PERFECTIONISM IN GIFTED COLLEGE STUDENTS: FAMILY INFLUENCES AND IMPLICATIONS FOR ACHIEVEMENT

by

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(Under the Direction of Thomas P. Hébert)

ABSTRACT

Through a qualitative interview study, the researcher investigated how different dimensions of perfectionism - socially prescribed and self-oriented - developed within gifted college students and influenced their achievement motivation and their attributions for successes and failures. Findings indicated that gifted students scoring high on either the measure of socially prescribed or self-oriented perfectionism attributed the development of this tendency in part to a lack of experience with failure in their early school years. The socially prescribed participants also believed their perfectionism developed due to pressure they experienced from their perfectionistic parents. For this group, the themes included fearing failure, setting performance goals, and practicing maladaptive achievement behaviors in addition to themes of minimizing successes, overgeneralizing failures, and making internal attributions for failures. In contrast, gifted students scoring high on the measure of self-oriented perfectionism attributed their perfectionism to social learning due to their parents' modeling of perfectionistic behaviors. Themes included a desire for self-improvement, setting both mastery and performance goals, and practicing adaptive achievement behaviors as well as tendencies to make healthy attributions for successes and failures, and frustration with coping with failures. Recommendations for parents and teachers working with gifted perfectionistic students are provided, and implications for future research on perfectionism are highlighted. **INDEX WORDS:** Gifted, Perfectionism, Achievement, College Students, Parenting

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DEDICATION

To my parents, William and Betty Speirs, who have always expressed their confidence in my abilities and encouraged my achievements.

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I am lucky to have such solid support systems, both at the professional and personal levels. As I take on two new roles in my life, a career in higher education and a career as a mother, I will keep my experiences in mind and strive to emulate the support I have received from people at both levels.

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CHAPTER 1

INTRODUCTION

Like many researchers, I chose my dissertation topic out of personal interest. My desire to examine perfectionism stems from my own experiences with perfectionistic tendencies toward academics throughout my tenure as a student. From the beginning of elementary school, my report cards were frequently filled with comments such as, "Kristie is so serious about school. She needs to learn to relax more" and "All of Kristie's work is meticulous; she never makes mistakes." My need for academic perfection has always served as a motivator for me. In elementary school I wrote and rewrote my spelling words until I knew them so well I could spell them backwards. In junior high school I spent hours every afternoon poring over my physical science book–since the class was graded on a curve, there could be only one A+ student, and I was determined to be that person. In high school, while my friends socialized after school, I could be found rehearsing with my clarinet; to maintain my position as the top clarinetist in my grade, I knew my audition had to be "perfect." In college my drive for perfection led me to secure a 4.0 in my major, putting hours of unnecessary studying into my courses to ensure A's would follow.

Where did this need for perfection emerge? No one in my life ever pressured me to achieve perfection in school. To the contrary, my teachers were always telling me I stressed too much over academics. While they celebrated my successes, they were concerned over the self-inflicted pressure they could see. Likewise, my parents also worried about my need for academic perfection. Although they continuously emphasized that they wanted me to do well in school, my expectations for my academic progress always exceeded theirs. Finally, my friends throughout school, despite being academic achievers themselves, never devoted the same amount of time and energy into mastering course material as I would. Although my motivation to achieve tends to be a combination of extrinsic factors (grades, awards, assistantships) and intrinsic needs (a true passion for learning and thoroughly mastering a concept), the pressure I feel to achieve academic perfection comes from within, an inherent part of my personality. I set the expectations I feel so compelled to meet; I never feel required to meet anyone's standards but my own.

For the most part, I view my desire for academic perfection favorably, for it has enhanced my learning and allowed me to achieve a number of successes, both academically and professionally. When I have encountered failure, this drive for perfection has motivated me to continue. To me, failure in an academic area is a mark of my own lack of effort; I believe most concepts can be mastered if I only put forth the effort necessary. Since it pushes me to continue pursuing my goals, I consider my desire for perfection to be an asset, knowing it will help me reach my potential.

Through reading literature on the topic of perfectionism, however, I have come to understand the downsides of this trait as well. People who suffer from perfectionistic tendencies may demonstrate lower levels of intrinsic motivation and self-efficacy and avoid challenges (Mills & Blankstein, 2000), experience a number of psychological disorders (Bhar & Kyrios, 1999; Ferrari, 1995), and even attempt or commit suicide (Boergers, Spirito, & Donaldson, 1998; Hamilton & Schweitzer, 2000). I began to wonder how a trait associated with positive characteristics such as maximizing one's potential and achieving self-actualization (Adler, 1956; Dabrowski, 1964; Maslow, 1970) can plague some perfectionists with feelings of anxiety and a learned helplessness approach to achievement (Flett, Hewitt, Blankstein & Pickering, 1998).

This question becomes even more complex when focusing solely on gifted individuals. Researchers and educators working with gifted students have often cited perfectionism as a characteristic of gifted individuals (Adderholdt & Goldberg, 1999;

LoCicero & Ashby, 2000; Roedell, 1984). Although definitions of perfectionism vary, most include feeling the need to meet unrealistically high standards for achievement (e.g. Frost, Marten, Lahart, & Rosenblate, 1990; Hewitt & Flett, 1991). As a result of their high ability, however, gifted individuals are frequently able to meet standards that may appear to be unrealistic to the general population. Since they can meet these standards, one might be tempted to argue that perfectionism in gifted students is not an unhealthy trait and in fact could be desirous if it leads to an increase in motivation. However, a number of gifted students with records of impeccable academic performance have been preoccupied with suicidal thoughts and have even attempted or committed suicide (Adkins & Parker, 1996; Delisle, 1986). This suggests that performance outcomes should not be the sole measure of whether or not perfectionistic tendencies are healthy. Rather, researchers need to more closely examine the construct of perfectionism and how it influences the motivation that drives individuals' behaviors to better understand its effects on psychological well-being.

In addition to taking a closer look at how different types of perfectionism may influence achievement motivation, researchers also need to examine these constructs over various developmental stages. Currently, all the research that has been conducted on perfectionism within gifted students has focused on childhood and adolescence (e.g. Parker & Mills, 1996; Parker & Stumpf, 1995; Schuler, 2000). No research was found that specifically investigated perfectionism within gifted college students. Such research is needed in order to understand how the influence of perfectionism on gifted students' academic achievement and psychological well-being may change at different developmental stages.

Hewitt and Flett (1991) presented a theory on perfectionism that may serve as a framework for investigating perfectionism within gifted college students. The researchers contended that perfectionism is better thought of as a multidimensional rather than a

unidimensional construct. Conceptualizing perfectionism in this manner allows for the possibility that different types of perfectionism may yield different outcomes, some perhaps more psychologically healthy than others. The model proposed by Hewitt and Flett (1991) separates the construct into three dimensions: self-oriented, other-oriented, and socially prescribed perfectionism. Individuals who are self-oriented perfectionists set high personal standards for themselves and evaluate their own performance against these standards. They are often highly critical of their own work. Other-oriented perfectionists are individuals who impose excessively high standards on others in their lives. Socially prescribed perfectionists are those who perceive that significant others in their lives hold excessively high standards for them. They may experience anxiety, for they feel as though they must meet these high standards in order to please others.

Hewitt and Flett's (1991) model has led me to think more closely about the source of high standards – whether they stem from within the individual or externally from others. How do gifted individuals who impose standards for perfection onto themselves differ from those who perceive high standards being imposed on them from others? Examining these two groups of gifted individuals – those who score high on Hewitt and Flett's selforiented subscale of the *Multidimensional Personality Scale (MPS)* and those who score high on the socially prescribed scale – may help clarify how perfectionistic tendencies can positively or negatively influence individuals' thoughts, perceptions, and behaviors.

One area that has remained largely under-researched is how perfectionism may influence achievement. Research has found socially prescribed perfectionism to be related to negative affect and self-oriented perfectionism to be associated with more positive affect (Frost, Heimberg, Holt, Mattia, & Newbauer, 1993); however, few studies have examined how these two types of perfectionism may influence individuals' achievement motivation and attributions for successes and failures. Do individuals scoring high on the self-oriented subscale of the *MPS* tend to set different types of achievement goals and give different attributions for their successes and failures than individuals who score high on the socially prescribed subscale? If they do set different goals and make different attributions, why is this the case? Might these differences reflect underlying differences in motivation that serve as an explanation of how perfectionistic tendencies may lead to both positive and negative outcomes? Research addressing these questions is needed to better understand the multifaceted construct of perfectionism and its influence on academic achievement motivation within gifted individuals.

In addition to examining the relationship between perfectionism and achievement motivation, research also needs to be conducted examining how perfectionism may originate. If certain facets of perfectionism are linked to maladaptive thoughts and behaviors, understanding how these facets originate would help parents and teachers prevent such tendencies from developing within gifted students. Researchers have begun to examine the origins of perfectionism and their relation to family factors (Flett, Hewitt, and Singer, 1995; Frost, Lahart, & Rosenblate, 1991), but this topic still largely remains unexplored. In addition, due to differences in the conceptualization of perfectionism, findings across studies are difficult to compare, and no studies have specifically examined how perfectionism may develop within gifted populations. Consequently, more exploratory research is needed examining how perfectionism may develop, specifically within gifted individuals.

The body of research on perfectionism is extensive. As indicated above, however, many areas remain unexplored, including factors contributing to the development of perfectionism and the interrelationships among different dimensions of perfectionism and achievement motives, goals, and behaviors within gifted college students. The purpose of the present study is to begin addressing these gaps in the literature with the following research questions guiding the investigation:

- 1) How do gifted college students who score high on self-oriented or socially prescribed measures of perfectionism perceive their academic achievement motivation?
- 2) How do gifted college students who score high on self-oriented or socially prescribed measures of perfectionism perceive their relationships to their parents and other significant adults?
- 3) What do gifted college students who score high on self-oriented and socially prescribed measures of perfectionism perceive as influencing their perfectionistic tendencies?

CHAPTER 2

REVIEW OF THE LITERATURE

Conceptions of Perfectionism

Perfectionism, a characteristic commonly associated with gifted individuals, has received considerable attention in the gifted education literature (Adderholdt & Goldberg, 1999; Delisle, 1986; Parker, 1997; Roberts & Lovett, 1994; Schuler, 2000). Among educators and researchers, however, no consensus has been reached regarding the nature or the definition of this construct. Several theorists have viewed perfectionism as a healthy trait essential to the human condition (Parker, 1997). Psychologist Alfred Adler, for example, considered perfectionism to be an innate part of human nature. According to Adler (1956), perfectionism may be considered an urge or striving that without which life would be unimaginable. He contended that perfectionism is healthy when the focus is on maximizing one's potential or social concern for others. He acknowledged, however, that perfectionism can be negative when it is accompanied by self-destructive tendencies. Other theorists have also viewed striving for excellence as healthy because it involves focusing on developing one's potential or reaching for self-actualization (Dabrowski, 1964; Maslow, 1970; Spence & Helmreich, 1983).

Additional theorists, however, have viewed the trait as destructive, noting that perfectionists tend to set impossible standards that result in anxiety and maladaptive behaviors within the individuals (Adkins & Parker, 1996; Blatt, 1995; Ferrari, 1995; Hewitt, Flett, & Turnbull-Donovan, 1992; Lask & Bryant-Waugh, 1992; Rasmussen & Eisen, 1992). According to Roedell (1984), perfectionism may become negative when it is accompanied by a self-punishing attitude toward one's efforts that can stymie the imagination, smother the creative spirit, and become a detriment to performance. In an attempt to clarify the nature of perfectionism, several researchers have proposed that the trait might be multidimensional, with both healthy and unhealthy facets. Hamachek (1978), for example, separated the concept into normal and neurotic forms of perfectionism. According to Hamachek, normal perfectionists are those that "derive a very real sense of pleasure from the labors of a painstaking effort and *who feel free to be less precise as the situation permits*" (p. 23). These normal perfectionists seek social approval, but this approval is not their fundamental reason for seeking perfection; rather, it is the icing on top of the cake of their own personal pride. It serves as encouragement for them to continue improving their performance. In contrast, Hamachek described neurotic perfectionists as those individuals who "demand a higher level of performance than [is] possible for them to obtain" (p. 28). Neurotic perfectionists never feel satisfied by their performance, and their motivation stems from a fear of failure rather than a need for achievement. In addition, neurotic perfectionists frequently report feelings of anxiety, confusion, and emotional strain prior to the commencement of a task.

Contemporary researchers examining perfectionism have proposed models of the construct that are more multidimensional. In addition to the Hewitt and Flett (1991) model reviewed in the introduction, Frost, Marten, Lahart, and Rosenblate (1990) have also created a multidimensional model of perfectionism. They developed the *Multidimensional Perfectionism Scale* (different from Hewitt and Flett's scale bearing the same name). This scale taps five different dimensions of the construct: personal standards, concern over mistakes, parental expectations, doubting actions, and organization. The subscale, concern over mistakes, appears to have the strongest link to negative affect (Frost, Heimberg, Holt, Mattia, & Neubauer, 1993), while the subscale of high personal standards and a need for order and organization have the strongest relationships to healthy behaviors, such as adaptive work habits, motivation, and high achievement (Brown,

Heimberg, Frost, Makris, Juster, & Leung, 1999; Frost, Marten, Lahart, & Rosenblate, 1990).

After conducting studies and reviewing literature suggesting that perfectionism is not a unidimensional construct, Stumpf and Parker (2000) conducted a hierarchical structural analysis of perfectionism and its relation to other personality characteristics. Their results indicated that perfectionism can best be characterized as two independent dimensions that illustrate different patterns of correlations with other personality variables. The researchers found that the unhealthy dimension of perfectionism correlated with lack of self-esteem, neuroticism, and general psychopathology. In contrast, the researchers found the healthy or functional dimension of perfectionism correlated with endurance, order, and conscientiousness. Based on these results, Stumpf and Parker contended that unhealthy and healthy perfectionistic tendencies are not opposite ends of the same continuum but rather reflect two different dimensions orthogonal to each other. Each may be conceptualized as bipolar, with the two poles described as high versus low healthy and high versus low unhealthy types of perfection.

Stumpf and Parker (2000) also emphasized that the distinction between facets of perfectionism depends on the context in which the construct is viewed. For example, Hewitt and Flett's (1991) model focusing on interpersonal and intrapersonal dimensions with depictions of other-oriented, self-oriented, and socially prescribed perfectionism, may be a more appropriate model to use when examining social interaction. Stumpf and Parker argued, however, that even in Hewitt and Flett's social-interaction depiction of the construct, the hierarchical structure they identified may be applied. They hypothesized that socially prescribed perfectionism should be associated with the unhealthy dimension of perfectionism. On the other hand, other-oriented, and, in particular, self-oriented perfectionism.

Each of the conceptions of perfectionism reviewed above highlights the need to move from a unidimensional to multidimensional consideration of the construct. By viewing perfectionism as multifaceted, researchers can examine different components of the construct independently, gaining a better understanding of how they may relate to various social and psychological factors.

Influences and Correlates of Perfectionism

To further understand the healthy and unhealthy aspects of perfectionism, research has been conducted, with more needed, that examines its relationship to a number of other variables. The results of several studies suggest no gender differences in perfectionistic tendencies (Parker & Adkins, 1995; Spangler & Burns, 1999). No studies have specifically examined differences in the incidence of perfectionism cross-culturally. In addition, with the exception of one study that found perfectionism in females to increase with age (Kline & Short, 1991), no other studies were found that examined the relationship between age and perfectionism. A review of the literature, however, does indicate relationships between perfectionism and various parenting factors, motivational variables, and measures of psychopathology.

Perfectionism and Parental Influences

Despite the differences in the way in which researchers conceptualize perfectionism, a striking theme runs throughout: individuals with maladaptive perfectionistic tendencies focus their attention on other people's evaluations of their performance. These individuals perceive that others hold high expectations for their performance, and they feel as though their self-worth is contingent upon meeting those expectations. That is, they believe they will not be "lovable" unless they are perfect (Pacht, 1984). Literature considering possible origins of these maladaptive cognitions is limited. Most of the theoretical and empirical studies that have been completed focus on parenting factors. For example, Hamacheck (1978) contended that the emotional environments of neurotic perfectionists fall into two categories: an environment of nonapproval or inconsistent approval and an environment of conditional positive approval. An individual growing up in the first type of environment would never know how to please his or her parents; consequently, she might adopt perfectionistic tendencies to try to win their approval. In the second situation, an individual may quickly learn that parental love is contingent upon successes and therefore adopt perfectionistic tendencies to ensure a feeling of love. Several researchers have explored the relationship between perfectionism and various parenting factors, including parental perfectionism, parenting styles, and attachment.

Parental perfectionism. The findings of two studies suggest that children may develop perfectionistic tendencies by observing their perfectionistic parents. Frost, Lahart, and Rosenblate (1991) found that mothers' self-reports of perfectionism were modestly correlated with their daughters' self-reports. Vieth and Trull (1999) also found support for the same-sex modeling hypothesis: levels of self-oriented perfectionism in students were positively associated with levels of perfectionism in their same sex parents.

Parenting styles. In addition to the modeling hypothesis, researchers have also explored the possibility that perfectionism is related to different types of parenting styles. Studies examining parenting styles have relied on Baumrind's (1971) classic distinction of types of parenting authority and Maccoby and Martin's (1983) revision of the model. According to Baumrind, styles of parenting can be categorized according to two characteristics: demandingness and responsiveness. Demandingness refers to the extent to which parents demonstrate control, demands for maturation, and supervision. Responsiveness refers to the extent to which they display affective warmth, acceptance, and involvement toward their children. Based on these two characteristics, Baumrind identified three parental styles: authoritarian, authoritative, and permissive. In a later extension of the model, Maccoby and Martin further divided the permissive style to create a fourth style of neglectful.

In this typology, Baumrind (1991) characterized parents who operate with an authoritarian style as demonstrating high levels of demandingness coupled with low levels of responsiveness. They primarily focus on controlling the behaviors and attitudes of their children, emphasizing obedience, respect for authority, and order. Authoritarian parents do not tend to be communicative with their children, expecting rules to be followed without questions. When expectations are not met, punitive measures frequently follow. Baumrind described authoritative parents as those with both high levels of demandingness and high levels of responsiveness. These parents set rules for their children to follow and enforce these rules, and they monitor their children's behavior, using non-punitive forms of discipline when standards are not followed. In contrast to authoritarian parents, however, authoritative parents encourage communication between themselves and their children. They encourage their children to express their points of view and recognize these points of view when establishing rules. They also demonstrate warmth and supportiveness toward their children.

A third style of parenting, permissive, results from parents demonstrating low levels of demandingness and high levels of responsiveness. Similar to authoritative parents, permissive parents demonstrate a warm and accepting attitude toward their children; however, they also exhibit a lack of control over their children as a result of their non-demanding behaviors. They do not require their children to demonstrate mature behaviors and instead allow them to behave without guidance (Baumrind, 1991). Finally, neglectful parents are characterized by low levels of both demandingness and responsiveness. Neglectful parents do not offer their children any support or attention. They do not attempt to control their children's behaviors but rather remain uninvolved in their children's lives (Maccoby & Martin, 1983).

Several studies have examined the relationship between parenting styles and various indices of perfectionism. Rice, Ashby, and Preusser (1996) found that neurotic perfectionists perceived their parents to be less encouraging, more demanding, and more critical than normal perfectionists. This study is consistent with the findings of Frost and colleagues' (1991) study that indicated perfectionistic daughters perceived their perfectionistic mothers as harsh and demanding. The findings of two additional studies also suggest that perfectionism may be related to the authoritarian parenting style. In one study, parents who believed their children should be "flawless" tended to rely on authoritarian parenting and emphasized a need for obedience (Robin, Kopeke, & Move, 1990). In support of this finding, Flett, Hewitt, and Singer (1995) also found that for males, socially prescribed perfectionism in college students was related to authoritarian parenting. This same relationship was not found for females in the study, but self-oriented perfectionism in females was significantly related to authoritative parenting. The researchers speculated that female college students may be prone to raise their goals and aspirations if they perceive their families as being supportive, a characteristic of authoritative parents.

Attachment. In addition to style of parenting, another factor that may be associated with the development of perfectionism is attachment. Attachment relationships have been defined as close affectional ties that provide an individual with a sense of security (Ainsworth, 1989; Bowlby, 1988). To distinguish attachment bonds from other forms of relationships, Cassidy (1999) outlined the following criteria established by Bowlby and Ainsworth: An attachment bond reflects each of the qualities of an affectional bond, including persistence; the involvement of a specific person who is not interchangeable with another; an emotionally significant relationship; the desire to maintain proximity to the attachment figure; and distress upon involuntary separation from the attachment figure. In addition to these affectional criteria, in an attachment bond, the individual must also seek security and comfort in the relationship with the attachment figure.

