletic competence, and physical attractiveness.

Adolescent Information-Seeking Questionnaire (AISQ). I included this questionnaire to facilitate discussion and to better assess the identity negotiation processes. This questionnaire is a modified version of the AFSQ; in the AISQ the perceivers select questions to ask the targets. This measure included six questions corresponding to each dimension of the ASAQ (intellectual/academic ability, social competence, artistic/musical ability, athletic competence, and physical attractiveness). For each dimension of self, half of the questions elicited positive information from the target (e.g.,

what about you makes you think that you would be a good artist or musician?) and the other half elicited negative information (e.g., what about you makes you think that you would be a bad artist or musician?). Perceivers were instructed to select two questions from each area to ask the target.

Adolescent Interaction Questionnaire (AIQ). I modified the questions Snyder, Tanke, and Berscheid (1977) used to assess participants' perceptions of a dyadic interaction for use with adolescent participants (see Appendix I). Questions were intended to assess participants' perceptions of: (1) enjoyment of interaction, (2) level of comfort during the interaction, and (3) accuracy of partners' conceptions.

Stimuli

Stimuli were digital images of Caucasian adolescents selected from a larger group of photographs of middle school students. These images were originally drawn from yearbooks and the Internet; I later imported the images into Adobe PhotoshopTM and standardized them for size, brightness, and color contrast. A group of 46 undergraduate students rated the standardized versions of these images for attractiveness on a 7-point Likert scale (1 = very unattractive, 7 = very attractive). Ratings were highly reliable ($\alpha = .97$). The final set of stimuli was selected to consist of three attractive females ($M = 4.98$), three unattractive females ($M = 2.71$), three attractive males ($M = 4.60$), and three unattractive males ($M = 2.38$). The ratings for attractive and unattractive faces were significantly different for both females and males, $t(4) = 9.86, p < .01$ and $t(4) = 7.21, p < .01$, respectively.

Procedure

Participants were tested in dyads, but each member of the dyad was tested in a different room to prevent face-to-face contact. Some dyads were composed of same-sex participants and others were mixed-sex. One member of the dyad was assigned the role of perceiver and the other member was assigned the role of target. During the study, one research assistant instructed the perceiver and a second research assistant instructed the target. For some of the sessions, members of each dyad were in different locations (e.g., different schools and summer camps). Assignment to target or perceiver role was then based on location (e.g. school A was designated a site for targets and school B was designated a site for perceivers). For the remaining sessions, both members of the dyad were in the same location. In order to prevent contact between participants before the interaction, appointments were scheduled fifteen minutes apart based on parental preference. The participant that was scheduled for the earlier appointment was assigned the role of target².

Prior to the interaction, the perceiver received two forms: one was a photograph of an attractive adolescent and the other was a photograph of an unattractive adolescent. I provided an image of both an attractive and unattractive adolescent in order to make the attractiveness manipulation more salient. The research assistant informed the perceivers that they would interact with one of the two pictured individuals. Perceivers rated both of the individuals pictured using the AIFQ. This measure provided information about

² There were several instances when the research assistants had to make modifications due to logistical concerns such as participation by siblings.

perceivers' stereotypic beliefs associated with attractive and unattractive individuals. After the questionnaires were completed, the research assistant with the perceiver pretended to correspond with another member of the research team under the guise of learning with which of the two individuals the perceiver would interact. The research assistant instructing the perceiver then announced to the perceiver which one of the pictured individuals would be their ostensible interaction partner.

Interaction preparation for the targets was markedly different than that for the perceivers. While the perceivers were providing their initial impressions of their ostensible interaction partners, the targets completed the ASAQ in order to provide a measure of their self-views. Targets were also provided with minimal information about their partner; the research assistant said that they would be interacting with another middle school student. The research assistant made no mention to the targets of the photographs provided to the perceivers³.

After completion of the pre-interaction questionnaires, the research assistants described the protocol to both the perceiver and target. Participants were told that the current study was an investigation comparing how individuals “get to know one another” by initially communicating online as compared to on the phone or in person. Research assistants distributed a policy on etiquette for the instant messaging conversation to participants (see Appendix J) and later monitored the interactions because of concerns

³ Targets remained unaware of the attractiveness manipulation; perceivers did not mention that they had a picture of their interaction partner in the conversation. Further, discussion about physical appearance was sufficiently vague among participants (i.e., I have nice eyes) so that perceivers did not doubt that the picture they had was of their interaction partner.

that inappropriate language (i.e., profanity) would be used or that mature subjects (i.e., drugs) would be discussed.⁴ Furthermore, in order to preserve anonymity, research assistants signed onto AOL Instant Messenger with standard screen names (e.g., UTMIDDLESCHOOL1 and UTMIDDLESCHOOL2).

The online interaction occurred in two phases: initial free discussion and then guided questioning. Participants were instructed to discuss any topics of their choosing for the first three and a half minutes⁵. For the remainder of the online interaction, perceivers asked the targets questions from the AISQ; perceivers asked one question at a time and allowed the targets to answer before proceeding to the next question. Perceivers asked targets two questions from each of the domains.

Following the interaction, participants completed additional questionnaires to assess their experiences. Perceivers completed the AIFQ for a second time; this allowed for comparison of pre- and post-interaction ratings. Targets completed the AIQ to evaluate their interactions.

Debriefing was conducted following the conclusion of all data collection. Perceivers and targets received separate debriefings via e-mail (see Appendix K and L, respectively) which described the purpose of the study. In order to prevent discovery of

⁴ It is likely that the conversations would have proceeded differently without adult supervision. However, upon request of the Internal Review Board, research assistants monitored what participants typed and asked them to change their word choice when profanity was used.

⁵ Pilot testing indicated that some teenagers have difficulty engaging in free conversation for a longer duration.

the attractiveness manipulation, I had delayed debriefing because adolescent participants were often drawn from the same schools.

Four judges naïve to the attractiveness condition evaluated the transcripts along the same dimensions of the AIFQ. The judges provided ratings of the targets along the dimensions of intellectual/academic ability, social competence, artistic/musical ability, athletic competence, and physical attractiveness using a five-point Likert scale (1 = a lot below average and 5 = a lot above average).

Transcripts of the interactions were also assessed using the Linguistic Inquiry and Word Count Program (LIWC). LIWC (Pennebaker, Francis, & Booth, 2001) provides information on a wide range of variables including: standard linguistic dimensions (e.g., word count, pronouns, negations), psychological processes (e.g., positive emotions, negative emotions, cognitive processes, social processes), and particular content areas including (school, achievement, sports, body states, sex and sexuality, and grooming). The external validity of LIWC has been tested and there is a strong correspondence between the program's output and objective ratings (Pennebaker et al., 2001). Of particular interest to the current study were participants' use of emotion words and words describing social interactions because attractive individuals are often assumed to be friendlier and are more desired as social partners. The LIWC program has been used successfully to analyze instant messaging transcripts in previous studies (e.g., Slatcher & Pennebaker, 2005; Slatcher & Vazire, 2005). Prior to analysis using LIWC, all transcripts

were spell checked and common instant messaging terms were written in full form so that they would be recognized by LIWC's dictionary (e.g., gtg = got to go).

Results and Discussion

Overview

Analyses were conducted for each segment of the study: pre-interaction, mid-interaction, and post-interaction. Different results were expected for each phase of the interaction depending on whether behavioral confirmation or self-verification was the predominant identity negotiation process. According to behavioral confirmation theory, the perceiver develops expectations regarding the target prior to the interaction. Behavioral confirmation makes the following predictions for the interaction: first, perceivers should treat targets as a function of their initial expectations; secondly, targets will behave in line with the perceivers' treatment, thus confirming the initial expectation. The perceiver holds fast to his or her original expectations as the behavior of the target has confirmed them. I expected that targets in the attractive condition would enjoy the interaction to a greater extent than targets in the unattractive condition due to preferential treatment by the perceivers. In contrast, self-verification theory predicts that the target enters social interactions with his or her own self-views. During the interaction, the target communicates his or her self-views to the perceiver. Following the interaction, the perceiver's views of the target become more similar to the target's self-views. In what follows, I examine each segment of the study and conclude by examining which of the identity negotiation processes is dominant during the interaction.

Pre-Interaction: Perceivers' Expectations and Targets' Self-Views

Prior to the instant messaging conversation, perceivers evaluated the targets based on pictures that were ostensibly of the targets. Targets completed the ASAQ to assess their self-views. In the following analyses, I examine perceivers' initial expectations as a function of attractiveness. I also examine differences in self-views of targets assigned to the attractive and unattractive condition to ensure that no a priori group differences exist.