Bowlby (1980) contended that secure and insecure forms of attachment can be understood in terms of the internal working models individuals develop about themselves and others. As infants interact with their caregivers, they develop internal working models, which are schematic representations of themselves and other people, that they use as a guide for interpreting events and forming expectations about human relationships. Infants with sensitive, responsive caregivers will likely conclude that people are dependable and therefore develop a working model of others that is positive. Infants with insensitive, neglectful, or abusive caregivers will likely conclude that people are not trustworthy and therefore develop a negative working model of others. Infants also develop a working model of self as a result of their caregiving experiences. Infants whose caregivers are responsive to their needs will likely conclude that they are worthy and loveable and thus develop a positive working model of self. On the other hand, infants whose signals are ignored by their caregivers may conclude that they are unworthy and therefore develop a negative working model of self.

Bartholomew and Horowitz (1991) have taken Bowlby's concept of working models and applied it to the study of attachment styles within adults. They identified four different attachment styles by crossing the two dimensions of working models of self and others: secure, preoccupied, fearful, and dismissing. Secure individuals are characterized as having positive working models of both self and others. They believe they are lovable and believe others are generally accepting and responsive. Preoccupied individuals have a negative working model of self accompanied by a positive working model of others. They maintain a sense of unworthiness but evaluate others positively. As a result, they strive for self-acceptance by gaining the approval of others. Fearful individuals have both a negative working model of self and others. They do not believe they are worthy of being loved, and they view others as untrustworthy and rejecting. Finally, dismissing individuals have a positive working model of self coupled with a negative working of others. These individuals have a sense of worthiness, but they distrust others, causing them to protect themselves against disappointment by avoiding close relationships.

A consideration of Bartholomew and Horowitz's (1991) four categorical model of adult attachment patterns and Hewitt and Flett's (1991) multidimensional model of perfectionism illustrates the theoretical bridge linking the two constructs together. The descriptions of individuals who are classified as having a preoccupied attachment style and those who are classified as socially prescribed perfectionists are conceptually similar. In both cases, the individuals have been described as seeking approval from others. They are motivated to achieve others' acceptance and fear disapproval of others, and they experience a high degree of self-blame when they fail to gain the acceptance of others (Bartholomew & Horowitz; Hewitt & Flett). In their description of other-oriented perfectionists, Hewitt and Flett noted that these individuals lack trust and harbor feelings of hostility toward others, which may result in difficulty with interpersonal relationships. Based on this description, other-oriented perfectionists may be more likely to adhere to a dismissing attachment style, which describes individuals who are comfortable without close relationships and prefer not to depend on others (Bartholomew & Horowitz). Finally, secure individuals may be less likely to adopt perfectionistic tendencies than any of the other attachment styles, since they have a positive view of both themselves and others and do not place their self-worth contingent upon their achievements.

To date only one study has explored the potential influence of parental attachment on the development of perfectionism. In this study, Rice and Mirzadeh (2000) used cluster analysis to classify individuals as adaptive, maladaptive, or non-perfectionists as a result of their scores on Frost et al.'s (1990) *MPS*. Participants' attachment to parents was measured by the *Inventory of Parent and Peer Attachment (IPPA*, Armsden & Greenberg, 1987). The researchers found that secure attachment to parents was a strong predictor of adaptive perfectionistic tendencies. Quality of attachment was a much weaker predictor of maladaptive perfectionism. Failure to find a strong predictive relationship between quality of attachment and perfectionism could be the result of the researcher's choice of attachment measure. The *IPPA*, does not distinguish between the three types of insecure attachment that have been identified in the literature (Bartholomew & Horowitz, 1991). Rice and Mirzadeh (2000) acknowledged that future studies should include a more sensitive measure of quality of attachment, such as Bartholomew and Horowitz's (1991) questionnaire.

In addition, researchers conducting future studies on the relationship between attachment and perfectionism may also want to consider using a measure of perfectionism that is more interpersonal rather than intrapersonal. Since attachment theory focuses on the quality of relationships with others, the most solid theoretical association with perfectionism should be between quality of attachment and the interpersonal dimension of perfectionism, as assessed by Hewitt and Flett's (1991) model.

Perfectionism and Achievement Motivation

Despite the demonstrated interest in the topic of perfectionism, only recently have researchers begun to examine the relationship among perfectionism and achievement motivation. Achievement motivation is defined as the energization and direction of competence-based affect, cognition, and behavior (Elliot, 1999). Throughout the decades, psychologists have presented various conceptions of achievement motivation. Drawing from these various conceptions of achievement motivation, including the achievement motive approach (Atkinson, 1957; McClelland, Atkinson, Clark & Lowell, 1953), the test anxiety approach, (Mandler & Sarason, 1952; Spielberger, 1972), the attributional approach, (Weiner & Kulkla, 1970), the self-worth approach (Covington & Beery, 1976),

and the achievement goal approach (Dweck, 1986; Nicholls, 1984) Elliot proposed a broader, hierarchical model of achievement motivation.

Elliot (1999) described achievement motives as general, affectively based dispositions that stimulate achievement activity and direct individuals toward success and failure. Two achievement motives – need for achievement and fear of failure – are thought to prompt individuals to adopt different types of achievement goals, which in turn guide their achievement behavior. Achievement goals are defined by the purpose of task engagement (Maehr, 1989), and they direct how individuals interpret and experience achievement settings (Elliot & Church). Elliot and his colleagues (Elliot, 1994, 1997, Elliot & Church, 1997; Elliot & Harackiewicz, 1996) proposed trichotomous achievement goal framework, consisting of mastery, performance-avoidance, and performanceapproach goals. Elliot (1999) defined mastery goals as focusing on developing competence or mastering a task. A need for achievement motive is presumed to underlie mastery goals, since this motive orients individuals toward success. Performanceavoidance goals are defined as focusing on avoiding normative incompetence. Performance-avoidance goals are thought to be driven by a fear of failure motive, which prompts individuals to focus on the possibility of failure. Therefore, they adopt performance-avoidance goals in order to prevent failure from occurring. Finally, performance-approach goals are defined as focusing on achieving normative competence. Unlike mastery and performance-avoidance goals, performance-approach goals are not thought to be driven by a single achievement motive; they can result from either an underlying need for achievement or a fear of failure motive. The need for achievement may drive individuals to set goals of achieving competence relative to their peers. Therefore, they may engage in a task for the sake of competing against others to prove their ability. In contrast, individuals may also set performance-approach goals if they are

motivated by a fear of failure. In this case, they would be motivated to strive for success because achieving success would simultaneously prevent them from experiencing failure.

The findings of the few studies that have been conducted suggest that perfectionism has strong motivational components. For example, studies have found perfectionism to be related to goal committment (Flett, Sawatzky, & Hewitt, 1995), attributions for success and failure (Flett, Hewitt, Blankstein, & Pickering, 1998), selfefficacy (Hart, Gilner, Handal, & Gfeller, 1998), and intrinsic and extrinsic motivation (Mills & Blankstein, 2000). To date, however, no studies have examined the relationship between perfectionism and achievement motivation, specifically the type of goals individuals set for themselves. High levels of different types of perfectionism may influence individuals' achievement motives, consequently driving whether they set mastery, performance-approach, or performance-avoidance goals. For example, since individuals with high levels of self-oriented perfectionism impose high standards on themselves and evaluate their performance against these standards (Hewitt & Flett, 1991), they may be motivated by an underlying need for achievement. Since self-oriented perfectionists do not measure their achievement in comparison to others, they may be more likely to adopt mastery rather than performance goals. Socially prescribed perfectionists, on the other hand, believe that others establish and hold high standards of which they are expected to meet (Hewitt & Flett). Since they believe their self-worth is contingent upon meeting these standards, these individuals may be motivated by a fear of failure and consequently be more likely to adopt performance-avoidant or performanceapproach goals. In both cases, these individuals would be less interested in attaining task mastery than they would preserving their self-worth by avoiding normative incompetence or failure. In order to more closely examine these theories, additional studies are needed investigating perfectionism within the context of Elliot's (1999) model of achievement motivation.

Perfectionism and Causal Attributions

In addition to differences in setting achievement goals, self-oriented, and sociallyprescribed perfectionists may also differ on the attributions they give for their successes and failures. To date, only one study was found that examined the relationship between perfectionism and attributions. Flett, Hewitt, Blankstein, and Pickering (1998) investigated this relationship; however, they only assessed attributions on the following dimensions: internal (effort and ability) and external (contextual factors and luck), rather than the three dimensions of stability, locus of control, and controllability outlined by Weiner (1994). Although the researchers found no correlation between types of attributions and self- and other-oriented perfectionism, they did find that socially prescribed perfectionism was related to a learned-helplessness pattern of attributions. Individuals classified as socially prescribed perfectionists attributed both positive and negative outcomes to external factors, demonstrating a perceived lack of control and a tendency to blame others for the outcome of events. In order to further understand the relationship between perfectionism and attributional style, more research needs to be completed that investigates the multidimensional facets of attributions, as highlighted Weiner.

Perfectionism and Gifted Individuals

A number of research studies have been completed examining perfectionism within gifted students on various dimensions. These studies have explored a variety of issues, including how perfectionism may change across stages of development; the extent to which it is an unhealthy or healthy trait for gifted students; and comparisons of perfectionism among gifted and non-identified populations.

In a cross-sectional study of elementary through college age gifted females, Kline and Short (1991) examined changes in social and emotional well being across different stages of development: early elementary, middle school, and high school/college. Results indicated that perfectionism, as well as feelings of hopelessness and discouragement, increased with age whereas feelings of positive self-regard and self-confidence decreased with age. The authors contributed their findings to be the result of conflicts between gifted females' psychological needs and society's gender-role expectations.

Schuler (2000) also examined the incidence of perfectionism among a gifted population of rural, middle school students. She found that 87.5% of the gifted students were perfectionistic, as indicated by their scores on the *Goals and Work Habits Inventory*. The majority of these students (58%) were classified as healthy perfectionists, and 29.5% were classified as unhealthy perfectionists. Qualitative interviews with the healthy perfectionists suggested that these students viewed order and organization as critical to achieving their goals. Interviews with the unhealthy perfectionistic students indicated that their achievement was limited by their fixation on mistakes. They reported experiencing a constant state of anxiety. The findings of Schuler's study again support the hypothesis that perfectionism is a two-dimensional construct with healthy and non-healthy forms leading to differences in psychological well-being.

Studies have also compared the incidence of perfectionism in gifted to non-gifted populations. The results of some of these studies suggest perfectionism is more common in gifted individuals. For example, LoCicero & Ashby (2000) found a significant difference in perfectionism between gifted and non-gifted students in a rural middle school. Overall, the researchers found that the gifted students were more perfectionistic than the non-gifted students. Specifically, gifted students were found to score higher on measures of adaptive perfectionism and lower on measures of maladaptive perfectionism than non-identified students.

LoCicero and Ashby's (2000) pattern of results does not offer support for the belief that gifted students experience distress or maladjustment from their higher levels of perfectionism. The findings of other studies, however, do support this belief, suggesting that gifted students experience higher levels of maladjustment as a result of their perfectionism. For example, Roberts and Lovett (1994) found that when gifted adolescents failed at an academic task they demonstrated greater degrees of self-oriented perfectionism, irrational beliefs, and negative affective and physiological stress reactions than non-gifted students. In another study, Bransky (1989) found a relationship between perfection in school and unreasonably high levels of self-expectations, an effort rather than ability attribution for success, and feelings of shame and guilt when experiencing failure after applying effort to succeed.

Other researchers have not found greater incidence of perfectionism in gifted compared to non-gifted individuals. In a study of sixth grade students, Parker & Mills (1996) found no differences in perfectionism between the gifted and non-gifted students. The authors suggested the same characteristics may be labeled differently according to the ability level of the child. A less able student holding high standards for himself may be labeled as conscientious or responsible by his teachers in contrast to an identified gifted student who may be labeled perfectionistic for exhibiting the same behaviors. This may be a result of the expectation that dysfunctional perfectionism is common within the gifted population.

The research reviewed above indicates mixed results in studies examining perfectionism in gifted students. Some studies found high incidences of perfectionism in gifted students, with data indicating that they are more likely to exhibit psychological distress as a result of their perfectionism. In contrast, other literature suggests perfectionism in gifted individuals is not associated with increased levels of psychological distress, and in fact, may not be more prevalent in a gifted population compared to a nonidentified population. Such a mixed pattern of findings may be the result of methodological inconsistencies including differences in the measurement of perfectionism and psychological well-being as well as different characteristics of the populations under study including age, operational definition of giftedness, and the school environment. In order to gain a better understanding of the incidence and nature of perfectionism in gifted students, more studies need to be completed attending to these methodological issues.

The research reviewed in this chapter highlights relationships between perfectionism and parenting factors, achievement motivation, and giftedness. The present study was designed to extend this body of research by exploring the interrelationships among these constructs in order to gain a better understanding of how gifted college students perceive the development of their perfectionism and how it influences their achievement motivation, thoughts, and behaviors.

CHAPTER 3

METHODS

Theoretical Framework

Constructionism, an epistemological stance, most closely approximates my view of the world and has guided my approach to this study. Social constructionism holds that human reality is constructed as individuals and the social world interact with each other (Berger & Luckmann, 1966). Because human beings engage with objects in order to construct meaning, many different ways of making sense of reality are possible, and consequently, no one true or valid interpretation exists. These different ways of understanding reality are passed on from generation to generation. As a result, the meanings of objects often precede the individual, as they were previously constructed by social and conventional institutions (Fish, 1990). Berger and Luckmann (1966) elaborated: "The same body of knowledge is transmitted to the next generation. It is learned as objective truth in the course of socialization and thus internalized as subjective reality" (p. 67). Berger and Luckmann noted that reality in turn has power to shape the individual, influencing their perceptions of reality and consequently their thoughts and behaviors. The transmission of knowledge through culture, therefore, enables individuals to perceive meaning; however, as Crotty (1998) noted, it may also inhibit meaning by predisposing individuals to ignore certain aspects of the world.

My theoretical perspective, symbolic interaction, arises out of the constructionism epistemology. This perspective is termed as such in reference to the symbols – language and other symbolic tools – human beings share and through which they communicate. It is referred to as an interaction because the researcher attempts to take on the role of

participant in order to better understand his or her perspective. Blumer (1969) outlined three basic tenets of symbolic interactionism as follows:

- human beings act toward things on the basis of the meanings that these things have for them.
- the meaning of such things is derived from, and arises out of, the social interaction that one has with one's fellows
- these meanings are handled in, and modified through, an interpretive process used by the person in dealing with the things he encounters.

Working in a symbolic interactionist perspective, the researcher discusses meaning in terms of the subjective meaning the participants give to their actions. While conducting the study, the researcher focuses primarily on the participants' views of actions, objects, and society with the goal of seeing the situation or event from the participants' perspective. With this goal, researchers must take care not to impose their own meaning onto to the situation or experience when analyzing data. Rather, they must attempt to take on the point of the view of the participants, so they can understand the world in terms of the participants' perspectives (Crotty, 1998).

The research process I followed for my dissertation reflects my epistemological stance and theoretical perspective. I purposely designed the interview guide to be open and flexible with the tenets of symbolic interactionism in mind; I wanted to refrain from imposing my own organization and thoughts about the topic into the interviews. One effective way I found to avoid this problem was to keep the interview flexible by asking a few, overarching questions that tapped into the aspects of the topic under study. This process granted my participants the freedom to put their own order and structure on the topics and in turn allowed me to more easily adopt their perspective in the interpretation process. My interview guide is provided in Appendix A.

Finally, in addition to informing the design of my study, my constructionist view of the world also significantly influenced how I have presented my findings. Coming from a constructionist viewpoint, I am sensitive to the notion that the meaning ascribed to a phenomenon is historically and culturally mediated. Consequently, interpretations of the same phenomenon may vary during different times and in different places. As a result, I was careful to keep these factors in mind as I attempted to generalize my findings. The themes I uncovered regarding the relationships among familial influences, perfectionism, and achievement motivation may not be the same for gifted college students across the world, in different parts of the country, or even at different universities within the same state. As I processed through the implications of my study for the field of gifted education, this realization shaped my thinking and the discussion of my findings.

Methodology

Participants

The participants in this study were 12 first-year students in the University of Georgia's Honors Program. Honors students at the University of Georgia have an average SAT score of 1410, and high school GPA of 4.02 (note: number is greater than 4.0 as a result of the advanced placement courses taken). In addition, each of the participants in this study were also identified gifted during elementary school.

A nonprobability sampling procedure, criterion purposeful sampling, was used to select participants for this study. Nonprobability sampling procedures are used when the researcher's purpose is not to collect data that will answer quantitative questions such as "how much" or "how often" but will instead address qualitative problems such as discovering what occurs, the relationships between occurrences, and the resulting implications (Honigmann, 1982). Purposeful sampling allows the researcher to select "information-rich" cases that will offer the greatest contribution to understanding the issues central to the research question (Patton, 1990). Criterion sampling, a strategy of purposeful sampling, was used to identify participants in the present study. This strategy allowed for the selection of cases that each met a predetermined set of criteria necessary to investigate the research questions (Patton, 1990). In the present study, the criteria used

for participant selection were: 1) high ability, defined as inclusion into a university honors program as a result of ACT/SAT achievement test scores and high school GPA; 2) firstyear students; and 3) perfectionistic tendencies, as defined by a high score on either the socially prescribed or self-oriented subscales of the Hewitt and Flett (1991) *Multidimensional Perfectionism Scale*. This method of purposeful selection was appropriate for this study, since it yielded participants whose characteristics match the criteria (high ability, first-year students, and self-oriented or socially prescribed perfectionistic tendencies) necessary to examine the research questions.

To select my participants, the *MPS* was administered to groups of first-year honors students. First-year honors students were each assigned in groups of 10-15 to an upperclass honors student who served as their "Peer Advisor." Peer Advisors met with their first-year students weekly. The Peer Advisors' supervisor, a graduate assistant, arranged for me to meet with all of the Peer Advisors to explain my study and elicit their assistance in administering the *MPS* to their first-year students. 290 out of a total population of 405 first-year students completed the *MPS*. In addition, participants were also given the *Relationship Questionnaire* (Bartholomew & Horowitz, 1991), the *Achievement Goal Scale* (Elliot, 1999), and a parenting style questionnaire. Demographic information was also obtained from each of the participants, including birth order, birth rank, mother's and father's education level and occupations, SAT scores, ethnicity, and residency. These questionnaires and demographic information sheet are included in Appendix B.

All of the *MPS* questionnaires were scored, and participants with the highest scores on each of the self-oriented and socially prescribed subscales were chosen to serve as my sample. It is important to note that the *MPS* subscales are not entirely independent; intercorrelations among the subscales range from .25 to .40 (Hewitt & Flett, 1991). Because my research questions focused on comparing differences in perceptions of

individuals scoring high on either the self-oriented or socially prescribed subscales, I took care to select participants who had a great discrepancy between their scores on the subscales with only one high score. A total of twelve participants, six with high self-oriented and six with high socially prescribed perfectionism scores were selected for the study. One of the participants was eliminated from the data analysis due to his reluctant participation during the interview experience. He refused to answer several important questions in the interview guide, the majority of which focused on his family experiences. Following the interview, he expressed his discomfort that the interview had been recorded (despite the fact that this procedure was explained to him prior to the interview, and he had given his consent). He was also uncomfortable with the notion of his story being published in a research journal article, even though he was assured that he would only be referred to by his pseudonym, and any other identifying information would be altered or removed from the text. Because I sensed the quality of the interview data was weakened by his distrust of the research experience, I decided not to include his perspective in the analysis.

Methods of Data Collection

The primary source of data collection used in this study was in-depth, semistructured interviews. In-depth interviews involve asking open-ended questions designed for participants to reconstruct their experiences and to explore their meaning (Seidman, 1998). In a semi-structured format, the interviewer begins with an interview guide that specifies a predefined range of topics to be addressed within the context of the interview; however, the interview format remains flexible, allowing the participant to initiate new topics or expand on topics salient to him or her (Payne, 1999). Methodologists have identified several advantages to using interview guides. The use of an interview guide allows the participant to lead the discussion as the interviewer poses open-ended questions that allow the participant to respond with extensive narratives (Rossman & Rallis, 1998). Patton (1990) contended that the interview guide is beneficial because it allows the interviewer the freedom to word questions spontaneously, establish a conversational style, and build a conversation within particular subject areas, all with a predetermined focus. In addition, McCracken (1988) noted that an interview guide assists the interviewer in controlling her subjectivities by including scheduled questions that may otherwise be overlooked. Finally, McCracken also emphasized that interview guides are useful because they allow interviewers to focus their attention completely on the participant, rather than splitting their attention between the participant and the larger structure and objectives of the interview.