Perceivers' Appearance-Based Expectations. I examined whether perceivers developed expectations based on the attractiveness of their interaction partner by examining initial responses to the AIFQ completed prior to the interaction. I conducted a multivariate analysis of variance in which the perceivers' ratings of the target along the different domains were the dependent variables. Attractiveness level (high versus low), gender of the target, and gender of the perceiver were analyzed as independent variables. There was a significant main effect for attractiveness, Wilk's lambda $F(5, 36) = 2.60, p < .05$. I used univariate analyses of variance to examine the distinct effect for each dependent variable and found that significant differences based on attractiveness were evident in the domains of sports ($F(1, 40) = 4.07, p = .05$) and appearance ($F(1, 40) = 10.97, p < .01$). Initial ratings by perceivers believing that they would be interacting with an attractive individual were more positive in the domains of sports and appearance than those by perceivers believing that they would be interacting with an unattractive individual (see Table 7). These results suggest that the attractiveness manipulation was effective; adolescent perceivers agreed with adult judges in their ratings of attractiveness. In

addition, attractive adolescents were rated as more athletic than unattractive individuals, which is consistent with the beauty-is-good stereotype. According to the beauty-is-good stereotype, attractive adolescents should also be viewed as more intelligent, creative, and socially competent than unattractive adolescents; however, the results found no significant differences in these domains as a function of attractiveness. There are several possible explanations for these results. In middle school, adolescents may have stereotypes of the intelligent “nerd” who cares more about academics than appearance (Kinney, 1993). Likewise, adolescents may expect creative individuals to have a unique appearance that is not typically considered to be attractive (e.g, goth appearance; Blum, 2003). Lastly, attractive individuals may be believed to exhibit more social aggression.

In the analysis of perceivers’ ratings, there was an interaction between attractiveness and target gender, Wilk’s lambda $F(5, 36) = 2.56, p < .05$. Follow-up univariate analyses of variance indicated that marginally significant differences existed in the domains of intelligence ($F(1, 40) = 3.26, p = .08$) and sports ($F(1, 40) = 3.21, p = .08$). Post-hoc paired comparisons indicated that unattractive girls were rated as more intelligent ($M = 3.92$) than unattractive boys ($M = 3.06$), and that attractive boys were rated as more athletic ($M = 4.0$) than attractive girls ($M = 2.83$).

Target Self-Views. I examined targets’ self-views to ensure that there were no initial differences between targets assigned to the attractive and unattractive conditions. I conducted a multivariate analysis of variance in which the targets’ self-ratings along the different domains were the dependent variables and attractiveness level (high versus low)

was the independent variable. There were no significant a priori differences between targets assigned to the attractive and unattractive condition.

During the Interaction: Behavior of Perceivers and Targets

Perceivers and targets engaged in free discussion during the first half of the interactions. In the final period of the interactions, perceivers asked questions and targets responded. For both perceivers and targets, I first analyzed word choice throughout the entire interaction. I also analyzed the questions that perceivers selected from the AISQ and the responses that the targets provided. Finally, raters that were naïve to attractiveness condition rated the targets after reading the transcripts; I analyzed these objective ratings as a function of perceivers' initial expectations and targets' self-views.

Behavior of Perceivers. Transcripts of the perceivers' portion of the instant messaging conversation were analyzed using LIWC. I had predicted that perceivers would use more social words in their interactions with attractive as compared to unattractive targets. A one-tailed independent samples t-test compared the number of social words that perceivers used when interacting with attractive and unattractive individuals. In accord with my predictions, perceivers used a higher percentage of social words when they believed they were interacting with an attractive target ($M = 15.95, SD = 2.23$) as compared to an unattractive target ($M = 14.88, SD = 2.35$), $t(46) = -1.61, p = .06$. Further, I predicted that perceivers would use more emotion words in their discussions with attractive as compared to unattractive targets. Again, I used a one-tailed independent samples t-test to compare the number of emotion words that perceivers used when

interacting with attractive and unattractive individuals. As was predicted, perceivers used a higher percentage of emotion words when they believed they were interacting with an attractive target ($M = 7.74$, $SD = 1.05$) as compared to an unattractive target ($M = 7.12$, $SD = 1.48$), $t(46) = -1.66$, $p = .05$. Perceivers' word choice suggests that individuals were more emotionally involved in conversations when they believed that they were talking to an attractive individual. The increased use of social words when talking to an attractive target may reflect either a desire to interact with the partner or an increased willingness to share social experiences.

During the second half of the conversation, perceivers were able to ask questions to elicit positive information or questions to elicit negative information from the target. I conducted a multivariate analysis of variance in which the numbers of positive questions in the different domains were the dependent variables. Attractiveness level (high versus low) was analyzed as the independent variable. There was no significant effect of attractiveness. On average, participants selected seven positive questions and five negative questions ($SD = 1.62$). Perceivers tended to select both positive and negative questions; no perceivers selected all positive or all negative questions. Many perceivers preferred to ask a positive and a negative question from each area, possibly to better understand their partner. This tendency to select one positive and one negative question may have been the result of how the questions were worded. Questions were matched such that one question probed for a positive response (e.g., what are some signs you have seen that you are above average in overall smartness?) and a second question probed for a

negative response (e.g., what are some signs you have seen that you are below average in overall smartness?). Participants may have inferred from this format that they were supposed to select one positive and one negative question.

Behavior of Targets. Parallel analyses were conducted for targets' word choice. A one-tailed independent samples t-test compared the number of social words that targets used when they were believed to be attractive versus unattractive. There was no significant difference in targets' use of social words as a function of their perceived attractiveness, $t(46) = -0.62, p > .10$. Similarly, a one-tailed independent samples t-test compared the number of emotion words that targets used when they were believed to be attractive versus unattractive. Again, no significant difference existed as a function of their perceived attractiveness, $t(46) = 0.30, p > .10$. Perceivers tended to use more social and emotion words when talking with a partner whom they believed to be attractive than one whom they believed to be unattractive. This differential behavior on the part of the perceiver did not influence the targets' reciprocal behavior.

I additionally analyzed targets' responses to the AISQ questions. I conducted a regression to determine whether the number of positive questions asked by the perceiver predicted the number of positive responses provided by the target. The overall regression was significant, $F(1, 43) = 79.63, p < .001$ and $R^2 = 0.65$. The number of positive questions asked by the perceiver was a significant predictor of the number of positive responses provided by the target ($\beta = .81, t = 8.92, p < .001$). Thus, targets' responses largely corresponded to the questions they were asked. However, targets did not always

answer in a manner that corresponded to the perceivers' questioning. Some targets informed their partners when they were asked positively phrased questions about areas believed to be their weaknesses. For instance, when one adolescent was asked what sports he expected to be good at, he responded "...I am the slowest [,] weakest [,] least likely pick ever..." Likewise, some targets informed their partners when they were asked negatively phrased questions about areas believed to be their strengths. For example, when one adolescent was asked what his greatest athletic weakness was; he responded that "I never really had one." In order to better examine the frequency with which targets corrected the perceiver, I coded targets' responses to positive and negative questions in each domain as a match (target answered the perceiver's question) or a mismatch (target did not answer the perceiver's question as it was worded or responded that they did not know). The percentages of mismatches ranged from 6% to 44% of the total responses for the positive and negative questions in each domain (see Table 8).

Objective raters also examined each transcript and evaluated the targets along the different domains (i.e., intellectual ability, social competence, artistic/musical ability, athletic competence, and attractiveness). Raters were blind to the attractiveness condition when making their judgments. The reliability of the raters' judgments was assessed by intraclass correlations within each domain and these values ranged from .54 to .78⁶. Average values were calculated for judges' ratings of each target in each domain. I began by conducting a multivariate analysis of variance in which the judges' ratings in the

⁶ Reliabilities of these magnitudes are typical when judges are making ratings along similar dimensions (e.g., Snyder et al., 1977).

different domains served as the dependent variables and the ostensible attractiveness of the target (high versus low) served as the independent variable. There was no significant difference in the judges' ratings as a function of target attractiveness, Wilk's lambda $F(5, 42) = 1.59, p > .05$. I also examined the univariate analyses of variance for the domains of athletics and appearance because perceivers' initial expectations had differed along these dimensions. There were no significant effects of attractiveness in either of these domains.

As a further test, I conducted a hierarchical multiple regression for each domain (see Table 9 for a summary of findings). The dependent variable for each analysis was the judges' ratings in the domain. The targets' own self-views in the domain and the perceivers' initial expectations for the target in that domain were analyzed as the first block of predictors. Target and perceiver gender were analyzed as the second block of predictors. Lastly, the interaction between target and perceiver gender were analyzed as the third set of predictors. I report the results separately for each domain and then discuss the overall pattern of findings.

For the domain of intellectual competence, the first model with targets' self-views and perceivers' expectations as predictors was significant, $F(2, 42) = 4.85, p < .05$. Targets' ratings of self-perceived intelligence significantly predicted objective ratings in this domain ($\beta = .42, t = 3.04, p < .01$). Perceivers' initial expectations had no significant influence on objective ratings. In the second step, the gender of the target and perceiver were entered into the model, which increased R square by .006, which was not

statistically significant (F Change = .155, $p > .05$). In the third step, the interaction between the gender of the target and the gender of the perceiver were entered into the model, which increased R square by .043, which was not statistically significant (F Change = 2.178, $p > .05$). Thus, targets' self-perceived intelligence was the only significant predictor of objective ratings in this domain.

For the domain of social competence, the first model with targets' self-views and perceivers' expectations as predictors was not significant, $F(2, 42) = .586, p > .05$. Neither targets' self-ratings nor perceivers' expectations significantly predicted objective ratings in this domain. In the second step, the gender of the target and perceiver were entered into the model, which increased R square by .116, which was marginally significant, (F Change = 2.700, $p = .079$). There was a significant effect of perceiver gender, ($\beta = -.31, t = -1.98, p = .054$), indicating that targets were rated as more socially competent when their interaction partner was female. Female perceivers may have been more outgoing than male perceivers and subsequently elicited more positive behavior on the part of the target. Alternatively, targets may have felt more at ease when interacting with a female partner. In the third step of the model including the interaction between target and perceiver gender increased R square by .012, which was not statistically significant (F Change = .570, $p > .05$).

For the domain of artistic/musical competence, the first model with targets' self-views and perceivers' expectations was not significant, $F(2, 42) = 1.110, p > .05$. In the second step, the gender of the target and perceiver were entered into the model, which

increased R square by .024, which was not statistically significant (F Change = .525, $p > .05$). In the third step, the interaction between the gender of the target and the gender of the perceiver were entered into the model, which increased R square by .007, which was not statistically significant (F Change = .311, $p > .05$).

For the domain of athletic competence, the first model with targets' self-views and perceivers' expectations as predictors was significant, $F(2, 42) = 13.97, p < .001$. Targets' ratings of self-perceived athletic ability significantly predicted objective ratings in this domain ($\beta = .61, t = 5.08, p < .001$). Perceivers' initial expectations had no significant influence on objective ratings. In the second step, the gender of the target and perceiver were entered into the model, which increased R square by .029, which was not statistically significant (F Change = 1.109, $p > .05$). In the third step, the interaction between the gender of the target and the gender of the perceiver were entered into the model, which increased R square by .007, which was not statistically significant (F Change = .454, $p > .05$). Thus, targets' self-perceived athletic ability was the only significant predictor of objective ratings in this domain.

For the domain of attractiveness, the first model with targets' self-views and perceivers' expectations was not significant, $F(2, 42) = 1.21, p > .05$. In the second step, the gender of the target and perceiver were entered into the model, which increased R square by .018, which was not statistically significant (F Change = .384, $p > .05$). In the third step, the interaction between the gender of the target and the gender of the perceiver

were entered into the model, which increased R square by .021, which was not statistically significant (F Change = .905, $p > .05$).

Across the different domains of self, perceivers' expectations were unable to predict objective ratings of target behavior. In the domains of intellectual and athletic ability, targets tended to behave in a manner congruent with their own self-views. There were no significant effects for gender of the target or the interaction of gender of the target and perceiver. The gender of the perceiver predicted objective ratings in the domain of social competence with targets being rated as more socially competent when interacting with a female partner.

The above analyses of target behavior included dyads from all possible groups: male target/male perceiver ($n = 16$), male target/female perceiver ($n = 9$), female target/male perceiver ($n = 17$), female target/female perceiver ($n = 6$). To examine whether there were differences in targets' behaviors in each of the groups, I conducted separate analyses for each group. I conducted a separate one-tailed independent samples t-test for each of the four groups to compare the number of social words that targets used when they were believed to be attractive versus unattractive. Similarly, I conducted a separate one-tailed independent samples t-test for each of the four groups to compare the number of emotion words that targets used when they were believed to be attractive versus unattractive. There were no significant differences in target word choice as a function of attractiveness condition in any of the groups.

In addition, I conducted a multivariate analysis of variance for each group in which the judges' ratings in the different domains served as the dependent variables and the ostensible attractiveness of the target (high versus low) served as the independent variable. There was no significant main effect for attractiveness in any of the groups. I examined the follow-up univariate analyses of variance for the domains of athletic competence and attractiveness because these were the domains upon which perceivers' expectations differed as a function of attractiveness. There were differences in dyads consisting of a male target and a female perceiver; pairwise planned comparisons indicated that objective raters considered targets in the attractive condition to be both more attractive and more athletic than targets in the unattractive condition ($p < .05$). Thus, the only evidence for behavioral confirmation existed in dyads consisting of female perceivers and male targets. The female perceivers may have been interested in pursuing a relationship with an attractive member of the opposite sex and thus, acted in a manner to elicit behavior consistent with their expectations.

Post-Interaction: Perceivers' and Targets' Evaluations

Following the interactions, perceivers evaluated the target for a second time in order that the pre-interaction and post-interaction ratings could be compared. I examined whether perceivers held fast to their initial expectations or whether targets were able to influence perceivers' expectations. Targets evaluated their enjoyment of the interaction and I examined whether differences existed as a function of attractiveness.

Perceivers' Evaluations. I tested whether perceivers' initial expectations or targets' self-views were more predictive of perceivers' final evaluations of the targets. Past studies (e.g., Swann & Ely, 1984) have shown that targets are more likely to influence others when they are certain of their self-views. I therefore also examined certainty and its interaction with the targets' self-views. I conducted a hierarchical multiple regression for each domain. Perceivers' final evaluations of targets in the domain of interest served as the dependent variable. For each domain, the perceivers' initial expectations, the targets' self-views, and the targets' degree of certainty in their self-views were analyzed as the first block of predictors. Prior to the analyses, I centered these predictors for ease of interpretation. The interaction between targets' self-views and the certainty with which they held those viewed for each domain was analyzed as the second block of predictors. The gender of targets and perceivers was analyzed as the third block of predictors. Lastly, the interaction between the gender of the target and perceiver was analyzed as the fourth block of predictors. I report the results separately for each domain and then discuss the overall pattern of findings.

For the domain of intellectual competence, the first model with perceivers' initial expectations, targets' self-views, and targets' certainty as predictors was marginally significant, $F(3, 40) = 2.52, p = .07$ and $R^2 = 0.16$. Perceivers' initial expectations regarding the targets' intellectual capacity was the only significant predictor of perceivers' final evaluations of the targets in this domain, $\beta = .35, t = 2.36, p < .05$. In the second step, the interaction between targets' self-views and certainty was entered which

increased R square by .009, which was not statistically significant (F Change = .430, $p > .05$). In the third step, gender of the perceiver and target were entered which increased R square by .005, which was not statistically significant (F Change = .121, $p > .05$). In the fourth step, the interaction between the gender and the target were entered which increased R square by .045, which was not statistically significant (F Change = 2.087, $p > .05$).

For the domain of social competence, the first model with perceivers' initial expectations, targets' self-views, and targets' certainty as predictors was significant, $F(3, 40) = 4.48, p < .01$ and $R^2 = 0.25$. Both perceivers' initial expectations regarding the targets' social competence and the targets' self-perceived social competence were the significant predictors of perceivers' final evaluations of the targets in this domain, $\beta = .39, t = 2.77, p < .01$ and $\beta = .49, t = 2.15, p < .05$, respectively. In the second step, the interaction between targets' self-views and certainty was entered which increased R square by .009, which was not statistically significant (F Change = .49, $p > .05$). In the third step, gender of the perceiver and target were entered which increased R square by less than .001, which was not statistically significant (F Change = .008, $p > .05$). In the fourth step, the interaction between the gender and the target were entered which increased R square by .001, which was not statistically significant (F Change = .044, $p > .05$).