The interview guide I used for my study consisted of open-ended, broad questions that were designed to open up, rather than constrain the participants' responses. For example, one question included, "Think of a situation in which you did not perform as well as you expected and tell me about it in as much detail as possible." I also borrowed a technique from phenomenological interviewing that involved tapping into the participant's subjective experience rather than limiting the focus to the external structure of the experience (Moustakas, 1994). For example, after asking my participants to describe a situation in which they experienced academic failure, I asked them the follow-up question, "What was that experience like for you?" Follow-up questions such as these provided my participants with the opportunity to reconstruct their experiences according to their own sense of what was important rather than being led by my interpretation (Seidman, 1998). Consistent with Seidman's recommendations, I designed these questions so they followed directly from what the participant said, asking for clarification, concrete details, and stories. Participants were interviewed for one and a half hours each. Additional follow-up interviews and e-mail correspondence took place when necessary to thoroughly complete data collection. Following the final interview, I e-mailed my participants, providing them the opportunity to share their final reflections on the research questions, now that data

collected has finished. These final reflections were treated as additional data and coded and analyzed in addition to the interviews. All interviews were recorded and transcribed verbatim. An audit trail of data and data analysis consisting of tape recorded interviews, interview transcripts, e-mail correspondence, and researcher notes has been preserved. In addition to the interviews, the information collected from the survey questionnaires also served as other sources of data and were incorporated to further my inductive analysis. *Control of Researcher Bias*

As I mentioned in the beginning of my dissertation, I have a personal interest in the topic of perfectionism based on my own experiences with perfectionistic tendencies. I have taken Hewitt and Flett's (1991) *MPS* and scored highly on the measure of self-oriented perfectionism. I recognize the potential for researcher bias that this factor introduces. Sharing a common group identity with the participants in my research study introduces the potential bias of infusing my own thoughts, feelings, and interpretations resulting from my personal experience into the data analysis.

To control for this potential bias, I have completed member checks with each of my participants. Member checks are defined as the opportunity for participants to review data, analytic categories, interpretations, and conclusions to verify that the researcher has constructed an adequate representation and interpretation of the participants' experiences (Lincoln & Guba, 1985). In the present study, the member checks consisted of sending interview transcripts and a draft of the analysis and interpretations via electronic mail to all of the participants. Along with the attached manuscript, I also included a note to the participants explaining the purpose of the member check and invited them to provide additional material if they felt my interpretation was weak or inaccurate in any area. Upon receiving their suggestions, I made the necessary changes. In all cases, these changes included elaborating on specific details. No participants felt that the analysis misrepresented them. By completing these member checks and encouraging my

participants to send additional data as necessary, I feel I have taken appropriate steps to minimize the effect of potential bias on the analysis and interpretations of the data. *Methods of Data Analysis*

To analyze my data I used procedures of inductive data analysis. This type of data analysis has been described in a variety of ways by multiple methodologists (e.g. Bogdan & Biklen, 1998; Coffey & Atkinson, 1996; Miles & Huberman, 1994). Although the specific strategies and techniques described vary across methodologists, they each refer to inductive analysis as a process of data management by coding, categorizing into themes, and drawing relationships among themes.

Approaches to inductive data analysis begin with the researcher reading and rereading the data to familiarize herself with it. During this process, the researcher codes the data with words and phrases that mark regularities and emerging patterns, as well as topics covered in the data (Bogdan & Biklen, 1998). This method of coding reduces the data by allowing the researcher to organize, manage, and retrieve meaningful components (Coffey & Atkinson, 1996). However, it also functions as a tool to "open up the data," allowing the reader to conceptualize the data, raise questions of it, and generate ideas regarding the relationships among the data (Strauss, 1987). Coffey and Atkinson (1996) succinctly captured the multiple functions involved in coding by saying, "Coding generally is used to break up and segment the data into simpler, general categories and is used to expand and tease out the data, in order to formulate new questions and levels of interpretation" (p. 30).

Using inductive analysis the researcher then examines codes, grouping them together into categories that reflect broader, more overarching concepts. After coding and categorizing the data, the researcher moves to a process of interpretation. Although informative at all stages of analysis, the researcher's interpretive or theoretical frame is central to the process of identifying relationships among codes (Wolcott, 1994). Dey

(1993) encouraged researchers to accomplish this by exploring the data through retrieving codes, breaking them into subcategories, and connecting them together. In this process, methodologists caution researchers not to ignore pieces of data that do not fit neatly into categories; these exceptions and negative instances are important to consider when interpreting the findings (Bogdan & Biklen, 1998; Coffey & Atkinson, 1996). Discovering the linkages and relationships among categories is the heart of inductive analysis, for within the interpretation of these linkages and relationships, researchers are able to move toward a process of generalization and find conceptual and theoretical coherence within their data (Coffey & Atkinson, 1996).

As suggested by Bogdan and Biklen (1998) I combed through the data, writing words and phrases that represented topics and emerging patterns, which served as my coding categories. My codes varied in content, including setting/context, definition of situation, perspectives of the participant, and relationship/social structure codes. I also followed Coffey and Atkinson's (1996) suggestion to make broad, easily identifiable codes, and then smaller codes that could be subsumed under the umbrella of the broader, more inclusive codes.

To facilitate my interpretation of the data, I made data displays for each of the participants. The data displays I created are referred to by Miles and Huberman (1994) as causal networks which consist of the most important independent and dependent variables in a study and of the relationships among them. I took what Miles and Huberman labeled as an inductive approach to creating my causal networks. In this approach, they described the researcher as discovering recurrent phenomena and recurrent relationships among the phenomena. The display of the findings emerges inductively. The concepts and links between them are labeled by the researcher and clustered into probable causes and their effects. Miles and Huberman contended that creating causal networks is useful for the

researcher since they "support, even force analytic activity" (p. 156). One example of my causal networks is included in Appendix C.

In addition to creating causal networks for the data for each of my participants, I also created an over-arching network for each of the two groups of perfectionists. Miles and Huberman (1994) referred to this procedure as creating a cross-case causal network, which they defined as a comparative analysis of all cases in a sample, using variables estimated to be the most influential in accounting for the outcome or criterion. The researcher creates the network by examining the outcomes in each case and examining the stream of variables that led to or determined those outcomes. Miles and Huberman explained that streams of variables that are similar across cases or that differ consistently from other streams are extracted and interpreted. According to the methodologists, "the basic principle is that of developing one or more meta-networks that respect the individual case networks from which they have been derived" (p. 228). The two cross-case causal networks I created for my findings are included in Chapter 4.

This process of creating data displays was beneficial to me, for it not only allowed me to see the similarities among the participants, it also allowed me to more easily identify outliers, or participants whose themes were inconsistent with the rest of the participants in that group. Upon identifying these outliers, I contacted these participants for follow-up interviews or questions via e-mail to ensure that I had accurately interpreted their thinking regarding the topic. These follow-up responses allowed me to further understand their perceptions and helped me figure out how their experiences could extend my interpretation of the research findings.

My overall approach to inductive analysis was a useful data analysis approach for my study since it involved logical and systematic methods of managing data through reduction, organization, and discovering relationships. This process facilitated my exploration of content (Coffey & Atkinson, 1996), allowing me to draw out meaningful components of the data to see how they related to one another and how they fit into the overall scheme of my research project. In addition, the process of attending to negative instances when categorizing also allowed me the opportunity to refine my thinking by bringing in theory to generate a more detailed and informative interpretation. The following chapter provides a detailed description of the findings that were constructed as a result of my data collection and analysis procedures.

CHAPTER 4

FINDINGS

Description of Participants

Eleven first-year Honors Program students participated in the study. Five of these students were selected for their high levels of socially prescribed perfectionism, and six were selected for their high levels of self-oriented perfectionism, as indicated by their scores on the *Multidimensional Perfectionism Scale* (Hewitt & Flett, 1991). For the socially prescribed perfectionism group, the average score on this subscale was 77 out of a possible 105. The average score for the entire sample of 290 first-year Honors students was 52, which is comparable to the mean scores of college students noted by Hewitt and Flett (1991) in their description of the instrument. They reported that in their norming sample of college students, the standard deviation for the socially prescribed subscale was 13.85. This indicates the five participants in the present study had scores on the socially prescribed subscale that were over one and a half standard deviations above the mean.

For the self-oriented perfectionism group, the average score on the self-oriented subscale was 95 out of a possible 105. The average score for the entire sample of first-year Honors students was 70, which is also comparable to the mean scores of college students in the norming data on the instrument. The standard deviation for the self-oriented scale was 14.95, indicating that the six participants in the study had scores on the self-oriented subscales that were almost two standard deviations above the mean.

The participants in the present study all grew up in the same state in which they attended college. With the exception of one Asian male, all of the other participants were Caucasian. All were identified as gifted during elementary school. The SAT scores of the participants ranged from 1300 to 1520 and were representative of the SAT scores in the

entire Honors Program population. Four of the socially prescribed and three of the selforiented perfectionists were first born children. Their majors included the following: political science, journalism, art, English, history, pre-med, exercise science, psychology, and education. All of the socially prescribed perfectionists had parents with college or graduate level degrees. Three of the self-oriented perfectionists had parents with high school degrees, and three had parents with college or graduate level degrees.

Findings: Socially Prescribed Perfectionism

The data for the participants scoring high on the socially prescribed perfectionism scale indicated several major themes related to the development of their perfectionism and its implications for their achievement. The participants identified lack of failure in their early academic experiences as contributing to the development of their perfectionistic tendencies. Their track record of academic successes influenced them to adopt an identity as intelligent. Preserving this identity was critical to maintaining their self-worth. More salient themes to emerge, however, involved influences from their parents, including parental perfectionism, an authoritarian parenting style, and stringent expectations. The participants identified social and emotional problems relating to their self-worth directly to their achievements. Collectively, these influences affected achievement motivation in negative ways. These students developed a fear of failure and fear of disappointing others, which influenced their thoughts and behaviors relating to academic achievement. Figure One provides an integrative diagram of these themes, illustrating the relationships among the categories.

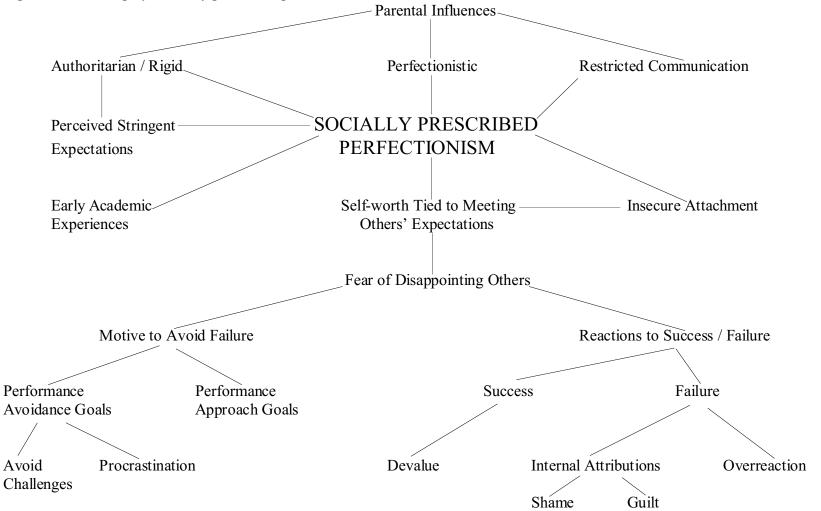


Figure 1. Data display: Socially prescribed perfectionism.

Parental Influences

Perfectionistic parents. Several of the participants described their parents as being highly perfectionistic, providing illustrative examples. For example, Sarah described her father's role as the executor of her grandfather's will. In this capacity he was responsible for ensuring that all of her grandfather's possessions were divided equally among the five children. Sarah's father took this task quite seriously, having each and every item in her grandfather's house appraised and then labeled with bar codes that indicated the value of the item. His siblings were then able to "shop" for their inheritance, during which time Sarah's father scanned their items and made sure everyone's inheritance was exactly equal.

Joyce also discussed her father's perfectionistic tendencies as they related to his career. As a newspaper columnist Joyce's father often worked fourteen hour days. Joyce said her father's tendency to work beyond deadlines was not because he would be rewarded for his efforts but rather because he liked to work until everything was completed to his satisfaction. Often this meant working Sundays in addition to overtime during the week just so he could perfect his column without interruption.

The participants' parents also directed their perfectionism toward their family, demanding that their children be perfect, as their children were a reflection of themselves. Dave described this attitude within his mother. He noted that she was the primary caregiver for the children, staying home to care for them full-time. Dave theorized that she demanded perfection from her children because it reflected on her ability as a parent. He believed his mom had the attitude that "since I was there, and I raised them, and I did a good job, they should be [perfect]." In Dave's family, this translated to perfect academic grades, performance in sports, and behavior.

Authoritarian/rigid parenting. An authoritarian, rigid parenting style emerged as one of the most prominent findings among the participants scoring highly on socially prescribed perfectionism. Four out of five of the participants described growing up in a

household with one or both parents exhibiting an authoritarian approach to parenting. This approach included emphasizing obedience, trying to control their children's behaviors with punitive threats, and restricting communication of love and support. This style of parenting was evident by the methods in which the parents interacted with their children.

Sarah described her father's authoritarian approach as a refusal to discuss any rules or expectations with her. When he made up his mind about how something was to be done or his expectations for her, he left no room for discussion; his was the final word. Sarah illustrated this attitude by saying,

If my father says, 'That's unacceptable,' that means that thing is going to change right then, right now, or else something big is going to happen. And if he thinks something is unacceptable, then it is just NOT okay at all.

When asked to give an example of a behavior her father considered to be unacceptable, Sarah described a family situation in which her teenage cousin became pregnant out of wedlock. According to Sarah, her father was so outraged "he was red in the face and could barely speak." She said, "He told me if I ever had sex out of wedlock and got pregnant then I would not be part of that family anymore. He would disown me literally." Growing up, it never occurred to Sarah that she could question her father's expectations and rules. She just focused on living up to them and not disappointing him.

Like Sarah, Joyce also grew up with an authoritarian father. Although her father understood that Joyce may have differing opinions from his, she said, "he lets me know in no uncertain terms that he not only disagrees with me but thinks I'm doing myself a disservice by holding onto them." Joyce described her father as expecting strict obedience from her. When he made a decision, Joyce explained that, "there was no arguing. My father's say was the final word on the matter." Because his word was "law," Joyce said her father had a strong influence on her academically. If he thought she needed to be working harder in a class and expressed this opinion, she would "just bite the bullet and do it," not wanting to disappoint him.

Unlike Sarah and Joyce, in Leigh's household her mother took on the role of the authoritarian parent. Whenever Leigh would fall short of her mother's expectations, her mother was quick to punish her, never willing to listen to Leigh's explanations for the behavior. Leigh described her mother's strict attitude toward academics. She said, "If I didn't get an A, I would be punished or just have privileges denied until I could make that grade." Unlike Sarah, Leigh expressed her frustrations with these expectations. In junior high, she grew fed up with her mother's academic expectations, saying, "I'm tired of this. I have friends who get paid when they get As, and I just get punished if I don't." Her father, in contrast to her mother, expressed far more concern about understanding the rationale behind Leigh's behaviors rather than immediately punishing her. She described her mother and father's different approaches to her behavior:

My mom has a short temper. My dad is always a lot more understanding and really concerned. Whereas my mom would just be upset with me, my dad is concerned, like, is this a deeper problem? In junior high when I was doing really poorly, my mom was just angry [and said] 'Let's punish her.' My dad was like, 'Is she depressed? Is there something going on?'

Despite their differences in parenting styles, Leigh's mother was the dominant disciplinarian, and therefore Leigh was frequently punished – "no phone, no music, no guitar" – for not meeting her expectations.

Dave also described his experiences growing up with a set of authoritarian parents. Although he described both his mother and father as adopting authoritarian approaches to parenting, Dave's memories of his father's behavior toward him were far sharper. Borrowing a line from a favorite movie, he described his father as "a good man, but a hard man." When Dave was a child, his father relied on physically punishing Dave for misbehaving, modeling what he had experienced in his own childhood. Dave explained that his father drank too much and sometimes lost control of his temper for irrational reasons. He vividly recalled experiences growing up where his father lost his temper. For example, he described his experiences with his father as coach of his little league baseball team, saying,

When I was a kid, he coached my [baseball] team, and if I messed up, he would really tell me. He would yell at me from the dugout and stuff. I didn't yell back at

him. I never yelled back at him until I was 14 or so. He was too intimidating. Throughout his entire childhood, Dave remained compliant to his father's demands, motivated by a fear of the consequences should he resist. Eventually, as Dave entered high school, he began to feel more comfortable standing up to his father, no longer fearing him as he caught up to his father's physical stature.

Only one participant in the socially prescribed perfectionism group, Paul, indicated that his parents were not authoritarian in their approach to parenting. Instead, they were more supportive of their son and less rigid with their expectations. Despite their authoritative style, however, Paul still adopted a similar interaction style with his parents as the rest of the socially prescribed perfectionists described below, which included restrictive communication and a fear of disappointing them in failing to achieve perfection.

Restricted communication. All of the participants described difficulty communicating with their parents. Whether it was academics or social matters, the participants rarely felt comfortable reaching out to their parents for support. Several of the participants indicated that this was the result of their parents' authoritarian style. They were afraid to share difficulties in their lives, for as Leigh said, "it was pointless to even try." They felt their parents would not be willing to listen to them and to provide the supportive, non-judgmental comments they needed to hear. Joyce described her dislike at sharing her failures with her father because of his tendency to hold a grudge against her. She said,

My dad is more like me. If there is something wrong, we are not very good at articulating it, and we are not good at forgiving. So, if I've done things that make him mad, it usually holds over for awhile until it blows up into one big thing, and then we are okay, but the blowing up period is not very pleasant.

Able to predict her father's reactions, Joyce selectively withheld academic disappointments from her father in order to avoid confrontation.

Leigh likewise hesitated before sharing her academic disappointments with her mother. Since she knew her mother tended to automatically blame Leigh for her academic disappointments, she avoided telling her altogether, feeling as though, "I cut myself down about it enough that I don't need someone else joining in on it." Leigh indicated that she was especially reluctant to share experiences where she has failed after putting forth her best effort. Leigh explained that since she thought she still would not have met her mother's expectations despite her effort, "it made me less likely and less willing to share that."

While most of the participants were willing to share their successes with their parents, Dave expressed his preference for no communication at all about his academic performance, successes or failures, with his parents. He explained that he avoided telling them about his successes, because

Then I have to tell them if I do badly on something, too. If you only call them and tell them when you are doing well, and then you bring home a bad grade, they are like, 'How come you got this bad grade? You called us and told us you had all these As. Were you lying to us?'

As his comments indicate, it was easier for Dave not to share any of his experiences than to justify his lack of performance and confront his parents' anger and disappointment. Even though Paul did not worry about angering his parents or not meeting their expectations when he failed academically, he still was unwilling to share his failures with them. According to Paul, "I share most of my successes with them, but I rarely share failures with them, particularly academic failures. I think that if I revealed to them my failures, my facade of perfectionism might be cracked." Paul's reluctance to communicate his failures with his parents seems to stem more from his desire to protect his image as a perfect person than it does a fear of their punitive response. In his words, "I was never in fear of what they would do to me [if I failed]; I was only in fear of what they would think of me."

Stringent Expectations

According to the definition of socially prescribed perfectionism (Hewitt & Flett, 1991), these individuals perceive that others have high expectations for them to meet. Therefore, they are motivated to achieve perfection in order to meet these standards. Most frequently, the participants indicated that they perceived their parents as setting the high expectations for their achievement. In addition to parents, however, they also felt their teachers and classmates held high expectations for them as well, both in the academic as well as the social realm. The following examples depict these perceived expectations from the participants' parents, peers, and teachers.

Joyce described the atmosphere in her household as being focused on academics. Although her parents encouraged extracurriculars, "they made it very, very clear that you don't do any of those if your grades are not up to par." Joyce viewed her father as setting high expectations for her academic success. Aware of his daughter's abilities and a strong believer in the power of an education, his standards for Joyce's academic performance were extremely high. Because Joyce knew her father's expectations, she dreaded telling him when she slipped below them because "I really hate letting him down. I feel guilty when I do." Leigh readily commented on her parents' expectations for Leigh's achievement. Leigh felt "like my parents didn't appreciate me making As anymore; they always expected it." When Leigh failed to meet these expectations, Leigh perceived that "my mom especially has been really disappointed" and frequently blamed Leigh. For example, in college when Leigh informed her mother she would be receiving a B in her English class, despite the long hours she had logged into preparing for the course and writing her papers, Leigh's mother was still upset. She maintained her standard that an A was the only acceptable grade, despite the difficulty of the course. Leigh felt her mother assumed she was not being truthful in her discussion of the amount of effort she put into the class. She said, "I tell her, but I don't know that she always believes me because she continues to ask why I made this grade."