For the domain of artistic/musical ability, the first model with perceivers' initial expectations, targets' self-views, and targets' certainty as predictors was significant, $F(3,$

40) = 3.12, $p < .05$ and $R^2 = 0.19$. Perceivers' initial expectations regarding the targets' artistic/musical ability were a marginally significant predictor of perceivers' final evaluations of the targets in this domain, $\beta = .26$, $t = 1.78$, $p = .08$. In the second step, the interaction between targets' self-views and certainty was entered which increased R square by .010, which was not statistically significant (F Change = .475, $p > .05$). In the third step, gender of the perceiver and target were entered which increased R square by .068, which was not statistically significant (F Change = 1.719, $p > .05$). In the fourth step, the interaction between the gender and the target were entered which increased R square by less than .001, which was not statistically significant (F Change = .016, $p > .05$).

For the domain of athletic ability, the first model with perceivers' initial expectations, targets' self-views, and targets' certainty as predictors was significant, $F(3, 40) = 3.27$, $p < .05$ and $R^2 = 0.20$. Targets' self-views were the only significant predictor of perceivers' final evaluations of the targets in this domain, $\beta = .43$, $t = 2.07$, $p < .05$. In the second step, the interaction between targets' self-views and certainty was entered which increased R square by less than .001, which was not statistically significant (F Change = .012, $p > .05$). In the third step, gender of the perceiver and target were entered which increased R square by .020, which was not statistically significant (F Change = .472, $p > .05$). In the fourth step, the interaction between the gender and the target were entered which increased R square by .041, which was not statistically significant (F Change = 1.980, $p > .05$).

For the domain of attractiveness, the first model with perceivers' initial expectations, targets' self-views, and targets' certainty as predictors was significant, $F(3, 40) = 6.33, p < .01$ and $R^2 = 0.32$. Perceivers' initial expectations regarding the targets' attractiveness were the only significant predictor of perceivers' final evaluations of the targets in this domain, $\beta = .58, t = 4.35, p < .001$. In the second step, the interaction between targets' self-views and certainty was entered which increased R square by .026, which was not statistically significant (F Change = 1.57 $p > .05$). In the third step, gender of the perceiver and target were entered which increased R square by .022, which was not statistically significant (F Change = .637, $p > .05$). In the fourth step, the interaction between the gender and the target were entered which increased R square by less than .001, which was not statistically significant (F Change = .011, $p > .05$).

Across some of the domains, perceivers' initial expectations were the only significant predictors of their final evaluations. This was the case for the domains of intellectual ability, artistic/musical ability, and attractiveness. However, targets' self-views influenced perceivers' final evaluations in the domains of social competence and athletic ability; these are the domains upon which a great deal of the conversation centered. Analyses from LIWC indicated that over 7% of the words that targets used were social in nature and over 3% focused on sports. Thus, targets were able to communicate their self-views to perceivers in the domains of social competence and sports, and this in turn, influenced perceivers' final evaluations. Intelligence, creative abilities, and appearance were not common topics of conversation and hence, targets

probably did not clearly express their self-views in these areas. Analyses from LIWC indicated that less than 1% of the targets' word choice focused on each of the following domains: achievement in the context of school/work, music, and physical states and functions (i.e., body, sex, grooming). Targets were therefore unlikely to be able to communicate their self-views to perceivers in these domains.

There were no significant effects for certainty or the interaction of certainty with self-views across all of the various domains. These results are consistent with the findings of the first study; differential certainty did not uniquely predict adolescent global self-worth. Early adolescents may lack the cognitive capacity to weigh their self-views by their degree of certainty in each domain.

Targets' Evaluations. Following the instant messaging conversation, targets rated the degree to which they enjoyed the interaction. Targets also rated how comfortable they were interacting with their partner, how accurately they believed that their partner viewed them, and the degree to which they believed their partner understood them. I examined how targets' post-evaluation ratings differed as a function of attractiveness condition as well as the degree of discrepancy between perceivers' expectations and targets' self-views. I created a difference score by subtracting the composite value of the ASAQ from the composite value of the AIFQ. I conducted a multivariate analysis of variance in which targets' post-interaction evaluations were the dependent variables. The attractiveness condition and the difference score between targets' self-views and perceivers' expectations were the independent variables. No significant differences were

found based on these independent variables. Targets' evaluations of the interaction and their partner were not contingent upon attractiveness condition or the degree of correspondence between their self-views and perceivers' expectations.

Behavioral Confirmation or Self-Verification

As discussed previously, different results were expected during each phase of the study depending on whether behavioral confirmation or self-verification was the predominant process. In this section, I first analyze each period to determine if the results are congruent with the predictions of behavioral confirmation theory. I then analyze each period to determine if the results are congruent with the predictions of self-verification theory. Lastly, I examine the joint operation of these processes.

In order to investigate whether behavioral confirmation had occurred, I examined all three phases of the study. As was predicted by behavioral confirmation theory, perceivers developed different expectations for targets believed to be attractive versus targets believed to be unattractive. In particular, they believed that attractive targets were more attractive and more athletic than unattractive targets. Accordingly, perceivers should have treated targets differently as a function of these initial expectations if behavioral confirmation was to occur. Indeed, perceivers used more social and emotion words when interacting with attractive as compared to unattractive targets. Nonetheless, it appears that this differential treatment did not influence targets' own behaviors in the majority of the dyads. Targets believed to be attractive did not reciprocate and share more social and emotional experiences as their interaction partners had done. As a further

measure of target behavior, judges provided ratings of the targets. Perceivers' initial expectations did not influence target behavior as assessed by objective judges in same-sex dyads and dyads composed of male perceivers and female targets. There were, however, differences in judges' ratings of athleticism and appearance as a function of attractiveness in dyads consisting of female perceivers and male targets. Lastly, I examined whether perceivers held fast to their initial expectations following the interactions. Perceivers' initial expectations regarding targets' intellectual ability, artistic/musical ability, and attractiveness persevered, but perceivers changed their views of targets' social competence and athletic ability. Looking across all segments of the study, the evidence for behavioral confirmation is weak. Targets did not respond to the differential behavior of perceivers in the majority of the dyads. The attractiveness manipulation may have not produced changes in perceiver behavior notable to the targets. Perceivers used more social and emotional words when talking to ostensibly attractive targets. However, perceivers did not ask more positively phrased questions to attractive as compared to unattractive targets.

Likewise, in order to investigate whether self-verification had occurred, I considered all three phases of the study. Targets entered the interactions with their own self-views. During the interaction targets communicated these self-views to the targets. Many targets corrected the perceivers when asked a question probing for positive ability in a self-perceived weakness or negative ability in a self-perceived strength. Targets' own self-views predicted objective ratings of their abilities in the domains of mental capacity

and athletics. Finally, targets' self-views influenced perceivers' final evaluations of their abilities in the domains of social competence and athletics. Conversations tended to focus on these areas and consequently, targets were able to communicate their own self-views to the perceivers. Summing across all segments of the study, self-verification occurred in the context of adolescent conversations. Adolescents shared their self-views with their partners and hence influenced their partners' post-interaction evaluations.

Self-verification appears to have been the predominant identity negotiation process in these brief dyadic interactions among adolescents. Targets shared their self-views and were often unafraid to correct perceivers. In fact, targets seemed to have not been influenced by the perceivers in the majority of dyads. These results run counter to those of Snyder, Tanke, and Berscheid (1977). I can offer three potential explanations for why this discrepancy may exist. First, in Snyder, Tanke, and Berscheid's original study, adult male perceivers interacted with adult female targets. It is likely that perceivers who believed their interaction partner to be attractive behaved in a friendly fashion in the hopes of potentially beginning a relationship with an attractive member of the opposite sex. The current study used same and mixed-sex adolescent dyads. The only differences in target behavior as a function of attractiveness existed in dyads composed of a female perceiver and a male target. Females may have been motivated to interact in a certain manner with an attractive member of the opposite sex. This motivation may have been lacking in same-sex dyads and dyads composed of male perceivers and female targets. A second possible explanation for the lack of behavioral confirmation is that perceivers may

have been uncertain of their expectations. Behavioral confirmation is only the more likely outcome when perceivers are certain of their expectations (Swann & Ely, 1984).

Although the current study did not assess perceivers' degree of certainty, their expectations for the targets did not differ along all dimensions (i.e., intellectual ability, social competence, and artistic/musical ability) as a function of attractiveness. Further, many participants expressed concern for rating the target along various dimensions based merely on physical appearance. Perhaps behavioral confirmation would have occurred in all types of dyads if perceivers were given more explicit information on which to base their expectations. For instance, imagine perceivers were told that everyone who knew the target agreed that he or she was socially incompetent and unintelligent. Perceivers would likely treat these targets in dramatically different ways than those expecting to interact with the most socially competent and intelligent partners. A third potential explanation is that the use of instant messaging technology prevented perceivers from displaying nonverbal behaviors (i.e., tone of voice, intonation) in response to their initial expectations. In sum, the results of the current study suggest that self-verification is the predominant process in adolescent dyadic interactions.