Like Joyce and Leigh, Sarah also perceived her parents, particularly her father, as having high expectations for her achievement in school. She explained these expectations, saying,

You are always expected to do well in everything that you do. I brought home report cards in high school, and my dad was like, 'You know Sarah, a B is not okay. You need to be making A's all of the time. When I was your age, I was

getting A+'s on everything. Why don't they give you people A+'s anymore? Even now that Sarah has graduated from high school, her father still places high expectations on her to achieve in college, setting a number of rules for her to follow. Describing these expectation for her behavior, Sarah said, "He's made it very clear that boys or drugs or any other kind of substance or having fun is not acceptable in college because my main focus should be studying."

Dave viewed both of his parents as holding high expectations for him, although in different areas. He indicated that his mother "expected my siblings and I to be perfect. She expected me to excel at everything I do and always try my hardest." Unlike the other

participants, when Dave did not meet his mother's expectations, she did not get angry with him and never raised her voice. Instead, she would "tell you in the most rational, calm voice how you have betrayed her trust." His mother's response really bothered Dave, who said, "you know you shouldn't feel guilty about it, but you feel so guilty it's incredible."

Whereas Dave's mother's focused her expectations on his academic achievement, his father focused his solely on his son's athletic performance. Because he was extremely athletic in high school and college, Dave's father expected his son to be dedicated to an extensive workout regime as well. When Dave balked at following such a routine, his father would tend to "blow up" at him verbally.

Similar to the other participants, as a child Dave tried meeting both his mother's and father's high expectations. He put a lot more effort into baseball "to try to please my dad and make him happy." But in middle school and high school, Dave's motivation changed. Although his parents still held stringent expectations for him, he no longer felt as motivated to meet them. Dave attributed his change of thinking to the central role his peers began to play in his life. His need to please others transferred from his parents to his peers as he tried to fit in socially. This led to a lack of concern over academic achievement: "When you get into middle school, it's not cool to have good grades any more, so you quit caring as much." Dave continued to focus on meeting the social expectations of his peers, trying on different identities and engaging in illicit activities in order to secure his popularity. He "tried really hard to fit in with everyone at one time, [and] would do whatever everybody else was doing." He discovered that "no one really cared [about my grades] except my parents" and "I was all rebellious then." Therefore, he quit focusing on achieving academically. As a college student currently, Dave continues to focus on maintaining his social identity, joining a fraternity and devoting time to his new relationships. Although his parents still place high expectations on him, he is better able to cope with them. He described the freedom he feels having moved out of the house and away from their control: "Moving out of my parents' house and not being under their rule [meant I could leave] whenever they started driving me insane, trying to make me do things." Dave no longer feels the need to meet their expectations because he "finally figured out my senior year why they could convince me to do things that I didn't want to because [my mom] was making me feel so guilty about things." Perceiving his mother's behavior as manipulative, Dave resisted his parents' control, saying "I [quit] caring what they thought."

Like Dave, the other participants also highlighted the attention they gave to meeting the perceived expectations of their peers. In contrast to Dave, however, the peer groups of the other participants were also all high achievers in school. As a result, the participants felt an unspoken expectation similar to their parental expectations for academic achievement in order to maintain their status in their peer group. For example, Paul described his high school peer group as consisting of the other students who all took Honors and AP courses. Part of his motivation to achieve was the pressure he felt to maintain his status as highly intellectual. He said,

Since the 6th grade, I have been tagged as 'the smart kid,' and to fail to meet the expectations others had for 'the smart kid,' I would lose that distinction, which was really the only thing I felt I had to offer in the microcosm of society in middle and high school. I had to fill my role as 'the smart kid,' or else I would no longer be part of the social circle at school.

Like Paul, the other participants also discussed the influence of their high achieving peer group on their perfectionism in school. They had also established an identity for themselves within their peer groups as smart. Therefore, they felt pressured to maintain this identity, for as Joyce said, "What else did I have?" In addition to parents and peers, the participants also expressed the pressure they felt to meet the high expectations of their teachers. Leigh said that while initially she enjoyed the pride her parents and teachers had in her successes, their expectations eventually became anxiety provoking. Leigh feared that if she did not meet them, no one would be there to support her. She described her feelings:

Their pride [put] me up onto this pedestal, and if I would slip just a little bit,

instead of everyone being willing to catch me and say, 'it's alright, we will help

you,' [their reaction was], 'oh, you are not up there anymore.

Perceiving a lack of support for her failures, Leigh's anxieties toward meeting expectations continued to grow as she commented, "I am afraid of letting everyone down and not living up to my potential."

Sarah also described feeling overwhelmed by attempting to meet the standards of not only her parents, but her teachers as well. She described the aftermath of winning an academic award:

Everyone in the school was like, 'Wow, Sarah, you're smart.' Then all the teachers were like, 'you need to be taking these courses. You are smart enough to be doing this. This is where you should be performing.' So, you've got their expectations, and then you've got your parental expectations, and it just all kind of forms together into one mass.

Despite feeling overwhelmed by the task of meeting these high expectations, Sarah never allowed herself any excuses for not meeting them, for according to her, "there should be no limits that you can set on yourself. You should always be doing very, very well and always exceeding other people's expectations and exceeding your own." Sarah believed that "if you are not doing something perfect or above perfect, than you are doing something wrong." When asked if there would ever be a time when it would be acceptable to fall short of meeting others' expectations, Sarah acknowledged that perhaps if one were physically sick, but beyond that, "there is no excuse for it." *Insecure Attachment*

The data above suggest that the participants perceived most of the significant people in their lives as having high expectations for their success, including their parents, their peer groups at school, and their teachers. Perhaps because they felt such high expectations for their success from others, they experienced difficulty in their relationships, as evidenced by their description of their relationship insecurities. Each of the participants took Bartholomew and Horowitz's (1991) *Relationship Questionnaire* which categorizes individuals' adult attachment style as secure or one of three types of insecure. Based on this measure, four out of five of the participants indicated that they have insecure styles of attachment to others. They elaborated on their relationship insecurities and how they interacted with their perfectionism.

Paul's response to the *Relationship Questionnaire* indicated a dismissing form of insecure attachment which describes individuals as uncomfortable with close relationships, preferring instead to be self-reliant and not have others depend on them. Paul explained that this description accurately portrayed him. Even as a young child, he said he preferred playing alone rather than with other children. When asked why he resists close relationships, Paul said he thought it resulted from not having confidence in other people. He said, "because I cannot control their actions, I am perhaps afraid of getting hurt." Rather than risk that possibility, Paul shied away from developing close relationships. He also suggested that his perfectionism has "been a roadblock in developing very close relationships with others." Because others might not "do it right," he did not have the confidence in sharing responsibilities with them, preferring instead to work alone if given the opportunity.

Joyce, who also indicated a dismissing insecure style of attachment on the *Relationship Questionnaire*, shared feelings similar to Paul's regarding working with others on projects. Like Paul, she preferred working on academic assignments alone, because "I don't like to be responsible for the success of others, and neither do I want to be the cause of their failure." In terms of her personal relationships, Joyce said she resisted becoming emotionally close to others because she did not want to disappoint others, nor did she want to be disappointed herself. Joyce explained that her insecurity in relationships is related to her need for perfection. She said,

I think my desire to keep emotion at an arm's length is part of my need to have things done right. There is too much room for error in a close relationship and too much at stake for me to be able to treat one lightly. . . To avoid screwing up emotional involvements, I just try not to get too close. I may not get it right, but I'm less likely to get it wrong.

Joyce's comments suggest that her insecure attachment style has resulted from her socially prescribed perfectionism, since her need for things to be perfect blocks her ability to trust others.

Sarah also indicated an insecure attachment style on the *Relationship Questionnaire*. Rather than dismissing close relationships, however, Sarah felt preoccupied with them. Individuals with this type of insecure attachment want to be extremely close to others but frequently find others resist being as close to them. They worry that they value others more than they are valued. Sarah described this description as being an accurate portrayal of her own approach to relationships. She explained that she typically has had problems in her relationships because she felt jealous easily and read far too much into the actions of others. Giving an example from her relationship with her last boyfriend, she said, If we were in the car together, and he didn't say anything for awhile, I would wonder what he was thinking and whether he was mad at me. I would convince myself he didn't like me anymore, and pretty soon I would be thinking that we were going to break up.

Sarah described her need for perfection as negatively influencing her approach to relationships. According to Sarah, the pressure she feels to be perfect extends to her relationships. When in a relationship, she felt that she needed to be a part of "a perfect and always happy couple." As a result, she stifled any feelings of discontent with the relationship that she might be feeling in order to protect the facade of perfection. Sarah realized her attitude may be unhealthy, but her need for perfection seemed to prevent her from changing it. In her last relationship, for example, she admitted she knew it was not healthy and she should end it because she and her partner were too different for the relationship to succeed. She explained that she still wanted to stay with him, saying, "I just felt the need to keep it going on, because if we broke up, I would have failed at something."

Leigh was the only participant to classify her attachment style as secure on the *Relationship Questionnaire*. When interviewed about her relationships, however, Leigh's responses indicated a more insecure style. According to the Relationship Questionnaire, individuals with a secure attachment style find it easy to become emotionally close to others. They do not worry about being alone or having others not accept them. Leigh described a healthy relationship with her current boyfriend consistent with this description. However, her depiction of various relationships with others suggests a more complicated picture with regard to security of attachment. Leigh consistently described her fears of failure as being afraid of disappointing others. She said, "my parents, teachers, everyone was always so proud of me. . . it was stressful because [when I didn't do well] in my mind

it became 'I'm a failure; I'm letting everyone down.'" Leigh's insecurities in her relationships also were evidenced by her reaction to conflict. She said,

I really hate conflict. Anytime someone is yelling or someone is upset, I immediately somehow direct that toward myself. I have to try really hard to think, 'Well, maybe they are just having a really bad day, and I didn't do anything to cause this.'

These comments suggest that Leigh did worry about having others accept her. She may not have been as secure in her relationships with others as she indicated on the *Relationship Questionnaire*.

Identity/Self-worth Tied to Achievement/ Pleasing Others

Another prominent theme running throughout the data for the socially prescribed perfectionists was the tendency to equate their identities and self-worth with pleasing others. Given the high expectations they felt others held for their academic performance, for the majority of the participants, pleasing others was synonymous with doing well in school. As they began to identify themselves based on their achievements, they adopted the belief that their self-worth was contingent upon these achievements. For example, Joyce described academics as being the one area in which she excelled. She defined herself saying, "I am academic. That's my box." Because her identity was connected to her achievements in school, Joyce feared failure, for she thought, "If I can't do this, then what chance do I have at anything else?"

Paul also attributed his self-worth to his performance in school. He described a strong focus on grades throughout middle and high school in order to maintain his identity as "the smart one." He acknowledged that his primary purpose for achieving was to receive recognition from others for his successes. When asked about his academic successes, he indicated that he was happy about them because it gave others the opportunity to see his achievements. Never once did he mention being proud of his

accomplishments because of the amount of effort he placed into his work, because he learned something new, or because he successfully mastered the content of a course. Paul did not express any of those internal feelings of pride. Rather, he explained that he was proud of his successes because they gave others the opportunity to see how intelligent he was, and this recognition was what he needed in order to feel good about himself as a person. For this reason, Paul "lived for honors night" at the end of each high school year where students were awarded for their performance in particular subject areas. Paul loved honors night because "all my peers were there, all of the parents were there, and the teachers were there," allowing everyone to notice his awards.

Paul also acknowledged that his self-worth increased when his peers recognized that he could perform above their level. To explain this, he described his pleasure when his peers would seek his support in writing their English papers. He said,

It made me feel better about myself. Maybe it gave me a sense of superiority. Even though I don't feel comfortable saying that, maybe that's what it was. I feel like I am better than they are because I get to edit their papers. Maybe I have to maintain that 'being smarter than you are' to be revered.

Sarah also described her self-worth as being connected to her achievement. She indicated that her friends all perceived her as a highly intelligent person, and therefore, she felt that if she did not succeed in school, they would not like her as much. She described a voice that ran through her head, saying, "You know, if you don't do well on this, then you are just no good any more," suggesting that her self-esteem depended on how well she did academically.

Leigh discussed doubting her self-worth in times of failure. Doubts would creep into her mind that her academic failures were proof that she was less of a person. For example, Leigh described her reaction to not getting a prestigious fellowship that she applied for in college. Since her boyfriend with similar academic credentials had been awarded the scholarship the year before, Leigh naturally assumed she would earn it as well. When she didn't get the scholarship, Leigh immediately began to doubt her selfworth, saying, "I just felt like maybe I was a bad person. I felt like it was me not being good enough." Leigh did not consider the possibility of any other factors that might have been involved in the decision, such as political factors or perhaps the fact that the winners might have participated in more activities than she had. Instead, she could only assume it was because she was not "as good of a person," continually asking herself, "What's wrong with me?"

Fear of Disappointing Others

The participants' perceptions that others held high expectations for them, coupled with their tendencies to connect self-worth with achievements, led them to describe a strong fear of disappointing others. They feared that if they did not meet the expectations of others, they were letting everyone down, and therefore people would think less of them. Paul acknowledged that this fear served as the primary motivator for his perfectionism. He said,

The thing that drives the perfectionism in me the most is other people. I want to do better, and I would feel bad about myself, but I would feel bad about myself because I would think others thought badly of me. It's all about other people. I think how my teachers, my friends, and to a degree, how my parents think of me is what really drives it.

Paul automatically assumed that his peers, teachers, and parents would think less of him as a person if he were to fail academically. For example, Paul described his fear of making a C in college because of the implications it would have on his future professors' opinions of him. He acknowledged the unlikelihood that his future professors would even know his grades in previous classes, but still he thought, "I would just imagine going into the professor's class, and there could be 300 people, but I would still think, 'he knows who I am, and he knows I got a C, and he's not going to like me." In describing these feelings, Paul acknowledged that his fears were irrational, but despite that admission, he could not allow himself to fully believe it: "I can tell myself many times that my teacher won't hate me if I get a poor grade, but that's not what I will act on." Because he placed his selfworth on the line with each academic endeavor, Paul constantly feared failure and not meeting perceived expectations of others.

Joyce and Leigh also described similar fears of disappointing others. Leigh felt that since "I've always been expected to succeed, and whenever I fall just a little bit short, I feel like I am letting myself down, and I am letting everyone else down." Likewise, Joyce also indicated her discomfort in falling below a standard because she worried that other people's opinions of her "might my damaged by what I've done or what I haven't done or what grade I got." Joyce admitted that she was a harsh self-critic, and because she judged herself harshly, she assumed everyone else did as well. Therefore, it bothered her to think that "anyone would be disappointed in my performance. I know what I am capable of, and once they know what I am capable of, I don't like to disappoint them."

Of all the participants, perhaps Sarah feared disappointing others the most. She described a low point in her life at the end of middle school where she underwent a serious bout of depression and struggled with anorexia. She slipped into a deep depression because she felt that she was disappointing others with her imperfections. When her grades began to fall as a result of her depression, her anxieties worsened. She described fears that would creep up night after night, preventing her from being able to sleep. She said, "My mind was so alive, but not alive in a good way. It was like a whole bunch of clouds of guilt and really bad thoughts [stemming] from letting people down." She felt like she was letting everyone down. Academically, she feared she was disappointing her parents. Physically, she felt as though she were disappointing her peers "by them having to look at me and me not being the perfect person."

So strong was this fear of disappointing others, Sarah lost 75 lbs, slimming down to 115 lbs on her five foot, eight inch frame. When asked if she received support from her parents, teachers, or peers during this time, Sarah indicated that she had not. Her parents ignored her eating disorder altogether, refusing to acknowledge that it was a problem, and only one of her friends recognized her struggle. When her friend finally turned Sarah in to the guidance counselor at school, however, the counselor simply told Sarah she should feel lucky that she could lose weight since the counselor herself struggled unsuccessfully with obesity. When asked if she felt let down by the lack of support from the other people in her life, Sarah looked surprised and immediately replied, "No, it was me. I did it to myself." Because she lived in fear of disappointing others, Sarah never expected anyone to reach out and help her when she struggled.

Implications for Achievement Behaviors

The participants' perceptions of needing to be perfect to meet others' expectations, connecting their self-worth to their achievements, and fearing disappointing others collectively influenced their academic achievement. Although they would all be considered academic high-achievers with outstanding high school records, their responses throughout the interviews indicated that they were plagued by several unhealthy beliefs and behaviors affecting their achievement motivation, including their approach to challenges and their tendency toward procrastination, minimizing their successes, overemphasizing failures, and attributing failures primarily to internal causes.

Approach to challenges. The participants varied in their responses to challenges, but all shared a common theme: none of them sought challenges as a result of internal motivation to learn or for self-improvement. Their actions in response to challenging situations were primarily the result of their desire to avoid appearing incompetent or less intelligent. For example, when asked whether or not he would avoid taking a challenging course with the high probability of earning less than an A, Paul indicated that he would definitely take the course. Interest in the course material, however, was not a motivating factor. Paul said he would take the class because he would be afraid others would think less of him if he avoided it. He described an experience with this issue in high school. The AP economics teacher in his high school was infamous for his difficult course and tough grading procedure. Although Paul felt anxious about the possibility of not performing well in his class, he admitted that he felt he had to take it anyway to preserve his image to his peers as intelligent. He thought to himself, "If I don't take this class, I am showing right there that I can't do it. If I don't take the economics class, I'm not as good as [my friends] because they would try." When asked what he thought his friends might think of him if he didn't take the course, Paul said he didn't know whether it would prove he was "dumber than they were" or just not as inclined to work as hard. Either perception, however, would destroy his image as an intellectual high-achiever, and therefore, not taking the course "would not have been an acceptable option."

Whereas Paul felt pressure to take on academic challenges to preserve his image, Joyce felt the need to avoid them for the same reason. Like Paul, Joyce presented herself to her peers as highly academic. In an effort to preserve this image, she described her tendency to only answer questions in class for which she was certain she knew the answer. In her words,

I am the girl in the corner who has her hand up all the time because she knows the answer. So, if she's wrong, take the wind all out of her sail. I like for people to think well of me. I don't like to fail in front of other people.

Joyce described an experience with her high school AP chemistry course that reflected this attitude. She volunteered to work an oxidation reduction problem on the board because she thought "I had it backwards and forwards and inside out." When she worked the problem, however, she made a slight calculation error that caused her answer to be off by .01. The teacher indicated that her answer was close, but not exactly right, and Joyce felt humiliated. She "never did another problem on the board" again since she "doesn't like my mistakes to be out in front of the world for everyone to see."

Procrastination. The participants all noted a tendency toward procrastination in their approach to academic work. With the exception of Dave, all of the participants explained their procrastination was the result of their perfectionism and the anxiety that accompanies it. As indicated previously, Dave did not share the same anxieties as the other participants in terms of his approach to academics. He said he procrastinated because "I always did well under pressure." In addition, since school was not challenging for him, Dave "could skate by" without having to exert effort. He said he would always put off beginning his work, telling himself "I can do it tomorrow. I can do it a little later, I'll just watch some t.v. right now" because he knew his lack of preparation would not adversely affect his grade.

In contrast to Dave, the other four participants all indicated that they tended to put off academic assignments because of the stress they experience. Leigh and Joyce both discussed their use of procrastination as a strategy for controlling their anxiety. Leigh explained that she felt so much stress beginning an academic project because of her perfectionism that she just wanted to put off the project to avoid feeling that anxiety. In her words,

Being a perfectionist, it's going to be such a taxing process. You are going to be meticulous through the whole process, so if you just condense it, you'll just have one night of this tearing you apart instead of a week or two.

Joyce, too, shared her tendency to "drive [her]self crazy" by attempting to achieve academic perfection in all areas. As a strategy to avoid this anxiety, Joyce tried to do her best on some academic tasks, but allowed herself to put off others. Joyce explained that she experienced greater performance anxiety toward projects that she had dedicated a lot of time to completing. If she had put forth all her effort and still did not succeed, this would indicate a lack of ability, which would be threatening to her image. Not doing a project in advance reduced that performance anxiety because her lack of effort provided an acceptable reason for performing poorly. Even though she still worried about her grade for those projects, the worry was less because she knew she had put forth less of her effort.

Paul also indicated his tendency to procrastinate to provide himself an excuse in case his performance was less than perfect. He explained that he felt much more upset with himself if he got a poor grade on a project that he started on early and expected to do well, for such a grade indicated that he was not as smart as people perceived him to be. To protect his self-image and avoid feelings of disappointment and anxiety, Paul put off his work, providing himself with an excuse to justify a less than perfect grade, should he receive one.