Summary of Findings

Study 2 examined the identity negotiation process in adolescent dyads. Specifically, I focused on whether expectations about appearance drove the behavioral confirmation process or whether targets' own self-views drove the self-verification process. Prior to the interactions, perceivers' expected attractive targets to be both more

attractive and more athletic than unattractive targets. Perceivers treated attractive targets in a slightly different fashion than unattractive targets as was manifested in their word choice. However, these subtle differences in treatment did not have a noticeable influence on target behavior as assessed by ratings of objective judges in the majority of dyads. Rather, self-verification strivings seemed to be guiding the interactions. Targets sometimes corrected perceivers' misperceptions about their abilities. Further, targets' own self-views influenced perceivers' post-evaluation appraisals in the domains of social and athletic competencies.

Chapter Four:

General Discussion

The current studies investigated the identity negotiation process in early adolescence. Adolescents desired feedback from an unknown peer that was congruent with their own self-views; those with more positive self-views wanted more positive feedback than those with negative self-views. There were no significant developmental differences in the degree of certainty with which adolescents held their self-views or the importance that they attributed to the different domains of self across middle school (Study 1). Self-verification strivings were also evident in brief dyadic interactions among adolescents. Perceivers' appearance-based expectations did not have a notable influence on the targets' behavior across the majority of dyads. Rather, targets' self-views influenced the perceivers (Study 2).

There are several limitations of the current studies. I was unable to have all participants complete the measure of pubertal development and thus had limited data on physical development. It would be informative for future studies to examine how self-verification strivings vary as a function of pubertal development. In addition, I did not collect information on the certainty with which perceivers held their expectations of the target. Later studies should examine how perceivers' certainty and targets' certainty jointly influence the identity negotiation process during adolescence.

Despite these potential limitations, the data from both studies indicate that adolescents are driven by self-verification strivings both in their desires and behaviors.

The original question posed was whether adolescent behavior is more strongly influenced by the expectations of other people or internal expectations. The current findings suggest that adolescents' self-views are important determinants of behavior. Significant implications for adolescent mental health, peer selection, and stereotyping follow from these findings.

Adolescence is a period during which it is common for certain psychopathologies such as depression and eating disorders to first emerge; however, only a small subsection of the population suffers from a clinically diagnosed psychological disorder (Angold et al., 1998; Ruuska et al., 2003). Self-verification strivings may partially explain the emergence and maintenance of these psychopathologies. Self-esteem tends to decrease during adolescence (Robins, Trzesniewski, Tracy, Gosling, & Potter, 2002; Shapka & Keating, 2005; Twenge & Campbell, 2001) and individuals often become more concerned about their appearance (Keelan, Dion, & Dion, 1992). As a result of decreased self-esteem and strong self-verification strivings, some adolescents may continually seek out negative feedback and affiliate with peers who see them in a negative light. These behaviors would create an environment in which depression is likely to emerge and be self-maintaining. Similarly, adolescents who view their bodies in a negative light may persistently seek out negative feedback regarding their bodies and fall victim to eating disorders. These adolescents may ignore feedback that is counter to their self-views and thus maintain a negative body image and unhealthy eating patterns despite their actual appearance. Further work is needed to directly examine potential connections between

self-verification strivings and adolescent psychopathology. Such work may hold important implications for treatment of adolescent depression and eating disorders.

Adolescence is also a period in which peer relationships become increasingly important (Larson & Richards, 1991; Smetana et al., 2006). Traditional wisdom suggests that peers exert great influence through their expectations for one another. The results of the current studies suggest that the direction of effect may be bidirectional such that others' expectations do influence adolescent behavior but that adolescents' own self-views also influence others' behavior. This study gives one example of a condition under which adolescents' self-views prevail over peers' expectations of them. More research is needed to highlight the conditions under which targets do not conform to others' expectations or demands. Such work may hold important implications for understanding peer conformity.

Adolescents who are members of a minority are often assumed to possess characteristics that are congruent with stereotypical assumptions. In the event that an individual's self-views are incongruent with the predominant stereotype of his or her group, he or she will need to seek verification from their interaction partners. For instance, African-American males of tall stature are often assumed to be good basketball players. A member of this group who considers himself to be a poor athlete would need to inform others' that their expectations are incorrect. Thus, members of stereotyped groups may constantly exert effort to seek verification for self-views that are incongruent with commonly held stereotypes.

The current studies are some of the first to examine the identity negotiation process during adolescence. This area of research is largely uncharted and the current studies leave many questions unanswered as well as raise new ones.

Future work should investigate the identity negotiation process over a larger developmental period. I found that early adolescents engage in self-verification. However, it remains unclear when individuals first begin to self-verify. Because many young children view themselves in a primarily positive fashion it may be difficult to disentangle self-verification and self-enhancement early in development. Nonetheless, studies should examine self-verification strivings across childhood.

Additional research is also needed to better understand the identity negotiation process during adolescence. In particular, empirical investigations should examine why adolescents self-verify; adolescents may seek verifying feedback for epistemic reasons, pragmatic reasons, or both. Adolescence is a period characterized by dramatic changes and adolescents may desire a sense stability and psychological coherence offered by self-verification. Peer relations also become increasingly important during this developmental period and adolescents may self-verify in order to maintain smooth interactions.

Similarly, more work is needed to address how adolescents self-verify; adolescents may be especially likely to display identity cues such as style of dress in order to communicate their own self-views. It also remains unclear as to how self-verification strivings during adolescence differ as a function of the interaction partner. For instance, adolescents may be less likely to self-verify when interacting with an adult

because they are less comfortable communicating their self-views due to the discrepant power relationships.

These as well as many other questions remain to be answered. Future research is needed to address these important questions and it is my hope that these studies will encourage others to begin to examine the identity negotiation process during adolescence.

Figure 1.

Process of Behavioral Confirmation

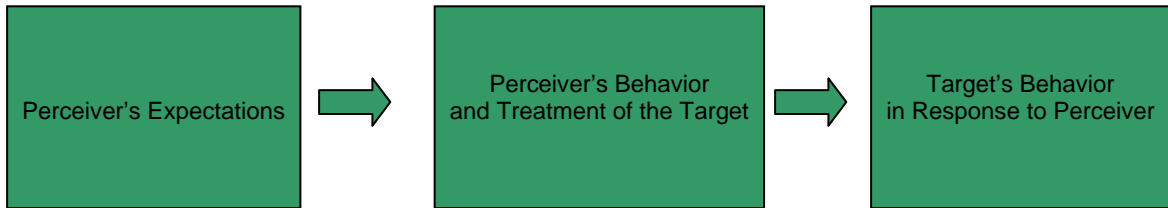
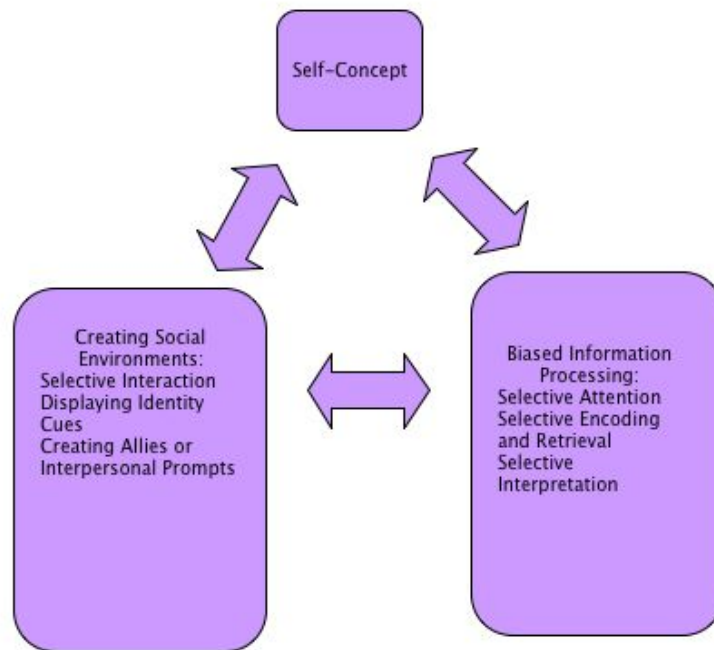


Figure 2.

Process of Self-Verification



From Swann et al., 2002

Figure 3.

Moderators of the Identity Negotiation Process

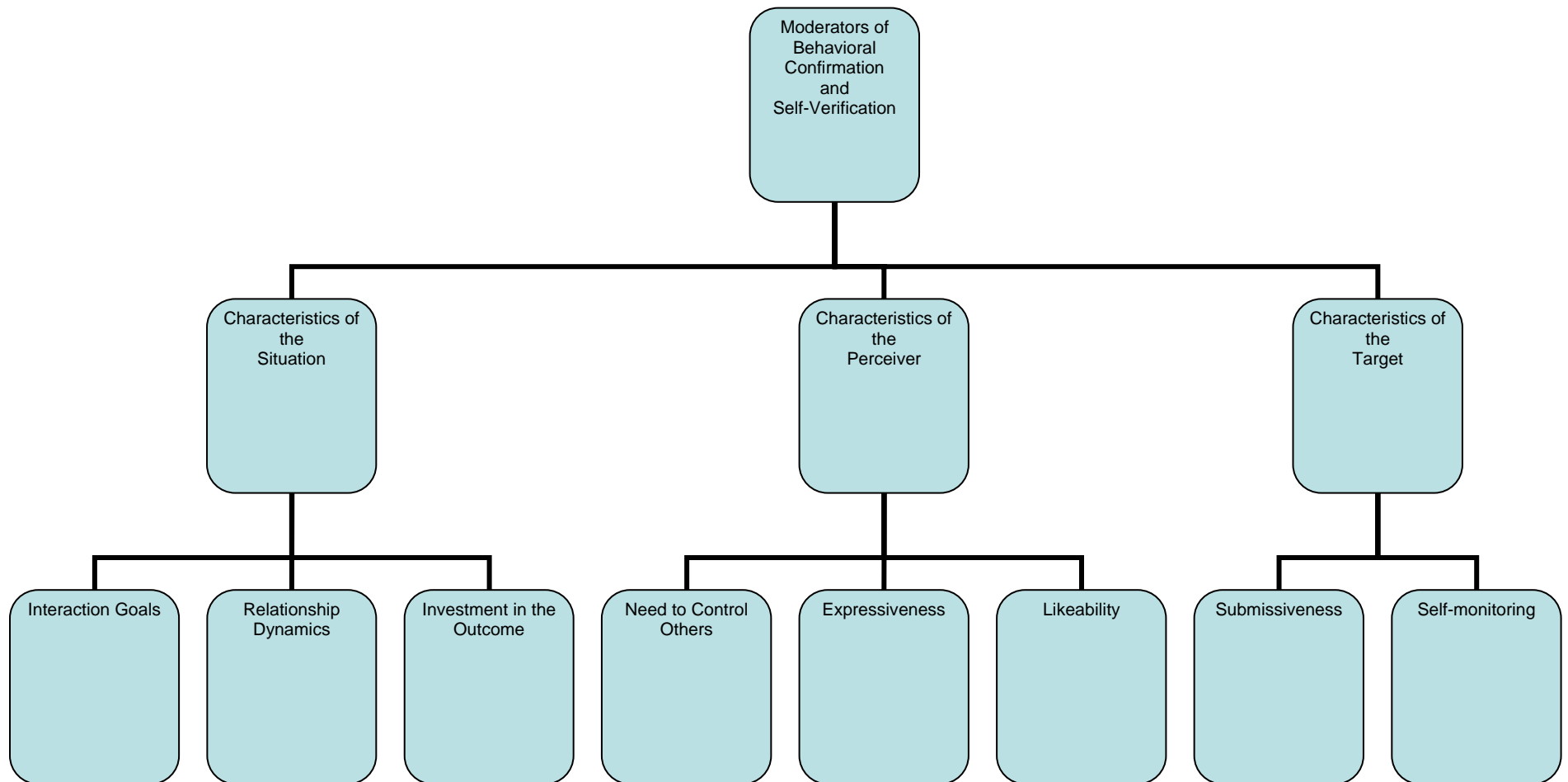


Figure 4.

Pubertal Status: Frequency by Grade and Gender

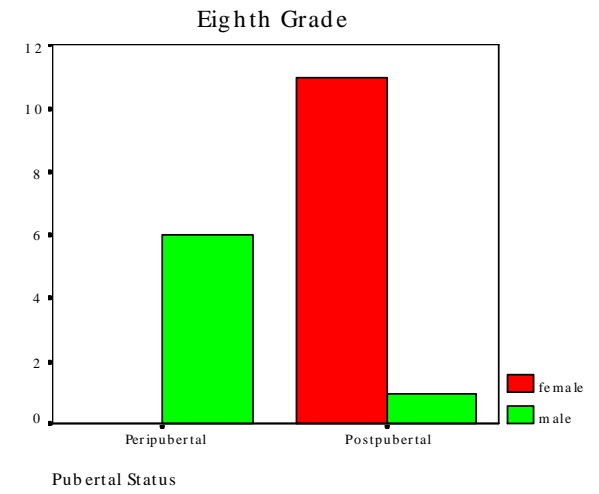
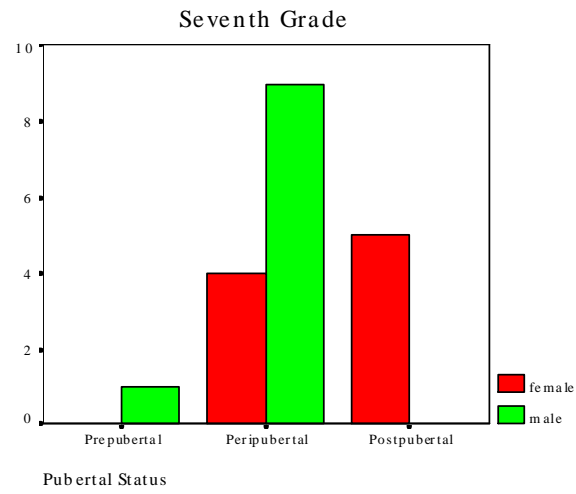
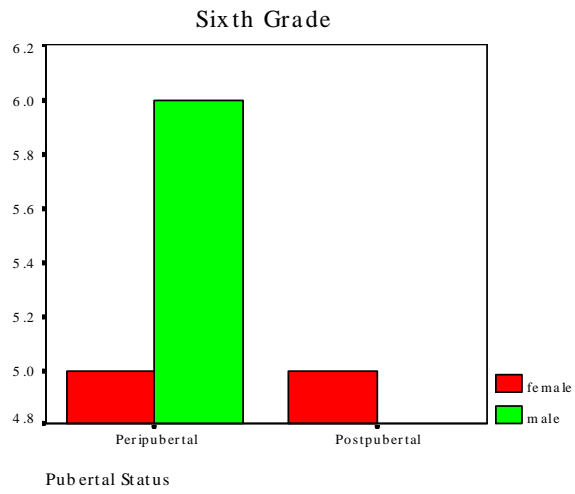


Table 1.

Moderators of Behavioral Confirmation and Self-Verification

Moderator	Effect on Behavioral Confirmation	Effect on Self-Verification
<p style="text-align: center;">Situational Factors</p> <p>Goal: Motivated by Accuracy</p> <p>Relationship Dynamics: Perceiver possesses power in situation</p> <p>Targets possesses power in situation</p> <p>Investment in Outcome: Perceiver invested in outcome</p> <p>Target invested in outcome</p>	<p>Decreases</p> <p>Increases</p> <p>Decreases</p> <p>Increases</p> <p>Decreases</p> <p>Increases</p>	<p>Increases</p> <p>Decreases</p> <p>Increases</p> <p>Decreases</p> <p>Increases</p>

Characteristics of the Perceiver		
Need to control the behavior of others:		
High need	Increases	Decreases
Low need	Decreases	Increases
Expressiveness:		
High expressiveness	Increases	Decreases
Low expressiveness	Decreases	Increases
Likeability:		
High likeability	Increases	Decreases
Low likeability	Decreases	Increases
Characteristics of the Target		
Submissiveness:		
High submissiveness	Increases	Decreases
Low submissiveness	Decreases	Increases
Self-monitoring:		
High self-monitoring	Increases	Decreases
Low self-monitoring	Decreases	Increases

Table 2.

Age Distribution of Participants

Age	Study 1	Study 2
10	n = 1	n = 0
11	n = 10	n = 18
12	n = 35	n = 25
13	n = 25	n = 26
14	n = 14	n = 20
15	n = 3	n = 3
Not Reported	n = 2	n = 4

Table 3.