Paul also acknowledged that even if he attempted to begin a project early, sometimes his anxiety over doing things wrong gave him a mental block that prevented him from beginning his work. According to Paul, he did not want to start a project because "if I start, I'll do it wrong, and if I do it wrong, I'll have to do it again." Without the "security of knowing I can do it right," he could not begin until "it was usually way too late to sensibly start something." Like Paul, Sarah also described a fear of not doing well that prevented her from beginning her work. Sarah worried about the implications of her performance to the point that the project starting "looming in my mind, and you know if you don't do it well, it's going to affect you very negatively." Sarah could not allow herself the freedom to have fun instead of working on a project. She said, "I can't just sit there and not do something. That would be wrong to procrastinate that way. But if I am doing something else that is productive, I could argue then that it's not as evil."

Reactions and Attributions for Successes and Failures

The participants indicated a tendency toward minimizing their successes and maximizing their failures. They expected themselves to meet the standards of others, even when these standards called for perfection. Therefore, the participants perceived academic successes as routine and nothing for which they should feel proud of themselves. Failures, on the other hand, were far more salient in their minds. Their anxieties centering on not meeting expectations and disappointing others caused them to focus on their failures, often holding exaggerated perceptions of the implications minor failures would have on achieving their overall life goals.

Reactions to successes. The participants' responses toward their perceptions of success all indicated a lack of personal pride. Leigh simply felt relief when she achieved an academic success, for it meant "one more thing I got through." Joyce said she typically did not take pride in her successes because "I feel like I didn't do anything extraordinary for it. I just performed at the level I normally do." To Joyce, success was normal because it meant she was simply meeting the acceptable standard for achievement. When she experienced academic successes beyond the classroom, such as being selected for the Governor's Honors Program, a highly competitive summer program for high ability students throughout the state, she attributed it to external factors beyond her control. According to Joyce, "I always just looked at [my successes] as good luck on my part, things that could happen to anyone if they've had the resources I've had."

Sarah, too, indicated that successes were not that important. When describing her reactions to achieving successes in her academic courses, she said that, "Yes, you'll feel great about it for a short period of time, but it's not like the whole day is completely made just because you got this grade." Paul's reactions to success were similar to Sarah's. He said,

It takes more work for me to think about my successes. For example, it's difficult for me to build a resume because I can't really recall any successes. My constant thought is not really how strong my resume might be but how weak it is in comparison to the outstanding resumes everyone else must have.

Overreactions to failures. As difficult as it was for the participants to think about their successes, it was impossible for them not to think about their failures. Each of them recalled fear of failure and actual failures as being salient in their minds, difficult to shut out or move beyond. Paul noted a preoccupation with thinking about opportunities that he did not pursue, which he considered personal failures. Paul described "focusing hopelessly on my personal history and what I could have done better. But instead of being a constructive evaluation, I just beat myself up over what I have failed to do." In Paul's perception, failure held much more weight than success. When discussing the possibility of achieving a B in a course, a grade he would interpret as a failure, Paul said this grade would disappoint him much more if he were to receive it his senior year because:

I would think, 'Why did I spend all that time working the past four years if I just blew it now, the last semester?' [Even if it were a difficult class] that wouldn't matter. If I got a B, that would cancel out everything else I did well.

So salient was failure to Paul, one experience with it could erase an entire history of successes.

Similar to Paul, Leigh also placed more emphasis on her failures than her successes. Leigh discussed her preoccupation with failure, saying, "I minimize my successes, and then it seems reasonable that the failures would grow to take up that space." Leigh admitted that failure is one of her biggest fears, so when it occurs, she has a tendency to "dwell on it" and "be pulled down by it," even when everything else is going well in her life. To explain this further, she provided an example from her high school experience where she did not do well in a couple of courses. Because of her performance in these two courses, Leigh found it difficult to focus on the courses where she was doing well. She described it as, "Here's this one weak spot, and that permeates everything else. It spoils everything."

Leigh's preoccupation with failure led her to develop exaggerated beliefs about the ramifications even minor failures would hold toward her future. Upon entering college, she set the goal of graduating with a 4.0. Currently, in her first semester, however, this goal has become unattainable, due to her struggle with a particularly difficult class. She explained her overreaction to this experience, saying,

When I realized it was going to be impossible for me to make an A [in my English course] this semester, all things started racing through my mind, like, 'What if I'm not going to get to stay in the Honors Program? What if I am not going to get into graduate school? What if I am not going to get a job?' It becomes this big, sweeping kind of thing when it's really just a small piece.

Other participants also shared Leigh's tendency to exaggerate the ramifications for failure. Sarah, too, described the cascading effect of failure. To Sarah, one bad grade in a course meant "you won't do well in the entire course, and then it's just a downward spiral from there. Once you get one bad grade, it just gets worse. It keeps cycling on." Paul also feared failure because he overgeneralized its implications to other facets of his life. He described his tendency to hide his perception that he lacked ability in math (typically making only 96's, not 100's) from his peers because "if I said I was not good at it, maybe they would think I was not good at other things. Maybe it could spill over into other [areas], and I'm not good at anything."

Internal attributions for failures. In addition to exaggerating the implications of their failures, the participants also tended to attribute their failures primarily to internal causes. They assumed all the blame for their failures, seldom acknowledging the role external factors may play in contributing to their performance outcome. For example,

Joyce, while freely attributing her academic successes to external factors, took full responsibility for her academic failures. She said,

Failures are of my own making. I attribute it to my unwillingness to put forth the effort needed to succeed. I've never felt there are things I can't do... I know if I work hard enough, I can at least do respectably, if not excel. So the only excuse for failure in an academic area is my own laziness.

Paul described a similar philosophy on failure as Joyce. He always assumed if he did poorly in an academic experience, it was his own fault, due to inappropriate preparation. When asked whether or not external factors could ever be attributed as the reason for his lack of success, Paul said no. He explained, for example, that even if he failed a test along with the rest of the entire class, the failure would still be his fault. He reasoned, "I couldn't really blame the teacher, but I would blame myself probably. . .I should have studied more. The test was made so that you could get a good grade, and I didn't, and it was my fault." The possibility that the test might be flawed was foreign to his thinking.

Consistent with Joyce and Paul, Sarah also attributed her failures to internal causes. Because she perceived her failures to be entirely her fault, Sarah described strong self-diminishing emotions that accompanied failure, including guilt and shame. She explained,

When you get a bad grade on a test, you feel bad inside, and when you are trying to go to sleep at night, you just feel guilt, like really bad depressive guilt, like you did something seriously wrong that you should be ashamed of. And you have nobody to blame but yourself.

This tendency to attribute all failures inward caused Sarah to develop intense negative feelings. She described these feelings as being invasive, saying "sometimes there are

things I can't [quit] thinking about" which stay with her for long periods of time "until something else is there to either motivate or bother" her.

Summary

Overall, the themes for socially prescribed perfectionists in the study indicated several contributors to the development of their perfectionism, including a lack of challenge in their early school experiences and strong parental influences such as parents holding perfectionistic attitudes and beliefs themselves, utilizing authoritarian parenting strategies, and placing stringent expectations for success on their children. Themes in the data indicated that the participants' socially prescribed perfectionism was also related to their insecurities in relationships. In addition, their socially prescribed perfectionism contributed to the development of their fear of failure achievement motive, which consequently influenced their achievement goals and achievement behaviors.

The following section describes a different set of themes for the self-oriented perfectionists in the study with regard to the development of their perfectionistic tendencies and influences both on their relationships with others and their academic achievement.

Findings: Self-Oriented Perfectionism

The data for the participants scoring high on the self-oriented perfectionism scale indicated several major themes related to the development of their perfectionism and its implications for their achievement. The participants identified three influences on the development of their perfectionism including personality, parental modeling of perfectionism, and lack of failure in their early academic experiences. Themes regarding their family backgrounds included parents with an authoritative style who demonstrated unconditional support and open communication with their children. As a result, these participants remained confident in others' acceptance of them, regardless of their achievement. Themes uncovered regarding their perceptions of achievement included intrinsic motivation and a desire for self-improvement, which fueled both mastery goals and performance goals and a host of adaptive thoughts and behaviors regarding their achievement. Difficulty coping with emotions resulting from experiencing failure emerged as one negative result of their self-oriented perfectionism on their psychological wellbeing. Figure Two provides an integrative diagram of these themes, illustrating the relationships among the categories.

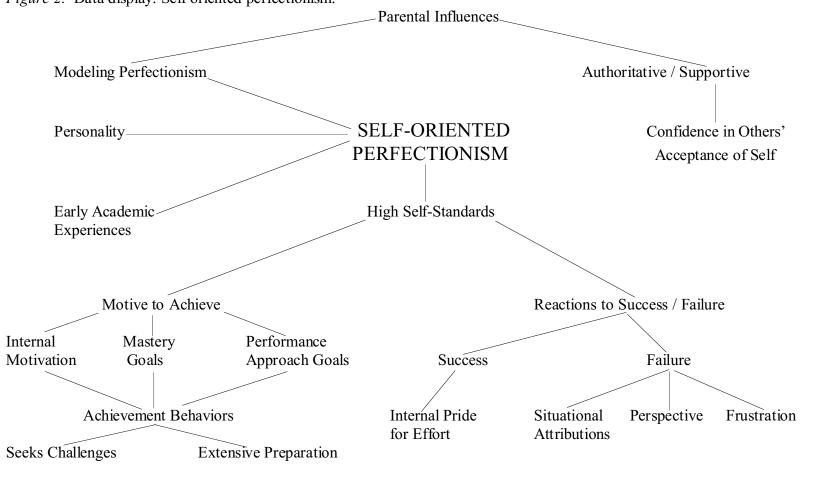


Figure 2. Data display: Self oriented perfectionism.

Development of Perfectionism

When asked to describe how their perfectionism developed, the self-oriented perfectionists found the question difficult to answer, for they could never remember a time in their lives when they were not perfectionistic. For that reason, they were quick to note that it seemed to be a tendency they had since birth, an inborn characteristic. They did acknowledge, however, that environmental factors played a role in cultivating that tendency. In particular, they cited their successes in their early academic careers as contributing to their perfectionism toward academic achievement. In addition, they also mentioned family influences. They began to adopt perfectionistic attitudes as a result of observing their parents modeling perfectionistic behaviors.

Several of the participants referred to early academic successes when explaining their perfectionism. Though all were identified as gifted in elementary school, none of the participants found their early school experiences to be challenging. In fact, some of them said they never experienced challenges in school until they reached their AP courses nearing the end of high school. Because their school curricula were not academically challenging, it was not difficult for them to establish a pattern of perfect performance throughout elementary and junior high school. John believed his ability to master the curriculum with ease had a strong influence on the development of his perfectionism. Reflecting on these experiences, he said, "My perfectionism now might have come from the fact that I never really did fail at anything when I was younger. The expectations [for perfection] just grew." John explained that had he encountered any academic difficulties at a young age, "then it would be acceptable once in awhile, and my perfectionism wouldn't be that high."

Jane described both her enjoyment of learning and her awareness of her intellectual abilities as being early influences on her perfectionism:

When I was in preschool and kindergarten, I loved school. And I think [my perfectionism] started just because I enjoyed it, and then I realized that it was what I am good at, so I [thought] I might as well be the best at it if I am so good at it.

Mackenzie also referred to the influence of past performances on the development of her perfectionism. Because she excelled at both music and academics, Mackenzie began to develop a reputation for herself in these areas. She indicated that "people who didn't know me, perceived me as, 'Oh, she's the really good percussionist. She's the top in her class' or 'She's the really smart girl who has never gotten a B."' Mackenzie described her perfectionism as evolving because of "the description is prescription thing;" since she was thought of a high achiever in these areas, she was motivated to continue to pursue them and eventually that motivation changed to striving for perfection in these areas.

Crystal described her need to achieve perfection as increasing following her freshman year in high school. Upon earning all A's in her first semester, she thought to herself, "Wow, I got all A's. I can't get a B now," and described her perfectionism as "progressing insanely from there." Now in her first semester of college, Crystal admitted it would be good for her to get a B because "I can tell you right now, if I make all A's this semester, I guarantee that will make me want to get straight A's through college. I think I would kill myself with stress if I tried to do that." For each of the participants, it appears that past experiences with success drove their perfectionism because it set the pattern, providing them with a standard to consistently reach.

Parental Influences

The group of self-oriented perfectionists described family backgrounds different from those portrayed by the socially prescribed perfectionists. Like the socially prescribed perfectionists, the self-oriented group described their parents as being perfectionistic. The parents of the self-oriented perfectionists, however, did not hold expectations for perfection for their children. Rather, their influence on the development of their children's perfectionism appears to stem from their modeling of perfectionistic behaviors. Their children, upon observing these behaviors in their parents, began to adopt these behaviors themselves. The parents of the two groups of perfectionists also differed in terms of their parenting style. While the parents of the socially prescribed group tended to be authoritarian in their approach, the parents of the self-oriented group were more likely to adopt an authoritative parenting style. The following descriptions and quotations from the self-oriented participants highlight these differing family influences.

Parental modeling of perfectionism. Both Crystal and Carl reflected on observing their fathers' perfectionistic behaviors. Crystal indicated that for as long as she could remember, her father has been a perfectionist. She described his perfectionism in his career, saying that "he keeps everything. He has file systems for everything, and his computer is this bank of information of things he saves and keeps in his orderly fashion." In addition to demonstrating perfectionistic behaviors at work, Crystal also noted that her father was a perfectionist at home as well, emphasizing again his need for order. She reflected back on her memories of her father from early childhood: "If I lost a Barbie shoe, he would go all over the house and try to find that little shoe for the Barbie. He had to. . . if we lost a game piece, he would flip out. He needed everything to be in its order." Despite her father's tendency for perfectionism, Crystal was quick to say, "He never made me do anything perfectly." Instead, she believed her perfectionism developed in part through observing her father when she "started picking up" on his behaviors and adopting them as her own.

When describing his father's perfectionism, Carl said, "He's definitely much more of a perfectionist than I'll ever be." According to Carl, his father was a perfectionist in all facets of his life from work to his family. Carl viewed his father's perfectionism as unhealthy, for it caused his father too much stress. He elaborated, I think that's part of the reason why he had a stroke – he wanted everything to work out directly in the workplace, within the home, with my brother, and with my

life. And I think that perfectionism causes so much stress.

Through years of observing his father's perfectionistic tendencies, Carl noted that he began to pick up on these attitudes and approach life in a similar manner. He still held high expectations for perfection in his own life, but after observing his father, Carl tried to keep his perfectionism in check, not allowing it to overwhelm him with stress.

In both Jane and Mackenzie's families, their mothers were the perfectionists. According to Jane, her mother's perfectionism showed through in the way she handled domestic responsibilities. As Jane described her, "she's really a control freak. She wants everything to be her way. She's very meticulous about housework and stuff like that." Jane attributed her perfectionism through watching her mother, saying, "I think I get a lot of my wanting to control everything from her." Mackenzie also described her mother as a perfectionist, saying "she's pretty anal. If she would write a letter to my brother, it would take her three drafts." Growing up, Mackenzie observed her mother's perfectionism around the house and when she would help Mackenzie and her brothers with their activities.

Like the other participants, John also believed his perfectionism stems from family influences. He said, "In certain aspects of their lives, my parents are definitely perfectionists." His mother's perfectionistic tendencies are evident in her work as an events planner and fundraiser. According to John, "Everything has to go off without a hitch. . . when it's going to rain, everything is a disaster!" John also believed his father, a financial analyst, is perfectionistic in his work. "When he has to forecast a budget, he spends too much time at the office" over preparing it. Since both his parents demonstrated perfectionism, as well as his two brothers, John was not sure whether the influence was from nature or nurture, saying "It's definitely in my family, whether it's from influences [from] when we were younger or something [we] were born with."

Authoritative/supportive parents. Five out of the six participants indicated that their parents utilized an authoritative approach to parenting. Their parents set realistic rules and expectations for their children and established open lines of communication. They set high expectations coupled with encouragement and support when their children experienced failures. As a result, the participants described their relationships with their parents as close, and they frequently reached out to them for support during times of stress.

Crystal described growing up in an extremely close-knit family. "The miracle baby," born to parents who were told they would never have children, Crystal " never had to question if my parents loved me." Growing up, Crystal always enjoyed open communication with her parents about her academic experiences and her social life. Like most authoritative parents, they guided her decision making, never making decisions for her and demanding she follow them. Crystal described her parents' guidance in choosing college courses and activities:

They are really encouraging. They've always let me make my decisions. If I ask their advice, they will give it to me, but they never jump in. They want the best for me, and they want to help me decide if I need to, but it's my experience, so they are letting me make my own decisions.

Patsy also described supportive parents similar to Crystal's, saying, "I consider myself very lucky to have the family that I have." Patsy acknowledged that her family had their share of disagreements, but as a whole they got along very well, and she always knew her parents were there to support her. She reflected on her parents' support saying, "My parents have always put me and my brother first. Always. They want to make sure that we are happy and that we have what we need before they even think about

themselves." Another example of her parents' authoritative style was evident in their approach to decision making. Patsy explained that while her parents were available for guidance, they expected her to make her own decisions. She said, "A lot of times I hate making decisions, and I'll ask my mom and dad what I should do, and they won't tell me. [They emphasize] this is your decision." For example, when Patsy struggled with the decision of whether or not to dive competitively in college, she wanted her parents to decide for her because she found the decision too overwhelming. They offered her guidance, but resisted choosing for her, telling her "we don't want you to come back to us and say, 'well, you made me do this." They wanted her to learn how to be responsible for her own choices and her own happiness.

When discussing her family, Jane also mentioned open communication with her parents and acknowledged that she talked to them every day even now that she was away for college. Jane gave examples of their authoritative approach to parenting throughout her childhood. She explained:

Whenever we got good grades on our report cards, we would take a family outing for dinner. They never paid us. They thought that was the most ridiculous thing ever. They were like, 'You should get good grades. Your reward is that we go out to dinner.' And we loved that. They would come to school functions, hang up artwork, put good tests on the refrigerator. So, they were really proud of us, and when you got a bad grade, they wouldn't yell. They would be like, 'Why? What can you do to make it better?' They were really good about that.

The parents of the self-oriented perfectionists also demonstrated their authoritative parenting by providing realistic expectations for their children. These expectations were high, but not so demanding that the participants felt overwhelming pressure to meet them, as many of the socially prescribed perfectionists alluded to feeling. Crystal explained that her dad had higher expectations for her academic successes than her mother. If she did not meet these expectations, Crystal explained that her father was not automatically upset with her. He was only disappointed if she could have prevented the outcome. She elaborated,

If I didn't make any effort to go get help, or if I told him that I didn't study for something or I just gave up, he would be very disappointed. But if I tried hard, and that's all I could get, [my parents] would never be ones to punish me for my report card or anything like that. They would never be that way.

Jane's father was also similar to Crystal's father in that he did not set rigid expectations for her to reach. According to Jane, her father "would always give us guidance, and his philosophy was to tell us what he thought was right and wrong, and then he'd let us go and see if that's what we did. He liked letting us go and do our own thing." Jane's father was goal oriented, and he encouraged that in his children as well. Jane's father, however, was ultimately more concerned with his children's happiness than their outright success. Jane explained, "He just wants us to be successful, not just for the sake of being successful, but so we are happy. He cares about that a lot."

John described his parents as setting flexible standards for him and his brothers to follow based on their previous performances. If they knew their children were capable of high grades in particular areas, they expected them to achieve those grades. However, in those areas where their children may have weaknesses, they set lower standards, emphasizing only that their children put forth their greatest effort. Now that John was in college, his parents assumed he could take responsibility for his own learning and had confidence that he would. John appreciated his parents' trust in him and as a result, he felt comfortable sharing his academic experiences with them, knowing they would be supportive. According to John,

I talk to them once or twice a week, and I always tell them how I am doing, whether it is a success or failure. I think they understand that I am out of the house now, and it's my own responsibility to study, and they know that I am studying. They know whether it is a success or failure that I worked hard on it.

In addition to setting realistic expectations for their children to follow, the parents of the self-oriented perfectionists were also very supportive of their children's experiences with failures. Unlike the parents of the socially prescribed group, these parents never punished their children or made them feel guilty when they fell short of meeting their selfstandards for perfection. On the contrary, they worried about their children's self-inflicted pressure and instead tried to soothe the participants' internal frustration over not doing well. For example, Mackenzie explained that her parents "are proud of me no matter what." They worried about the stress she puts on herself to achieve academic perfection and "hate to see me stress out. They don't understand it. They think I put way too much pressure on myself." To illustrate their attitude toward her perfectionism, Mackenzie gave an example from earlier in the academic year. Struggling in Honors Calculus her first semester of college, Mackenzie called home worried that she was going to get a B in the class. Her father's reaction was "Mackenzie, you are going to get a B? I'm going to come up there, and I am going to take you out to dinner." She explained that her parents "would love for me to just relax a little and have fun while [in college] and not to put the stress on myself."