Domains of Self: Importance Ratings

	Females	Males
Intellectual Ability	4.31 (<i>M</i>) .86 (<i>SD</i>)	4.24 (<i>M</i>) 1.03 (<i>SD</i>)
Social Competence	4.55 (<i>M</i>) .70 (<i>SD</i>)	4.55 (<i>M</i>) .65 (<i>SD</i>)
Artistic/Musical Ability	3.41 (<i>M</i>) 1.08 (<i>SD</i>)	3.21 (<i>M</i>) 1.19 (<i>SD</i>)
Athletic Competence	3.20 (<i>M</i>) 1.22 (<i>SD</i>)	4.24 (<i>M</i>) 1.05 (<i>SD</i>)
Physical Attractiveness	3.47 (<i>M</i>) 1.24 (<i>SD</i>)	4.00 (<i>M</i>) .87 (<i>SD</i>)

Table 4.

Domains of Self: Certainty Ratings

	Females	Males
Intellectual Ability	3.55 (<i>M</i>) 1.10 (<i>SD</i>)	4.05 (<i>M</i>) .92 (<i>SD</i>)
Social Competence	3.88 (<i>M</i>) 1.16 (<i>SD</i>)	4.10 (<i>M</i>) .88 (<i>SD</i>)
Artistic/Musical Ability	3.43 (<i>M</i>) 1.27 (<i>SD</i>)	3.64 (<i>M</i>) 1.20 (<i>SD</i>)
Athletic Competence	3.43 (<i>M</i>) 1.32 (<i>SD</i>)	4.08 (<i>M</i>) 1.09 (<i>SD</i>)
Physical Attractiveness	3.27 (<i>M</i>) 1.13 (<i>SD</i>)	3.55 (<i>M</i>) .98 (<i>SD</i>)

Table 5.

Ratings of Certainty by Pubertal Status for Sixth Grade Girls

	Early Maturing	Later Maturing
Intellectual Ability	3.00 (<i>M</i>) .70 (<i>SD</i>)	4.40 (<i>M</i>) .89 (<i>SD</i>)
Athletic Competence	2.20 (<i>M</i>) .84 (<i>SD</i>)	4.00 (<i>M</i>) 1.00 (<i>SD</i>)

Table 6.

Components of Self-Esteem

	<i>b</i>	<i>SE</i>	β	<i>p</i>
Positive Affect	.01	.01	.18	>.1
Negative Affect	-.03	.01	-.41	<.01
Composite Self-Views	.07	.03	.30	<.05
Differential Importance	.11	.19	.07	>.1
Differential Certainty	.21	.25	.10	>.1
Self-Ideal Discrepancy	-.01	.02	-.06	>.1

Table 7.

Perceivers' Initial Impressions as a Function of Target Attractiveness

	Unattractive	Attractive
Intellectual Ability	3.39(<i>M</i>) 0.98 (<i>SD</i>)	3.41(<i>M</i>) 0.50 (<i>SD</i>)
Social Competence	3.42 (<i>M</i>) 1.03 (<i>SD</i>)	3.82 (<i>M</i>) 0.59 (<i>SD</i>)
Artistic/Musical Ability	3.27 (<i>M</i>) 0.87 (<i>SD</i>)	2.86 (<i>M</i>) 0.71 (<i>SD</i>)
Athletic Competence	2.92 (<i>M</i>) 1.06 (<i>SD</i>)	3.46 (<i>M</i>) 0.86 (<i>SD</i>)
Physical Attractiveness	2.77 (<i>M</i>) 0.59 (<i>SD</i>)	3.36 (<i>M</i>) 1.00 (<i>SD</i>)

Table 8.

Percentage of Mismatched Responses to AISQ questions

Questions (area, valence of question)	Percentage of Mismatched Responses
Social, Positive	12.5
Social, Negative	6.3
Intelligence, Positive	12.5
Intelligence, Negative	6.3
Art/Music, Positive	25.0
Art/Music, Negative	8.3
Sports, Positive	10.4
Sports, Negative	10.4
Appearance, Positive	43.8
Appearance, Negative	16.7

Table 9.

Predictors of Judges' Ratings

	Targets' Self-Views	Perceivers' Expectations
Intellectual Ability	.37 (<i>b</i>)	.05 (<i>b</i>)
	.12 (<i>SE</i>)	.10 (<i>SE</i>)
	.42 (β)	.07 (β)
	.00 (<i>p</i>)	.62 (<i>p</i>)
Social Competence	.02 (<i>b</i>)	-.09 (<i>b</i>)
	.08 (<i>SE</i>)	.09 (<i>SE</i>)
	.03 (β)	-.16 (β)
	.85 (<i>p</i>)	.31 (<i>p</i>)
Artistic/Musical Ability	.12 (<i>b</i>)	-.09 (<i>b</i>)
	.10 (<i>SE</i>)	.13 (<i>SE</i>)
	.18 (β)	-.10 (β)
	.25 (<i>p</i>)	.51 (<i>p</i>)
Athletic Competence	.37 (<i>b</i>)	.06 (<i>b</i>)
	.07 (<i>SE</i>)	.09 (<i>SE</i>)
	.61 (β)	.09 (β)
	.00 (<i>p</i>)	.47 (<i>p</i>)
Physical Attractiveness	.15 (<i>b</i>)	-.01 (<i>b</i>)
	.10 (<i>SE</i>)	.09 (<i>SE</i>)
	.24 (β)	-.01 (β)
	.13 (<i>p</i>)	.93 (<i>p</i>)

Appendix A

Self-Perception Profile for Adolescents (Harter, 1988)

What I Am Like

Name: _____ Age: _____ Birthday: ___/___/___ Group: _____

SAMPLE SENTENCE

	Really True for Me	Sort of True for Me			Sort of True for Me	Really True for Me	
a)	<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers like to go to movies in their spare time.	BUT	Other teenagers would rather go to sports events.	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>							
1.	<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers feel that they are just as smart as other their age	BUT	Other teenagers aren't so sure and wonder if they are as smart.	<input type="checkbox"/>	<input type="checkbox"/>

Appendix B

Adolescent Self-Attribute Questionnaire

INSTRUCTIONS:

Please read carefully before starting:

The following questions use the numbers below to indicate where you think you stand on particular abilities.

1	2	3	4	5
A lot below average	A little below average	Average	A little above average	A lot above average

The following questions concern how you feel about some of your activities and abilities. For the questions below, you should rate yourself relative to teenagers your own age using this scale:

1	2	3	4	5
A lot below average	A little below average	Average	A little above average	A lot above average

On the following areas, rate how you compare to other teenagers your age:

- | | | | | | |
|-------------------------------|---|---|---|---|---|
| 1. Smartness | 1 | 2 | 3 | 4 | 5 |
| 2. Getting along with others | 1 | 2 | 3 | 4 | 5 |
| 3. Art and/or musical ability | 1 | 2 | 3 | 4 | 5 |
| 4. Skill at sports | 1 | 2 | 3 | 4 | 5 |
| 5. How nice you look | 1 | 2 | 3 | 4 | 5 |

Sometimes, people are certain about things and know them for sure. Other times, people are uncertain about things and not clear about how they stand. Now rate how *certain* you are of your standing on each of the above traits (you may choose any number). Are you sure about how good or bad you are on each of these traits:

1	2	3	4	5
Very uncertain	A little uncertain	Average certain	A little certain	Very certain

On the following areas, rate how certain you are about your abilities:

1. Smartness	1	2	3	4	5
2. Getting along with others	1	2	3	4	5
3. Art and/or musical ability	1	2	3	4	5
4. Skill at sports	1	2	3	4	5
5. How nice you look	1	2	3	4	5

People care a lot about some things but do not really care that much about others. Now rate how personally *important* each of these domains is to you (you may choose any number):

1	2	3	4	5
Very unimportant	A little unimportant	Average important	A little important	Very important

On the following areas, rate how important each of these abilities is to you:

- | | | | | | |
|-------------------------------|---|---|---|---|---|
| 1. Smartness | 1 | 2 | 3 | 4 | 5 |
| 2. Getting along with others | 1 | 2 | 3 | 4 | 5 |
| 3. Art and/or musical ability | 1 | 2 | 3 | 4 | 5 |
| 4. Skill at sports | 1 | 2 | 3 | 4 | 5 |
| 5. How nice you look | 1 | 2 | 3 | 4 | 5 |

Sometimes people wish they could be different than they actually are. Imagine that you could be exactly how you wanted with any characteristics or abilities. How different are you from the ideal self that you could imagine? Now rate yourself relative to your “ideal self” - the person you would be if you were exactly the way you would *like* to be (you may choose any number):

1	2	3	4	5
Very different from my ideal self	A little different from my ideal self	Average amount like my ideal self	A little similar to my ideal self	Very similar to my ideal self

On the following areas, rate how much you differ from your ideal self:

1. Smartness	1	2	3	4	5
2. Getting along with others	1	2	3	4	5
3. Art and/or musical ability	1	2	3	4	5
4. Skill at sports	1	2	3	4	5
5. How nice you look	1	2	3	4	5

Appendix C

PANAS-C

INSTRUCTIONS: This scale consists of a number of words that describe different feelings and emotions. Read each item and then circle the appropriate answer next to the word.