Patsy and Jane reflected on having similar conversations with their parents in response to achieving less than perfect academic grades. Patsy said that in high school, when she would make a B on a paper or test, she would be so upset. In discussing her feelings with her parents, they tried to reassure her saying, "It's okay, Patsy, as long as you tried your hardest." Because the pressure to achieve perfection was coming from within herself, Patsy still found it difficult to believe them and continued to be frustrated with herself.

Jane's parents also tried to soothe her when she received B's, reassuring her that "everybody gets B's once in awhile." Like Patsy, Jane's anxieties over her grades were internal; she never felt anxious over her parents' reactions. She said,

They know that I am smart, and they know that I work really hard. So, the B was completely fine with them. They [said], 'We know you didn't slack off or anything, and that's why you didn't get an A. It's just the way it went.' They are really good about stuff like that because they know that I don't really need them [to pressure] me, that I am my worst critic.

Carl was the only participant whose parents did not demonstrate an authoritative, supportive approach to parenting. As immigrants from Thailand, Carl explained that his parents instead utilized the standard authoritarian approach to raising their children. As a child when he disobeyed, his father would use corporal punishment as a means of discipline. When Carl would disagree with his father as an adolescent, he said, "I got the silent treatment [when] he became angry with me." Carl indicated that his father "holds grudges. He remembers things." In fact, he did not speak to Carl's older brother for several years because of differences in world views that could not be reconciled between the two men. As a whole, Carl described communication as being restricted in the household. Emotions were closely guarded rather than shared, and his father always held the final word in decision making. His parents held high standards of perfection for Carl's academic achievement throughout his school experience. They "were constantly checking up on my grades [and] going to my teachers." His father also expected Carl to enter medical school upon college graduation, a career choice that was non-negotiable in his father's eyes.

The family pattern Carl described is consistent with the family pattern experienced by the socially prescribed perfectionists. When asked about this, Carl explained that as a child and throughout middle school, he very much fit the profile of the socially prescribed

perfectionist, fearing that he would not be able to live up to others' expectations for him. At the beginning of high school, however, Carl explained a change in his mind set where he began to shed his socially prescribed perfectionism and instead began to adopt more self-oriented tendencies. He quit worrying about achieving perfection in order to please others and instead began to focus on developing his own goals and standards and working to achieve them for himself. When asked to explain how this change of attitude came about, Carl described it as a combination of factors that came together all at once. One of these factors was newfound independence. During that time period, the responsibility of his parents' careers as pharmacists forced them to work in the evenings. For the first time, Carl was able to experience a taste of independence since his parents were not able to watch over him and his activities as closely as before. He described his need for this independence because "all throughout elementary school my parents just pushed me all the time. I think to an extent it just became overbearing to me. It just reached a natural limit." He wanted to develop his own independence and ways of thinking, goals he thought he adopted as a result of his acculturation into American society. He explained that "in Asian cultures, it's straight, obey your parents at all costs. No matter what they say, no matter if they are wrong or right. You are not supposed to break that rule." Growing up in an American culture, on the other hand, where "there is a lot of stress on independence and individuality" made Carl yearn to develop those characteristics within himself. He described being influenced by watching American television and movies:

The heroes are these independent people, they are really strong minded, they have strong values, they don't need to rely on anybody else. I've always thought about things like that. I would watch a movie and wish I could be like that. Really strong minded. I wish I could endure everything.

Carl's growing awareness of his need for independence and to break free of his parents' thinking was accompanied by his exposure to new people with different world views. He

described a turning point in his thinking when he participated in the Governor's Honors Program in high school. Exposure to all these new people and different ways of thinking allowed Carl to see that his parents' value system and expectations for his life represented only one way of viewing life. He described the impact of this experience on his thinking and change in motivation from external to internal:

I had been so caught up in the goals of my parents and in [my] high school, and it's such a limited perspective. I brought in my perspective on life beginning [then], and I realized at that point that I needed to get away– not run away, but I needed to do things that would allow me to meet other people and understand that there are people that are self-motivated and that you do things to be happy and not to do it because someone else wants you to, or because some societal pressure makes you do that.

Throughout high school and into college, Carl continued to meet people in his classes and extracurricular activities who reinforced the need to be self-motivated and to choose a path for life that would make him happy rather than just pleasing his parents. He met several role models, people who had been "under the same situation" of family pressure who "in the end, did what made them happy." These people have influenced Carl to reflect on his life and what he needs to do to make himself happy, including his choice of careers. In the past, he indicated that he would be motivated to achieve a goal because "my parents were telling me to do this, so I should do it." Whereas now Carl is more self-oriented in his motivation, telling himself, "I need to think about this and see if I really want to do it." For Carl, the influence of American culture on his desire to become independent and his exposure to different world views have allowed him to reject his former socially prescribed perfectionism where he was motivated to achieve perfection to meet the standards of others. Although he is still motivated to achieve perfection, the

motivation is now self-oriented, allowing him to set his own goals and high standards for achievement.

Confidence in Others' Acceptance of Self

With the exception of Carl, the participants each described the security they felt in their families. They knew their families were not judging them based on their performance, and they knew their parents would continue to love them, regardless of whether or not they achieved their goals. As a result of this solid support system at home, unlike the socially prescribed participants, the self-oriented perfectionists did not tie their self-worth to their academic achievements. Crystal, for example, said that while her achievements made her feel good about herself, her failures did not make her question her self-worth. She said,

I am always very proud of my achievements for myself. It makes me feel good about myself. But at the same time, I think if I didn't do well, I wouldn't think I was worthless. I would just think I did badly on something and have to fix that next time. I don't think I would question myself or my abilities.

Because she did not question her self-worth when experiencing failure, Crystal explained that she had no fear of sharing her failures with other people. In fact, she indicated, "I probably tell more people when I do badly than when I do well on something. . . I guess I don't care if anyone knows that I did badly."

Patsy also discussed the relationship between her perfectionism and her self-worth. She explained that her success " is important to myself. It's not about what other people think." Therefore, she did not equate her self-worth with her success because she knew others would continue to support her regardless of her performance. She explained, "That's the main thing about my perfectionism, realizing that other people love me anyway and that even if I am not happy with myself, other people are." Patsy may have experienced internal frustration in response to her less than perfect performances; however, despite these failings, she knew she did not have to stress or worry that people's love for her was contingent upon her doing well.

Like Crystal and Patsy, Carl also did not equate his self-worth with his academic achievements, and he expressed his frustration with other people's tendencies to judge him by his test scores and achievements. Carl's philosophy was that "test scores are important in that they are helping me do what I need to do to reach my goals, but they are not important to who I am." For example, Carl described being the recipient of a prestigious fellowship, which included full tuition coverage, travel-study and academic conference/research grants, and a variety of other academic enrichment opportunities. He expressed his frustrations with others who made assumptions about him as a person once they learned of his fellowship. For this reason, Carl attempted to conceal his fellowship from his professors and peers when possible, so they could learn to appreciate him for who he was beyond his achievements. According to Carl,

The fellowship should not be the thing that defines you. My character and my personality should be defining me. I pride myself that I do work hard and that I do care about people, and I will help people. I try to be who I am, and I work hard at being what I perceive to be a good person.

For Carl, his personality, work ethic, and desire to help others were far more representative of his identity as a person than any test score or scholarship he may have earned.

Mackenzie was the only one of the six participants who indicated that her identity was strongly connected to her achievement. She explained that growing up as the youngest child with three older brothers, she often had to fight for her brothers' respect and her parents' attention. When describing her brothers, Mackenzie classified them each in terms of one defining characteristic, saying "Matt is the independent one, Mitchell is the sensitive, caring one, and Mike is the fun-loving one." To establish her own identity separate from her brothers', Mackenzie took on the role of being "the smart one." Because she was the youngest, her brothers enjoyed teasing her relentlessly. She said she focused on academics and music because "the only thing they HAD to respect me for were my grades and music ability because I was more successful in those areas than they were." Creating an identity based on abilities her brothers did not share also enabled Mackenzie to stand out. She enjoyed the attention she received, saying "when I am in an environment where I do stick out [for my abilities], I take advantage of it. I like that."

High Self-standards

Unlike the socially prescribed perfectionists, the self-oriented participants did not continually worry about meeting the standards of others. They did not feel external pressures to succeed or achieve perfection. In contrast, the source of their perfectionism came from within. They set the high self-standards for themselves to meet based on an internal drive for self-improvement and for perfection. Each of the participants talked freely of this internal drive. They explained that this internal drive for perfection was more powerful than external motivators and that it persisted despite the concerns of their families that they were placing too much pressure on themselves.

Crystal described her high internal standards for her academic performance, saying that she had "a really difficult time settling for anything less than an A." But she elaborated that she set her standards beyond external factors, such as grades. She indicated that she had "to be the best for me," and therefore, even when she did receive A's, she was sometimes not satisfied, if she knew her work was not reflective of her greatest ability. For example, she explained that if she believed she was capable of doing a project a certain way, and it did not turn out as well as she envisioned, she was "disappointed that I didn't do as well as I should have, whether or not that affects my grade." Even if she received an A on the project, Crystal said she would still feel upset because "I make myself do things perfectly regardless of other people." Patsy was also adamant in her discussion of self-standards, stating that her primary motivator was internal, to improve herself. According to Patsy, "no one pressures me. It's just for myself. To prove to myself that I can do well. . . and to improve myself." Like Crystal, she was not as concerned with external indices of performance as much as she was with meeting her own internal standard for self-improvement. To elaborate on this distinction, Patsy discussed her honors chemistry course in college where the professor's policy was to drop the students' lowest test grades. Pasty described her classmates' reaction to this policy, saying that many of them had decided that if they did well on the first three exams, they were not even going to take the final exam. Patsy said, "But that's not like me. I'm going to have to go and try to get a higher grade than my lowest one," even if this last test would have no bearing on her final grade for the course.

Patsy's high internal expectations for perfection extended beyond academics. She also described a need to perfect her appearance. She frequently worried that she was not thin enough and therefore set goals to lose weight. Despite reassurances from her family and boyfriend that she was not overweight, Patsy could not let go of her own standards, for as she said, "I know that I'm not fat, but I just want to be perfect, and I know I can't be, but I expect myself to be." She described her standards for perfection in every domain from sports to academics to her appearance as being much higher than others' standards for her. She described other people as constantly telling her "It's okay if you don't do well on this, it's okay if you are not the best at this," and her inability to believe them, responding, "No, it's not."

Jane and John also discussed their tendencies to be harder on themselves than anyone else, setting self-standards beyond what others would expect. John explained that his motivation "is more internal. I push myself rather than other people pushing me." Like Crystal and Patsy, external factors did not seem to influence John's motivation to achieve perfection. To explain this further, he discussed how his classmates' performance did not influence his motivation. If others were doing well in a course, and John was doing poorly, he said that he was motivated to improve his performance, not to compete with his peers, but because he was "not satisfied with my grades or understanding of the concept." Jane also discussed her high self-standards and the self-inflicted pressure she experienced. She acknowledged that even though "it's normal to get B's once in awhile I'll get really upset. I want to be perfect and get all A's." Jane has worked on trying to control the anxiety she experiences as a result of her internal pressure. She sought the help of a psychologist as a senior in high school to cope with feelings of depression related to missing her boyfriend who had left for college. She said the counselor mainly focused on Jane's perfectionism. She could tell Jane was a perfectionist "just by the way I talked. . . I think she could tell I was really hard on myself." Jane thought the counselor was helpful because "she gave me a lot of ways to deal with [my anxieties] like relaxation [techniques]."

Mackenzie noted that her high self-standards frequently resulted in a feeling of discontentment with herself. Although she knew she should feel proud of herself and content with her achievements, she said she never did, because "it's that feeling of never being done." According to Mackenzie, "If I can do that, then I should be able to do better. If I could achieve that, if I worked a little harder, what could I have achieved?" These thoughts pushed her to set standards beyond her past personal best, to continue to improve herself. Even though she admitted to feeling anxiety as a result of her high self-standards, Mackenzie noted that as a whole, her internal drive for perfection was healthy, for it allowed her to develop a strong work ethic. She explained,

Having to be perfect takes a lot of work. I've learned that I can sit down, and I can study something for three hours until I get it right. I am not satisfied with less. So, it has enabled me to achieve more and to have a better work ethic than a lot of people.

As a result of her own attitudes to work and achievement, Mackenzie could never understand classmates who did not share her internal drive for perfection. She described being amazed at her peers who would quit studying when they were tired, even if they did not finish reading their chapters. Mackenzie's belief was that "you stay up until 3:00, and you learn all of it!" Quitting early would not be acceptable to Mackenzie because it would mean not meeting her internal standards for learning.

Finally, Carl also described in detail his self-standards for perfection. He lives his life according to his own standards, not anyone else's. Carl said, "I try to do things the best that I can, whether that's perfect in another person's eyes is another question. But with my eyes, I have a certain goal or certain standard." Carl indicated that his internal standards for perfection were not limited only to academics. He approached every aspect of his life with the need for perfection. In his words,

If I do something, I try to do the best job at it. That goes with anything. Extracurricular, soccer, sports. That's where my perfectionism comes from– to excel at everything. I try to be very diverse in my life. Working, ballroom dancing, whatever, I try to do it the best I can. I can accept less than perfect, but I strive for perfection.

Implications for Achievement

The participants described their self-oriented perfectionism as exerting a number of influences on their achievement. Their internal drive for perfection shaped the achievement goals they set for themselves, including both mastery goals (a drive to achieve in order to learn concepts or tasks) and performance-approach goals (a drive to achieve in order to achieve normative competence with one's peers). In addition to influencing their achievement goals, the participants indicated that their perfectionism also played an influential role in shaping their perceptions of their academic successes and failures, which in turn positively influenced their future motivation in those areas.

Internal motivation and mastery goals. The participants all reflected on an internal love of learning and need for achievement. While they were motivated by external factors, such as competition and grades, they were primarily motivated by internal factors, including their desires for self-improvement and mastery of the concepts they were studying.

One of the most salient internal motivators for achievement for the participants was the drive for self-improvement. They described their tendencies to compete with others, but these tendencies were secondary to the drive to compete against their own past performances. For example, Carl explained, "My biggest influence [to achieve] would be to do better myself. Competitiveness is part of my drive, but I think competing with myself is a lot more influential than anything will ever be, my self-drive to improve." Patsy shared similar feelings to Carl regarding competition, stating that competition with herself was a much stronger drive than competition with others. She said, "I'm more motivated to compete against my self and my past performance. I do want to do better than other people, and I do compare myself to other people, but ultimately, my goal is to better myself."

When speculating on what was more influential to his motivation to achieve, competition with others or competition against his last performance, John indicated that "it is case sensitive," setting his standards depending on the challenges of the situation. For example, he explained "There are some classes where [my performance] is above the rest, so I know I need to do better than my last grade because if I did better than everyone else, it doesn't seem like that big of a deal." On the other hand, for courses such as his honors courses, where he was even with his peers in terms of ability, he set the standard to "make the grades they do," since that was a more difficult standard to achieve.

In addition to describing their internal motivation for self-improvement, the participants also described an internal need for achievement based on their desire to learn.

As a result, they set mastery goals for themselves. After describing her love of learning, Crystal admitted, "I'm going to have a hard time when I have to get into my major courses because I like studying everything. I am usually motivated because I like the things that I am studying." Consistent with Crystal, Jane also shared an internal love of learning. She explained that she has always loved school because "it gives me an outlet to be creative, and I like feeling that I am learning more and I know more. The more you know, the better you can handle situations and be involved in the world."

Carl also described his motivation to achieve perfection as a need to develop his skills in particular academic areas. He gave the example of his college English class. He explained that his high school English curriculum had not prepared him for the challenge of writing papers in his college English course. As a result, in college, Carl devoted hours to seeking help from his professor and peers and then writing and rewriting his papers. His primary objective was not to achieve an A in the class, but because "I want my writing to improve, and that's why I am working harder at it." Carl's response to his English course was indicative of his overall love of learning. He said that once he started breaking away from achieving to meet the expectations of his father, he began to develop a more internal love of learning and mastery goal orientation. He described this change in thinking:

I actually enjoy learning now more than I ever have. And I think it's more the fact that I just want to know a lot of things now. In high school, I learned things for AP tests and for grades. Now, I want to learn this because I want to know it. My grades are reflective of how much I know. [It's no longer that] I am learning this so I can get a grade.

Seeks challenges. The participants all indicated an internal motivation to achieve, stemming from their love of learning as well as a need for self-improvement. Consequently, they were not afraid to seek challenges, viewing these experiences as an opportunity for learning and self-improvement. John explained his tendency to take challenging courses because of how much they could offer his learning experience. He elaborated on his philosophy, saying,

My parents thought I was crazy when I was taking 16 hours and a lot of honors courses, but I kind of feel like, especially in college, you are here, you might as well make the best of it. You are here to learn. You don't have to go to college. Maybe in high school you can slack off, but in college, it's all about learning. So, go for the challenge rather than shy away.

When asked about her response to challenges, Patsy explained that she was always motivated to seek challenges. Patsy perceived avoiding challenges as the equivalent to failing. For example, she explained her reaction to trying new skills in gymnastics. She said,

If I am trying to learn a new skill, and I'm scared, and I don't go for it, I see that as failure. I have to make myself go for it. If I don't make myself go for something, and I have let fear overcome me, than I have totally failed.

This fear of letting failure overcome her and her desire for self-improvement have motivated Pasty to try new challenges both in her athletic experiences with gymnastics and diving as well as her academic experiences by taking on additional honors courses rather than opting for the regular curriculum.

In Crystal's experience, she said she was always motivated to take on academic challenges because "I just want to be the best I can be." She said she could not imagine taking less than the most challenging classes and noted her history of completing a rigorous course load of Advance Placement courses in high school and extra honors courses in college. She explained that she has no fear of taking challenging courses because of her high self-efficacy for academics. In her words, she said,

I'm not scared of taking a class and getting a B in it because that doesn't occur to me to assume that's what I am going to get. I always assume I can get the A. [Even if the class was difficult] I would always assume that I could be that one person in the two percent A's.

Crystal indicated that she has such high self-efficacy because of her previous successes in academics. Since she has never taken a course where she was not able to earn an A through exerting effort, she explained that she had no reason to believe this goal was not achievable. Therefore, despite the difficulty of a course, Crystal was always motivated to take it and prove to herself that with the right amount of effort, she would be able to make an A.

Extensive preparation. The majority of the participants indicated a tendency to over-prepare their academic assignments rather than under-prepare through procrastination. Since their goals were frequently for self-improvement and mastery of the material, preparation well in advance was the best method of achieving these goals.

When asked if she ever procrastinated on her assignments, Mackenzie indicated that she did sometimes, but then said, "Procrastination for me is starting a week and a half before it is due." Her philosophy was to do work on her difficult subjects every night, constantly reviewing her notes and making herself study guides. This method of distributed practice allowed Mackenzie to feel confident going into her exams, knowing she had prepared to the best of her ability. Like Mackenzie, Patsy also described her tendency to over-prepare rather than procrastinate. To provide an example, Pasty explained how she was currently approaching studying for her honors chemistry course, a course she found extremely challenging. Pasty said she spent several hours each night preparing for this course. She thoroughly read the chapters in her book, doing sample problems from each chapter, despite the fact that these problems were not required for homework. She went over her class notes daily, and she joined a study group to help her prepare for the tests.

Carl followed a similar system to preparing for his courses as described by Mackenzie and Patsy. When he had large projects, courses papers, or tests to prepare for, Carl said,

I organize and space it out in my schedule enough, so I don't do it at the last minute. I do things in progression. I do things a little bit at a time. If the paper is due in two weeks, I am working on it [for] an hour or thirty minutes every day, so I can come up with the best project I can. I space it out a lot.

Carl said that with this method of preparation, he ensured that he turned in his best work each time.

John also described himself as one to over-prepare for his courses, In contrast to Mackenzie, Patsy, and Carl, however, John said his length of preparation for a course was dependent on the inherent value of the course to him. For subjects in which John did not have any inherent interest and that were not relevant to his major, John said he was likely to procrastinate. He spent his time instead over-preparing for courses he knew would have a direct influence on his future or for those courses in which he had genuine interest in the material. By being selective in his preparation for courses, John said he ensured he had enough time to learn what was most important to him; whatever time he had left, he devoted to his other subjects.

Both Crystal and Jane described a different pattern of preparation for courses than the other four participants. Both described themselves as predominantly procrastinating in every academic subject and on every project. Crystal acknowledged the paradox between her desire to achieve perfection and her lack of preparation, saying, "You would think because I want everything to be perfect, I would do it really far ahead of time, [but] I usually don't." She explained, however, that since she has always been successful in the past without beginning on her work until the last minute, she has developed poor study habits. As her courses become more challenging in college, Crystal realized that her work habits would have to change in order for her to continue achieving at a high level.

Jane also indicated that she tended to procrastinate on her work, but not because she was confident in her abilities. She explained that she was not sure why she procrastinated, but speculated it was because "I am afraid I'm not going to do it right, so if I do it right before I have to, I won't have to think about [not doing it right]." When asked to describe her fear of not doing things right, Jane indicated that it was a fear of disappointing herself, not a fear of disappointing others. She procrastinated because she worried about not meeting her own high standards for herself and did not want to experience the frustration and anxiety that would follow not meeting those goals.

Performance goals. In addition to the mastery goals of learning they set for themselves, the self-oriented perfectionists also set performance goals. These goals included outperforming their peers as a measure of their competence in their courses. The participants indicated that they used the performance of their peers as an index against which they could set their own standards for achievement. They strived to achieve the best, which they sometimes defined as the best performance in the class.

Mackenzie described setting performance goals of achievement in her AP calculus course. In this course, she explained she was competing against a number of mathematically-inclined students. Therefore, when she achieved an A in the course, she was "pretty proud of myself because just to be able to compete with them on that level was pretty satisfying." Mackenzie also mentioned that she used the ability level of her peers to help her set high but realistic standards for her own achievement. In high school, she indicated that her drive for perfection was greater because not as many of her peers were her intellectual equals. As part of the honors program in college, however, Mackenzie explained that her classes were now filled with peers that were equal or above her level of ability. As a result, she explained that,

My [need] to be perfect is less because I am in a class with all these people who have taken all these other hard classes that I haven't taken, and I'm competing against them. I am keeping up with them, getting the same grades as them. I am not the black sheep of the class. So, if I can rank among them, then that's satisfactory to me.

In this case, Mackenzie demonstrated how she used the performance of others whom she perceives to be high in ability to set her own standards for achievement.

Jane, Crystal, and John all described their experiences with high-achieving peer groups in high school as influencing them to set performance goals for themselves. Jane described her high school as being highly competitive. In this environment, she set performance goals to compete against her peers. She explained that their achievements provided a solid standard for her own achievement because she was familiar with their capabilities. Having been in the same honors and AP classes with these individuals for years, Jane explained it was possible "to gauge whether or not you think you are smarter than some people." Comparing her performance to that of her same ability peers provided her with a set standard for achievement and drove her motivation.

Crystal described a similar experience to Jane's. Like Jane, Crystal also had a lot of friends in high school who were in her advanced level courses. She selected two students – her boyfriend and another female whom she perceived to be perfect – as the standards to beat. She explained that setting her standards against the performance of these two individuals fueled her motivation, for "it kept me on pace. It made me work harder and try harder."

John also described his intellectual peer group as influencing his motivation to achieve. He explained that he had "always been in gifted classes or AP classes with the same group of people, so they all became my friends, and it was always like we would try to one-up the other person." As John reflected on these competitive experiences, he concluded that "it worked out well for me because there were people in these classes that were just above my ability, so to force myself to match with them was my primary motivation." Like John, Carl also viewed competition as healthy because it fueled his motivation, providing him with a high standard to meet. For example, in his honors chemistry class, he explained that he uses the performance of others as a standard to meet. He said, "When we get our chemistry grades back, I want to see myself in the top ten or top five, out of this 80 person class, every time. I think that competitiveness drives me to work, be better, or excel."

Reactions and Attributions for Successes and Failures

Attributions for successes. Beyond influencing the type of goals they set for their academic achievements, the participants indicated that their self-oriented perfectionism also influenced how they interpreted their performances, both their successes and their failures. These interpretations then determined their motivation to continue to achieve in these areas.

When describing their successes, the participants attributed their successes to internal causes, primarily their hard work. They described feelings of personal pride for their accomplishments because they knew they had earned them based on the amount of preparation they had done. When reflecting on her successes in general, Patsy indicated that, in most cases, she did well because of the amount of effort she had put forth. For example, she was particularly proud of achieving a 95 on her honors chemistry test. Describing her reaction to finding out her grade, she said, "I had this grin on my face for like an hour because all the hard work paid off." When asked about her attribution for the success, Pasty adamantly stated it had nothing to do with luck. She acknowledged that her intellectual ability played a small role, but the primary reason for her success was "because I worked hard for it." She explained that her success on this test fueled her motivation to achieve on subsequent tests because she could see that her efforts really paid off. It never occurred to her to think, "Oh, I did well, so I can slack off now."

John described his experience of achieving a 5 on his Advanced Placement Physics test, the highest score awarded. He felt "a mix of satisfaction and pride" because he had worked so hard to achieve the score. In discussing the reason for his achievement, he acknowledged that his natural ability for the subject was in part responsible, but his hard work in the class definitely paid off as well. Jane, too, described feeling proud of herself for her successes. In particular, she remembered being ecstatic over receiving the letter that she had been accepted into the Honors program in college because all "my hard work, everything I had done in high school" was being rewarded.

Carl discussed his biggest achievement as earning the prestigious fellowship to the university. When relaying the events of this highly competitive experience, Carl indicated that he was especially proud of himself because he learned that he had one of the lowest SAT scores of all the people who were awarded the fellowship (earning a 1410 compared to the average 1500), and many of the students he beat had significantly higher scores than he had. Because he knew he had not earned this award solely on the basis of his ability, he felt even more proud of himself, saying, "The biggest testament to me is that the standardized test didn't determine my getting into the program." He believed the award was a reflection of the amount of preparation he had put forth in writing his application essays as well as his "personality and ability to handle the pressure" of the interview experience. For Carl, these internal, controllable attributions for his success were a lot more meaningful than if he had been awarded the fellowship solely based on his ability alone. As he stated, "I considered it a big achievement because I worked so hard, and it's paid off."

Failures kept in perspective. Unlike the socially prescribed perfectionists, the selforiented perfectionists did not overemphasize the implications of their failures. While they admitted to feeling disappointed or frustrated with them, they were able to put them in perspective and move beyond them. For example, when asked if failure would weigh on her mind, Crystal responded,

Maybe for awhile, but it wouldn't last indefinitely. If I failed at something, and I was disappointed about it, if I did equally as well on something else, then I would try to focus on that. I wouldn't want to think about that. It would probably stick with me for a little while, but I would get over it.

Pasty expressed a similar attitude to Crystal's. She indicated that if everything was going wrong in her life and if she seemed to be failing at everything she attempted, then yes, failure would be salient in her mind and difficult to forget. If, however, she were to experience a failure in the midst of other successes, it would not bother her nearly as much because she would be able to concentrate on her successes and keep her failures in perspective of those successes.

Finally, Carl also expressed a healthy reaction to experiencing failures. Rather than feeling defeated or overwhelmed by his failures, Carl commented that he interpreted them as an opportunity to work harder. He explained,

I never set goals that are unreasonable. So, if I fall short of those goals, the next time that comes around, I am working even harder to get there. As a child, I remember a quote, 'Great people make mistakes, but they never repeat them again.' That's what I strive for.

Because he has adopted this attitude toward failure, Carl indicated that he was "okay with failing my first test or making a B or C." He granted himself the experience of making mistakes without being a harsh judge on himself. After earning a grade that falls below his standards, however, Carl indicated, "that grade should never happen again because I think

I am capable of doing much better." Rather than fearing failure and exaggerating its implications, Carl viewed it as a healthy, natural experience that served as a motivator to work harder in the future.

Attributions for failures. When assessing experiences in which they did not meet their standards, the participants demonstrated a healthy pattern of attributions, dependent on the individual situation. They attributed their "failures" to internal causes when justifiable, such as making preventable errors on exams or not putting forth enough effort. However, they were also quick to recognize the influence of uncontrollable external factors on their performance, and they attributed the cause of their failures to these external factors when appropriate.

John explained how his attributions for failure differed according to the situation. After receiving a low B on an honors chemistry exam in college, John explained,

I turned it outward because people missed the same problems. So, if [the professor] is asking those, and everyone is missing them, then there is something wrong. Typically, if the rest of the class does okay, it's definitely my fault because I should have been right up there with everyone else. But we've had quizzes where everyone fails. If I studied for it, I can't really blame myself.

Mackenzie, like John, also discussed the role of external factors on her performance. She was currently taking an honors calculus class in college that was similar to a course she had taken in high school and had earned an A. Since she was already wellversed in the subject matter, Mackenzie had assumed this course would be an easy one for her. Upon receiving low B's on her first two exams, Mackenzie was frustrated. She did not attribute her performance to internal causes, for she knew she had the ability to do well, and she had put forth significant effort in preparation for the exams. Rather, she attributed it to her professor, realizing that his methods of grading and the format of the class were causing her problems. As frustrated as she felt with the course, Mackenzie acknowledged she could not blame herself, commenting that "This is the way college is," and that A's are not automatic with effort, as she perceived them to be in high school.

Jane expressed a similar attitude to Mackenzie's, explaining that in high school, she had "the mind set that if I worked hard enough, I would get an A." Now in college, Jane, too, was becoming more aware of the role of uncontrollable external factors in determining her performance. For example, she said, "You can write the best paper that you've ever written, but if it's just not what the teacher was looking for, you still can not get as good of a grade." For this reason, Jane said she "no longer beats herself up" if she gets a B, realizing both the increased difficulty of the courses as well as contributing factors beyond her control.

Carl also discussed external attributions for his own experiences with failure. Carl explained that in college, he was currently having difficulties in his English class because of his writing skills. Although he knew his skills were not as well-developed as his classmates', he did not take responsibility. He explained that, "I don't blame it on anybody, but I think it's the way our educational system was in [county's name]. The teachers "were not bad; they were just more lenient" in their grading, so he did not have the opportunity to develop his writing skills. Because he attributed his lack of skills to his school experience, Carl did not experience frustration with himself. He knew he was now in a position to control the situation. He said, "Right now I am having trouble, but I think I am working harder on it than I ever have before," seeking help from professors and writing tutors.

Patsy explained how her attributions for failure, and consequently her interpretation of the experience, differed according to the subject matter. For example, she perceived herself as having a lower verbal ability. Therefore, when she would receive B's in her English courses, she attributed these grades to internal, but uncontrollable causes. She said, "I'm not naturally as smart in English. . .we would have tests and quizzes over books we read, and I would have no clue." Since she did not perceive herself as having high ability in this area, she was not as hard on herself, taking on the philosophy, "what you see is what you get." On the other hand, because she perceived herself as "being really good at math and understanding it," when she experienced failures in her math classes, she attributing them to careless mistakes that could have been prevented. She expressed her frustration with herself in these situations, saying "Why didn't I see that? Why didn't I recognize that? I should have rechecked it." Patsy's comments suggest that her attributions for failures were dependent on her perceptions of her abilities in those particular areas.

Frustration with failure. Despite their ability to make healthy attributions for the causes of their failures, the participants still indicated that they felt a great degree of frustration and anger upon experiencing failures. These feelings were aggravated by the participants' lack of coping skills. Since they rarely experienced academic failures throughout their school experiences, they found themselves incapable of knowing how to cope with the experience and to deal with their negative emotions. As a result, they reported strong feelings of frustration and anger.

Pasty described the frustration she experienced when her performance did not meet her standards, despite the tremendous amount of effort she put forth in preparation. In academics, she explained that after studying for a test so much and receiving a bad grade, she "feels so upset because it is like all of this work is for nothing." She also feels that way when she makes a mistake in her athletic performances. Patsy was quick to note that her feelings were not the result of her fears of disappointing others. She said failure did not make her "feel threatened in any way." She just experienced anger with herself for not meeting her standards. Patsy's internal frustrations caused her to decide to quit diving competitively in college. She explained that because of her emotions the sport was no longer fun anymore. She said, I would just want things to be perfect, and they couldn't be because you can't always do well. I just got to the point where it would eat me. And I would just go to bed thinking about diving and thinking about what I didn't do right that night or what I needed to do better. It would just take so much energy out of me just because I would focus so much more on the bad part of it, about not being good enough.

For Patsy, her inability to control her negative emotions began to ruin her internal love of the sport, and "it got to the point where diving wasn't as fun as it used to be."

Carl discussed similar emotions to Patsy when experiencing failure. He described feeling angry at himself when he knew he had control over the situation, and he failed anyway. For example, he discussed his reaction to his last exam grade in his honors chemistry course. He attributed his low performance to "stupid mistakes like recording numbers down wrong. I had the concepts down pat." These careless errors made Carl even more frustrated than if he would have done poorly because he did not understand the concept. He said,

That made me really angry at myself because I knew if I had studied that hard, I blew away those scores because I made silly mistakes on the tests, not because I didn't know the information. It frustrates me because if it is my mistake, I know I have control over the situation, and I know I could have done it right.

Carl's method of coping with his frustration was to work harder in the future, believing that to deliver such a performance again would be inexcusable to himself.

John also discussed his frustrations with his inability to meet his standards after putting forth his greatest amount of effort. He explained that his perfectionism "doesn't necessarily make me want the best grade. What it does is make me want to be rewarded for that effort." Therefore, when his performance did not represent the amount of effort he had put forth, It feels much harsher. I tried to be perfect, but it wasn't quite there. It makes me angry when I am not rewarded for my efforts, not really at myself because I know

that I've put forth the effort. Not angry at the professor but just the situation. John also described feelings of frustration and anger when he was unable to grasp concepts he was learning. In his honors calculus class in college, John explained that he frequently felt frustrated because he was unable to understand the concepts, and he knew he needed to learn it because subsequent concepts would build on it. When asked to describe his feelings of frustration in more detail, John explained that he believed they developed as a result of his lack of experience with failures. Throughout his K-12 experience, John explained that he never really experienced an academic failure. His performance was always representative of his ability or the amount of effort he put forth. Now in college, he was experiencing challenges for the first time, and he said he did not know how to cope with these new experiences of failure. According to John, "You get to college, and it's pretty hard to deal with the fact that sometimes you are not going to make A's and sometimes you are going to struggle." He indicated that in high school, perfectionism was not a problem because "there's not that much of a challenge, [so] it's not hard to be a perfectionist in high school." In college, however, "making an A is a lot harder, so [my perfectionism] is much more stressful on me now than it ever was in high school." John suggested that the Honors Program at the University should have a counseling service available to teach students how to cope with perfectionism to make their experiences with failure easier to handle.

The participants also indicated that their frustration with experiencing failure may have stemmed from their need for control. They each mentioned their desire to control situations, as Crystal summed up, "if I am in control, then things will go okay. I trust myself." Throughout their school experiences, the participants learned that they could control the outcome of their performance by the amount of effort they put forth. Mackenzie explained this perception, saying "With academics, I could always control it myself. If I had a test, I could study as much as I wanted to to get the grade that I wanted to. I could pull all-nighters and ace the test. Or if I did badly on it, I knew it was because I didn't study." When they entered college, however, and began to realize that sometimes their performance was due to circumstances beyond their control, frustration set in as a result. John explained feeling the greatest sense of frustration when his effort did not automatically lead to understanding the material and achieving a high grade. Thus, even though the participants acknowledged the role of external factors in contributing to the failures, a healthier approach than automatically assigning self-blame, they still had difficulty coping with their failures. They did not want to accept that they could not control every outcome, and as a result, they experienced anger and frustration.

Overall, the themes for the self-oriented perfectionists in the study indicate several contributors to the development of their perfectionistic tendencies, including a lack of challenge in their early academic experiences, personality characteristics, and parental modeling of perfectionistic attitudes and behaviors. Since their perfectionism evolved from internal high standards rather than feeling pressure to meet the standards of others, they remained confident others would still love and accept them even if they experienced failure. Themes in the data suggest that their self-oriented perfectionism influenced their need for achievement, consequently driving the achievement goals they set for themselves including mastery and performance-approach goals. These goals in turn influenced them to adopt adaptive achievement behaviors, including the tendency to seek challenges and thoroughly prepare for their academic coursework and activities. The data also indicated that the self-oriented perfectionists maintained healthy attributions for successes and failures. However, the participants did acknowledge the anger and frustration that sometimes accompanied their experiences of failures.

CHAPTER 5

DISCUSSION AND IMPLICATIONS

The themes uncovered in the present study reveal different patterns of developmental influence and implications for achievement for the socially prescribed and self-oriented perfectionists. The following chapter frames these findings within the context of existing literature, addressing consistencies as well as discrepancies. Implications for future studies are highlighted, and recommendations for counselors in Honors Programs and parents and classroom teachers of gifted perfectionistic students are provided.

Influences on the Development of Perfectionism

Early Academic Experiences

Both the socially prescribed and self-oriented perfectionists identified their early academic experiences as contributing to the development of their perfectionism. All identified as gifted in elementary school, these students did not find their overall school curriculum challenging. They commented that until high school, academic perfection came without effort; they consistently aced their homework and tests simply on the merits of their ability. As a result of having established a history of perfect grades, they began to adopt academic perfectionism as their goal. It became their standard of success, and earning any grade less than an A was interpreted as failure. The participants in both groups remarked that had they experienced a challenging curriculum throughout their education, causing them to earn grades that were less than perfect, they would not have adopted this standard of success; consequently, their perfectionistic tendencies would not have been as extreme.

This finding regarding the development of perfectionistic tendencies and early academic experiences has implications for future research in this area. Although many studies have been conducted examining perfectionism in gifted individuals (e.g. Parker & Adkins, 1995; Parker & Mills, 1996; LoCicero & Ashby; Schuler, 2000), none of these studies has focused on how perfectionism develops. Lack of attention to the development of perfectionism within gifted students remains a significant gap in the literature that needs to be addressed in order to better understand this phenomenon. The findings of the present study suggest one fruitful avenue for future study. Researchers may want to more closely examine how the difficulty level of the curriculum influences the development of perfectionism in gifted students over time. Tomlinson (1999) theorized that if gifted students were consistently challenged from the beginning of their school experiences, they would not come to always expect perfection from themselves. As a result, they may develop healthier attitudes and motivational patterns of achievement, since a challenging curriculum nurtures intrinsic motivation within gifted students (Gottfried & Gottfried, 1996).

This finding also highlights implications for educators working with young gifted students. For children at every ability level, educators need to ensure that their students are experiencing an appropriate challenge level commensurate with their ability. For educators working with gifted students in the regular classroom, practicing curriculum compacting (Reis, Burns, & Renzulli, 1992), – a strategy that frees students from instruction of curriculum in which they can demonstrate mastery to focus on more challenging tasks – as well as differentiation of assignments (Tomlinson, 1999) would help to maintain a high level of challenge for their gifted students. In addition to providing gifted students with more opportunities to explore challenges, teachers may also want to teach them how to cope with experiences in which they do not achieve as highly as they expected. Following these experiences with "failures," teachers may help students

develop coping strategies such as teaching them how to process their feelings and to develop a plan for improving their understanding of the material in the future. These experiences may help gifted students stymic perfectionistic tendencies by enabling them to reinterpret their academic disappointments as learning experiences rather than as failures. Arming gifted students with strategies for coping with failure will also better equip them for confronting later school experiences when the difficulty level increases. Consequently, they may experience less anger and fewer maladaptive behaviors such as procrastination avoidance of challenges than the participants in this study.

Parental Influences

The findings of this study suggest that parental influences are related to perfectionism in gifted college students in two primary ways: parental perfectionism and parenting styles. The themes uncovered suggest that variations in these two parental characteristics contributed to the development of either self-oriented or socially prescribed perfectionistic tendencies.

Parental perfectionism. The data suggest a relationship between parents' perfectionism and both self-oriented and socially prescribed perfectionism in their children. This relationship, however, differed according to the manifestation of perfectionism within the parents. The socially prescribed perfectionists viewed their parents' tendency to place rigid expectations on them as a result of their parents' own perfectionism. Several of the participants explained that their parents demanded perfection from their children because their children were a reflection of themselves. Therefore, in order to maintain their own image as being perfect in all areas, including parenting, they expected perfection out of their children. Parents contributed to the development of the participants' socially prescribed perfectionism because it increased the students' anxiety surrounding their performance, knowing they were expected to meet their parents' high standards for achievement.

In contrast to the socially prescribed perfectionists, the self-oriented participants explained that their parents' perfection contributed differently to the development of their perfectionism. Although perfectionistic themselves, the parents of these participants did not expect perfection out of their children. Rather, the relationship between parental perfectionism and perfectionism within the child formed as a result of observational learning. The participants found that as they watched their parents model perfectionistic attitudes and behaviors, they began to adopt these same characteristics themselves. In short, they learned their perfectionist tendencies through social learning, or modeling.