Indicate to what extent you have felt this way during the past few weeks.

Feeling Emotion	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
Interested	1	2	3	4	5

Appendix D

Self-Rating Scale for Pubertal Development

INSTRUCTIONS: The next questions are about changes that may be happening to your body. These changes normally happen to different young people at different ages. Please circle the answer that is most like you. If you do not understand a question or do not know the answer, just mark “I don’t know.”

Please write your ID number in the space provided. ID# _____

1. Would you say that your growth in height:
 - a. has not yet begun to spurt
 - b. has barely started
 - c. is definitely underway
 - d. seems completed
 - e. I don’t know

Appendix E

Adolescent Feedback Seeking Questionnaire

Below are some questions about different areas like sports and music. Each area is on its own page. We are interested in which questions you would like answered about yourself by another teenager. Pick two questions from each page which you would like your partner to answer about you. Please read over the entire list in an area before you decide on your questions.

Remember you can pick **2 questions per page**.

GETTING ALONG WITH OTHERS

- 1) What is some evidence you have seen that I get along well with other people?
- 2) What is some evidence you have seen that I do NOT get along well with other people?
- 3) What about me makes you think I would be comfortable interacting with other people?
- 4) What about me makes you think I am NOT comfortable interacting with other people?
- 5) In terms of getting along with other people, what is my best quality?
- 6) In terms of getting along with other people, what is my worst quality?

INTELLIGENCE/SCHOOL ABILITY

- 1) What are some signs you have seen that I am above average in overall smartness?

- 2) What are some signs you have seen that I am below average in overall smartness?

- 3) What about me makes you think I will have academic problems in high school and get bad report cards?

- 4) What about me makes you think I will do well in high school and get good report cards?

- 5) What academic subjects (like Math, Reading, Science) would you expect me to be especially good at? Why?

- 6) What academic subjects (like Math, Reading, Science) would you expect to be difficult for me? Why?

MUSIC/ARTISTIC ABILITY

- 1) What about me makes you think that I would be a bad artist or musician?
- 2) What about me makes you think that I would be a good artist or musician?
- 3) What is my greatest artistic or musical talent?
- 4) Why am I unlikely to do well at creative activities?
- 5) What about me makes you think that I have a good imagination?
- 6) What do you think my biggest weakness is in art or in music?

APPEARANCE

- 1) Why do you think people of the opposite sex would find me attractive?
- 2) Why do you think people of the opposite sex would find me unattractive?
- 3) What do you see as my least physically attractive features?
- 4) What do you see as my most physically attractive features?
- 5) Why should I feel good about my appearance?
- 6) Why might I feel bad about my appearance?

SPORTS ABILITY

- 1) What are some sports you would expect me to be especially good at? Why?
- 2) What are some sports you would expect me to be bad at? Why?
- 3) What about me lets me a good athlete?
- 4) What about me probably stops me from becoming a good athlete?
- 5) What is my greatest athletic talent?
- 6) What is my greatest athletic weakness?

Appendix F

Filler Questions

INSTRUCTIONS: Please answer the following questions about yourself.

1. What is your name?
2. When is your birthday?
3. What year were you born?
4. Were you born in Austin?
5. What school do you go to?
6. What grade are you in?
7. Do you have any brothers or sisters?
8. Do you have any pets?
9. What is your favorite movie?
10. What is your favorite band?
11. What types of food do you like?
12. What are your hobbies?
13. Do you like sports? If so, which ones?
14. What are your favorite subjects in school?

Appendix G

Adolescent Impression Formation Questionnaire (AIFQ).

Rate your partner using the follow scale. Please write down the number that best fits how you would describe your partner.

1	2	3	4	5
A lot below average	A little below average	Average	A little above average	A lot above average

1. Smartness	1	2	3	4	5
2. Getting along with others	1	2	3	4	5
3. Art and/or musical ability	1	2	3	4	5
4. Skill at sports	1	2	3	4	5
5. How nice he/she looks	1	2	3	4	5

Appendix H

Adolescent Information-Seeking Questionnaire

GETTING ALONG WITH OTHERS

- 1) What is some evidence you have seen that you get along well with other people?
- 2) What is some evidence you have seen that you do NOT get along well with other people?
- 3) What about you makes you think you would be comfortable interacting with other people?
- 4) What about you makes you think you are NOT comfortable interacting with other people?
- 5) In terms of getting along with other people, what is your best quality?
- 6) In terms of getting along with other people, what is your worst quality?

INTELLIGENCE/SCHOOL ABILITY

- 1) What are some signs you have seen that you are above average in overall smartness?
- 2) What are some signs you have seen that you are below average in overall smartness?
- 3) What about you makes you think you will have academic problems in high school and get bad report cards?
- 4) What about you makes you think you will do well in high school and get good report cards?
- 5) What academic subjects (like Math, Reading, Science) would you expect to be especially good at? Why?
- 6) What academic subjects (like Math, Reading, Science) would you expect to be difficult for yourself? Why?

MUSIC/ARTISTIC ABILITY

- 1) What about you makes you think that you would be a bad artist or musician?
- 2) What about you makes you think that you would be a good artist or musician?
- 3) What is your greatest artistic or musical talent?
- 4) Why are you unlikely to do well at creative activities?
- 5) What about you makes you think that you have a good imagination?
- 6) What do you think your biggest weakness is in art or in music?

SPORTS ABILITY

- 1) What are some sports you would expect to be especially good at? Why?
- 2) What are some sports you would expect to be bad at? Why?
- 3) What about you lets you be a good athlete?
- 4) What about you probably stops you from becoming a good athlete?
- 5) What is your greatest athletic talent?
- 6) What is your greatest athletic weakness?

APPEARANCE

- 1) Why do you think people of the opposite sex would find you attractive?
- 2) Why do you think people of the opposite sex would find you unattractive?
- 3) What do you see as your least physically attractive features?
- 4) What do you see as your most physically attractive features?
- 5) Why should you feel good about your appearance?
- 6) Why might you feel bad about your appearance?

Appendix I
Adolescent Interaction Questionnaire (AIQ).

Please answer the following questions based on the discussion you just had.

1. How much did you enjoy your conversation?

1	2	3	4	5
Not much at all	A little	Medium	Pretty Much	Very Much

2. How comfortable were you interacting with your partner?

1	2	3	4	5
Not much at all	A little	Medium	Pretty Much	Very Much

3. How accurately do you think your partner saw you?

1	2	3	4	5
Not much at all	A little	Medium	Pretty Much	Very Much

4. How much do you think your partner understood you?

1	2	3	4	5
Not much at all	A little	Medium	Pretty Much	Very Much

Appendix J

Online Etiquette

Behavioral Conduct for Internet Study

I understand that I am expected to use good online etiquette. Good online etiquette includes no profanity, no vulgarity, no mention of drug use and paraphernalia. I also understand that I am not supposed to give the other participant my name, phone number, or address.

I understand that I can talk about a lot of different topics including my family, pets, interests, sports, hobbies, friends, and personality.

Participant's Signature

Appendix K

Debriefing for Perceivers

The study you just participated in was designed to look at how teenagers treat one another. Specifically, we wanted to see what teenagers do if they are provided with information about their partner before their conversation. We provided you with information about your partner that may or may not have been correct. For example, we may have said that your partner was older than he or she actually was. We were interested in whether individuals would treat their partners differently based on this information. Again, we wanted to see how and when teenagers are affected by the information that they hear about someone before they meet them.

Now that you fully understand what happened in this study, you may e-mail the researcher if you do **not** want to allow us to use your answers.

Thank you for participating!

Appendix L

Debriefing for Targets

The study you just participated in was designed to look at how teenagers treat one another. Specifically, we wanted to see what teenagers do if they are provided with information about their partner before their conversation. We provided your partner with information about you that may or may not have been correct. For example, we may have said that you were older than you actually were. We were interested in whether your partner would treat you differently based on this information. Again, we wanted to see how and when teenagers are affected by the information that they hear about someone before they meet them.

Now that you fully understand what happened in this study, you may e-mail the researcher if you do **not** want to allow us to use your answers.

Thank you for participating!

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