The findings of the present study call attention to the possibility that parents may play a role in contributing to the development of their children's perfectionistic tendencies. In light of this possibility, educators and counselors may need to help increase parental awareness of how their own their own perfectionistic tendencies may be influencing their children. By increasing their awareness, perhaps parents can open a channel of communication with their children on this topic. They may share with their children their own experiences with perfectionism, highlighting how it has influenced their own lives, positively and negatively. Such open communication between parents and children may help children learn how to cope with their own perfectionistic tendencies, realizing their parents are understanding and supportive. In addition, parents who place high demands for perfection on their children may benefit from learning how these demands negatively impact their children's emotional security as well as their achievement motivation. Relaxing these demands for perfection may reduce children's levels of socially prescribed perfectionism as they learn that their self-worth is not dependent on their achievement levels.

Other studies have also found a relationship between perfectionistic tendencies of both parents and children. The focus of these studies has centered largely on examining gender correlates in parent and child perfectionism. The findings of these studies indicate a same-sex modeling effect, with mothers' and daughters' perfectionism scores correlating and fathers' and sons' scores correlating. For example, Frost and his colleagues (1991), conducted a study investigating this topic with undergraduate women as participants. Using Frost and colleagues' (1990) *Multidimensional Perfectionism Scale*, the researchers found that overall perfectionism scores correlated for mothers and daughters, but not fathers and daughters. With a population of young gifted adolescents, Parker (cited in Blatt, 1995) also found support for the same-sex modeling hypothesis. In this study, mothers' perfectionism, as measured by Frost and colleagues' *Multidimensional Perfectionism Scale*, contributed significantly higher to explaining the variance in daughters' perfectionism contributed significantly higher to explaining the variance in their sons' perfectionism contributed significantly higher to explaining the variance in their sons' perfectionism than in their daughters' (15% compared to 5%).

Only one study (Vieth & Trull, 1999) investigated the same-sex modeling hypothesis with the Hewitt and Flett (1991) *Multidimensional Perfectionism Scale*. In this study, the same-sex modeling hypothesis was found for the self-oriented subscale, both for males and females. For the socially prescribed subscale, only the mothers' and daughters' scores were correlated, not fathers' and sons.'

The findings of these studies are consistent with the findings for the self-oriented participants in the present study. With this group of participants, more of a gender match between parent and child perfectionism emerged. Both Mackenzie and Jane perceived their mothers as perfectionistic, and Carl perceived his father as perfectionistic. John felt that both his mother and father were perfectionistic. Only Lindsey indicated a cross-gender modeling effect with her father demonstrating perfectionism. The findings in the present study with regard to the socially prescribed participants, however, were not consistent. With this group of participants, no pattern of gender matching was found between the perfectionistic child and the parent. Both Sarah and Joyce had perfectionist fathers, Dave and Leigh had perfectionist mothers, and Paul indicated that neither of his parents were extreme perfectionists.

Several explanations may account for these noted differences in the findings. First, as the present study was qualitative in nature, only a small number of participants were included. It remains possible that with a larger sample size, the cross-gender relationship found in the present study may not emerge. Second, the differences may be due to the fact that the present study was conducted with gifted participants whereas in previous studies the participants were more representative of the general population. Perhaps intellectual giftedness mediates the same-sex correlation between parent and child socially prescribed perfectionism. Since their child has been identified as gifted, and therefore perceived as capable of high achievement, perfectionistic mothers and fathers may demand academic perfection from both their son or daughter, regardless of their gender. This possibility suggests a need for a follow-up studies using the Hewitt and Flett (1991) *MPS* with a large sample of parents and gifted students to clarify the relationship between socially prescribed perfectionism in parents and gifted children.

Another explanation for the differences in findings among the studies may involve an additional parenting factor that may be more salient: parenting styles. The socially prescribed participants indicated that they believed their perfectionism developed not through observing and adapting the behaviors of their perfectionistic parents but rather as a result of the high demands placed on them by their parents. This suggests that high parental demands, rather than modeling of perfectionist behaviors, were more influential in contributing to the development of socially prescribed perfectionism within the participants. Granted, these demands may have developed in part out of their parents' need for perfection, but other factors may have contributed as well. Thus, their parents' authoritarian parenting style may offer more explanatory power for describing the development of socially prescribed perfectionism than simply examining parental perfectionism. Future studies examining both factors (parental perfectionism and parenting styles) may indicate how much unique variation each contributes to explaining the development of socially prescribed perfectionism.

Parenting styles and perfectionism. The findings of the present study suggest that parenting styles may be related to the development of perfectionism within gifted college students. The socially prescribed perfectionists described one or both of their parents as adopting an authoritarian approach to parenting, setting high, non-negotiable standards and demonstrating restrictive emotionality and communication with their children. Hewitt and Flett (1991) defined socially prescribed perfectionists as perceiving that others had high expectations for them to meet and evaluated them stringently. For the socially prescribed perfectionists in the present study, these perceptions were formed primarily as a result of their parents' authoritarian style.

Other studies have also examined the relationship between parenting styles and perfectionism. For example, Rice, Ashby, & Preusser (1996) compared parenting styles of perfectionists using Hamachek's (1978) classification distinction of neurotic perfectionists (defined by Hamachek as those who feel emptiness and dissatisfaction, regardless of the amount of achievement or precision of their work) and normal perfectionists (defined by Hamachek as those who engage in a healthy striving for superiority, feeling free to be less perfectionistic depending on the situation). The researchers found that neurotic perfectionists were more likely to have parents who were less encouraging, more demanding, and more critical, than normal perfectionists. Although the definitions of neurotic and normal perfectionism do not overlap entirely with Hewitt and Flett's (1991) conception of socially prescribed and self-oriented perfectionism, researchers have noted the parallel between neurotic forms of perfectionism (Stumpf & Parker, 2000), allowing the findings of the study to be compared to those of the present study. In another study investigating the relationship between parenting styles and perfectionism, Flett, Hewitt, and Singer (1995) found that authoritative parenting was related to self-oriented perfectionism within female but not male undergraduates. In contrast, they found a relationship between socially prescribed perfectionism and authoritarian parenting for males but not females. The authors suggested that female college students might be prone to raise their goals and aspirations when they are raised in a supportive family environment, characteristic of authoritative parents. On the other hand, the researchers speculated that socially prescribed perfectionism may only be related to authoritarian parenting for males because of cultural gender typing that encourages males to develop competitiveness and achievement striving and females to focus on affiliative tendencies.

The gender differences found within Flett, Hewitt, and Singer's (1995) study were not found in the present study. This may be the result of differences in the populations examined. Flett and his colleagues conducted their study with average ability college students whereas the present study focused only on gifted college students. Perhaps the high ability level of the child causes a different interaction between the parenting style and development of perfectionism. For example, high ability males may be more prone to perfectionistic tendencies than average ability males (LoCicero & Ashby, 2000). Growing up in an authoritative environment might shape these tendencies into self-oriented perfectionism, since the parents are likely to provide a supportive, encouraging environment for their sons' need for achievement to thrive. Therefore, no gender differences would be expected in the relationship between authoritative parenting and selforiented perfectionism.

Similarly, giftedness might also intersect the gender differences found within socially prescribed perfectionism and authoritarian parenting. Flett and his colleagues (1995) proposed that the relationship between the two constructs was only found for

males because of cultural expectations pushing males to become competitive, highachievers. This stereotype, however, might not hold true for parents with gifted daughters. Because their daughters have been labeled as gifted, parents may perceive them as being equally capable of the pursuing the high-achieving career track of men. Therefore, authoritarian parents of gifted girls may be likely to set equally high expectations and demands for their daughters as they would their gifted sons. Consequently, no gender differences would be expected in the relationship of authoritarian parenting and socially prescribed perfectionism in gifted students. To investigate the validity of this theory, future studies replicating Flett and his colleagues' methodology need to be completed with gifted college students.

The findings of the present study highlight implications for parenting. Parents with an authoritarian approach may need guidance in learning how this approach may contribute to the development of socially prescribed perfectionism within children. Counselors may want to encourage such parents to attend parenting workshops that teach authoritative approaches to parenting. Learning to relate to their children in an authoritative manner, communicating high standards, yet unconditional love and support, may help thwart the development of socially prescribed perfectionism. This would enable children to develop healthier attitudes toward themselves and their achievement in school. *Attachment and Perfectionism*

The findings of the present study suggest a complex relationship between attachment styles and perfectionism. Bartholomew and Horowitz (1991) described individuals with a negative working model of self and a positive working model of others as having an insecure, preoccupied attachment style. Because of their low levels of selfworth, individuals with a preoccupied attachment style seek self-acceptance by gaining the approval of others and are likely to blame themselves when they are rejected by others. In contrast, Bartholomew and Horowitz described individuals with a positive working model of self and a negative working model of others as having an insecure, dismissing attachment style. According to the researchers, these individuals do not have lower levels of self-worth; they maintain a strong sense of positive regard for themselves. They distrust others, however, as a result of previous experiences of being rejected by them. Because they downplay the importance of others and relationships, they are able to maintain high self-esteem.

In the present study, all but one of the socially prescribed perfectionists indicated an insecure form of attachment on Bartholomew and Horowitz's (1991) attachment style questionnaire. The participants differed in their type of insecure attachment style, with Dave, Paul, and Joyce describing a dismissing form and Sarah describing a preoccupied form. These findings on attachment are complex when considering the underlying theories of the different types of attachment coupled with other themes from the present study on fear of disappointing others and self-worth tied to achievements.

Theoretically, the relationships between socially prescribed perfectionism and both preoccupied and dismissing forms of insecure attachment are conceptually sound. Because socially prescribed perfectionists perceive that others have unrealistic standards for them to follow and evaluate them harshly, they may develop a preoccupied form of attachment. Their self-worth may become tied to meeting others' standards and gaining their approval. In the present study, the data from Sarah are indicative of this pattern. She consistently referred to "being a bad person," feeling guilty, and feeling ashamed for not meeting the expectations of others. Her self-worth appears strongly tied to her ability to please other people.

On the other hand, developing an insecure dismissing form of attachment would also be theoretically consistent with the description of socially prescribed perfectionism. In this case, the socially prescribed perfectionists may realize that others' demands on them are too harsh and unrealistic and therefore develop a negative model of others that would cause them to avoid close relationships. This pattern describes the present study's findings on Dave. He indicated that as he grew older, he realized his mother was manipulative and his father uncharacteristically harsh. Based on these realizations, he began to reject them, no longer feeling compelled to meet their standards.

The types of insecure attachment, preoccupied and dismissing, ascertained by Bartholomew and Horowitz's (1991) self-report measure are consistent with the data that emerged in the interviews for Sarah and Dave. The data, however, are not consistent for the other three participants. For example, Joyce and Paul both described themselves as having dismissing attachment styles. They described their desire to avoid getting close to others because they were afraid others may disappoint them if the relationships did not end up being perfect. These descriptions are consistent with Bartholomew and Horowitz's description of an insecure, dismissing style; however, the other findings in the study were not consistent with this style. Both Joyce and Paul strongly felt that their self-worth was tied to their achievements. They described a strong fear of failure because they feared that if they did poorly, others would think less of them as people. In addition, they feared failure because they would think less of themselves, believing they were not as smart or likeable if they did not meet the standards of others. These feelings are inconsistent with theory and research underlying an insecure, dismissing form of attachment. Bartholomew and Horowitz (1991) found that individuals with a dismissing style have high positive regard and self-esteem. If this is the case, why did both Joyce and Paul's sense of selfworth seem dependent on meeting the expectations of others? If their categorization of attachment on the self report measure was accurate, they should be able to maintain a strong sense of self-esteem and remain unconcerned with others' perceptions of them.

In addition to this inconsistency between the self-report measure and the interview data for Joyce and Paul, the various forms of data were also inconsistent for Leigh, who described herself as having a secure form of attachment on the Bartholomew and Horowitz (1991) measure. The interview data with Leigh, however, strongly illustrates that she, too, feared failure and disappointing others because it would mean "maybe I was a bad person." According to attachment theory, individuals who are securely attached, would not be plagued by such fears. This raises the question of why Leigh would have categorized herself as securely attached on the self-report measure yet clearly expressed her insecurities in her interview.

Several possibilities exist for explaining these discrepant data. One possibility involves methodological concerns with the Bartholomew and Horowitz's (1991) measure of attachment style. This measure is a self-report, forced choice measure that instructs individuals to select the best category to describe themselves. It operates under the assumption that individuals can accurately describe their thoughts, feelings, and behaviors and that they will be able to classify themselves squarely into one category. The participants may not have been able to do this effectively, choosing the best, but not entirely representative, category for themselves.

In addition, the measure itself may be problematic in terms of its reliability, as studies indicate that it has a reliability estimate of .5 (Crowell, Fraley, & Shaver, 1999). In recognition of these problems, the measure has recently been revised to include a 30-item inventory (Griffin & Bartholomew, 1994) that provides individuals with a score on each of the four styles of attachment, rather than just categorizing them into one type with no indication of intensity. This new measure, the *Relationship Styles Questionnaire*, has proven to be more reliable, with reliability estimates of .65 (Fraley & Shaver, 1997). Finally, researchers caution against using only self-report measures when drawing conclusions about attachment styles. These measures are better used in conjunction with other measures, such as interviews, to gain a more thorough understanding of individuals' attachment orientations (Crowell, Fraley, & Shaver). The data in the present study from

the self-report measure are therefore best understood in relation to the interview data, rather than independently.

No discernable pattern regarding attachment styles was found for the self-oriented perfectionists, with two participants indicating a secure attachment, two fearful, and two preoccupied. This finding may seem surprising, in light of the participants' description of their relationships with their parents. They described having warm and supportive relationships with their parents, characterized by unconditional positive regard and open communication. Attachment theory would predict characteristics such as these as fostering secure attachment bonds (Rutter & O'Connor, 1999). It is quite possible, however, that the participants maintained secure relationships with their parents, but not others in their lives. The *Relationship Questionnaire* used in this study is a measure of adolescent and adults' general attachment orientation; it does not specifically measure individuals' attachment to their parents. In fact, measures of adult attachment styles such as this have been shown to have little correlation with instruments specifically measuring attachment to parents (Crowell, Fraley, & Shaver, 1999).

The inconclusive findings of the present study regarding the relationship between attachment and perfectionism highlight the possibilities for many future studies in this area. First, it would be interesting to directly examine the relationship between perfectionism and attachment to parents. This study could be longitudinal in nature, measuring infants' security of attachment and correlating it with later measures of perfectionism. Or, a study could also be conducted using the *Adult Attachment Interview*, which retrospectively measures adults' attachment to their parents in childhood (Main & Goldwyn, 1985), and the Hewitt and Flett (1991) measure of perfectionism.

The findings of the present study also highlight the need to examine the relationship among attachment and non-attachment components of parental relationships and perfectionism. Parent-child relationships include strong attachment components, but

they also include other non-attachment characteristics, such as caregiving, disciplinary features, shaping of social experiences, models of behavior, teaching, conversational interchanges, and playful interactions (Rutter & O'Connor, 1999). Perhaps these non-attachment characteristics are more related to the development of different types of perfectionism than the attachment characteristics, providing an explanation for the findings in the present study. Granted, some of these non-attachment characteristics, such as those comprised in the authoritative parenting style, may be related to the sensitive, responsive qualities that promote attachment security. However, no empirical studies have been conducted examining the interconnections of these parenting characteristics (Rutter & O'Connor), precluding definite conclusions from being drawn explaining the interrelationship among these constructs and perfectionism.

Future studies also need to be conducted examining how perfectionism may be related to attachment to others beyond parents, such as peers and romantic partners, since the attachment style of one relational domain does not correlate highly with attachment styles in other domains (Crowell, Fraley, & Shaver, 1999). For example, the self-oriented perfectionists in the present study may have been securely attached to their parents, but not to their peers and romantic partners. This possibility offers an alternative explanation for why the interview data collected on their relationships with their parents suggested attachment security, yet the data from Bartholomew and Horowitz's (1991) *Relationship Questionnaire* indicated insecure attachment styles for the majority of the participants. To test this hypothesis, it would be beneficial to examine the relationships between perfectionism and attachment in various relational domains.

Finally, it would also be beneficial for future studies to examine the directionality of the relationship between perfectionism and attachment. Do individuals with insecure attachment styles tend to develop perfectionistic tendencies, or do perfectionistic people tend to develop insecure attachment styles? The data from the present study do not clearly indicate direction. For example, some of the data for the socially prescribed perfectionists suggest that the high expectations others set for them – and the consequences of not meeting those expectations – caused the socially prescribed participants to feel as though they were not worthy of being loved unless they were perfect. This suggests that their insecurity in relationships led them to develop their perfectionism. However, the participants also commented on how their perfectionism negatively influenced their ability to relate to others. In essence, they "blamed" their perfectionism as the cause of the troubles relating their peers and significant others. Future studies examining directionality are needed to clarify the relationship between perfectionism and attachment.

Influences of Perfectionism on Achievement

Achievement Goals

When discussing whether perfectionism is an unhealthy or a healthy trait for individuals to possess, an argument can be made that it is healthy, since it may lead to high levels of achievement, such as in athletic competitions and academics. If one looks beyond the outcome performance measure and examines the underlying motives and goals that drive achievement behavior, however, a more complex picture emerges. As Pintrich (2000a) suggested, multiple pathways may lead to the same outcome behavior, resulting from different patterns of motivation, affect, strategy use, and performance over time. Some of these pathways may be psychologically healthier than others. These different pathways to achievement were evidenced within the data for the present study. Both the self-oriented and socially prescribed perfectionists had histories of strong academic achievement, yet the motives and goals they expressed that fueled their achievement behavior differed, with the pattern described by the self-oriented perfectionists being more psychologically adaptive than that described by the socially prescribed perfectionists. The self-oriented and socially prescribed perfectionists demonstrated different patterns of motives, goals, and behaviors that influenced their academic achievement. These goals can be interpreted through Elliot and Church's (1997) hierarchical model of achievement motivation. According to this framework, individuals adopt achievement motives which direct the types of achievement goals they set, which in turn influence, direct, and regulate their behaviors toward achievement. As a whole, the self-oriented perfectionists were guided by what Elliot and Church referred to as a need for achievement motive. They exhibited predominantly internal motivation for their academic achievement, stemming from a desire for self-improvement as well as a mastery orientation toward learning. Their need for achievement drove them to set both mastery and performance-approach goals.

Setting goals for self-improvement and mastery of content led the participants to adopt a number of adaptive motivational strategies. They were motivated to seek out challenges, constantly pushing themselves to achieve more highly, as evidenced by Lindsey's desire to take on the most challenging classes. These goals also directed the participants to devote more effort toward their school work. For the most part, they reported using distributed practice in preparation for their papers and their exams, working on them a little each night over the course of several weeks rather than procrastinating and only beginning an assignment at the last minute. They also adopted a number of healthy strategies that helped them with their academic achievement, including time and resource management, eliciting the help of knowledgeable peers and their professors, and monitoring their own learning.

Adaptive motivational strategies such as those described by the self-oriented perfectionists in the present study are consistent with other research findings. For example, Mills & Blankstein (2000) found that self-oriented perfectionists demonstrated a number of adaptive metacognitive and cognitive learning strategies as well as effective resource management. These included the use of rehearsal, elaboration, organization, critical thinking, metacognition, time and study environment management, and effort management.

In contrast, the socially prescribed perfectionists in the present study appeared to have adopted a fear of failure achievement motive. The socially prescribed perfectionists' fear of failure and inability to keep failures in perspective is consistent with Hewitt and Flett's (1991) examination of perfectionism and maladjustment. The researchers found that socially prescribed perfectionism was related to a fear of negative evaluation and a tendency to overgeneralize failures.

The socially prescribed perfectionists demonstrated no intrinsic motivation to achieve academically and instead tended to set either performance-approach goals or performance-avoidance goals, rooted in their motive to avoid failure. Their tendency to set either performance-approach or performance-avoidance goals may be the result of the connection they made between their self-worth and their achievement. According to Covington's self-worth theory (1992) students are motivated to maintain their reputation of competency because their self-worth depends on their reputation. Therefore, they develop various strategies in an attempt to avoid failure. These strategies may include avoiding work because failure that might result from lack of effort would not be as threatening to their self-worth as failure that might result from lack of ability. On the other hand, they may increase the amount of effort they devote toward a task to ensure that failure would not be a possible outcome (Covington, 1984).

These two opposing strategies for avoiding failure – avoiding effort or putting forth more effort – were evidenced in the findings of the present study. The participants indicated that they had a tendency to procrastinate on their assignments and preparation for class because of their anxieties of not doing the work correctly. Paul, for example, indicated that he used procrastination as a self-protection measure, saying that if he procrastinated on a project and did poorly, he would have the excuse of not having put forth enough effort and therefore, it would not reflect negatively on his self-worth. On the other hand, he explained that if he devoted all his resources to a project and still did poorly, it would indicate that he lacked ability in that area which would negatively impact his self-worth. Therefore, to avoid this potential outcome, he frequently procrastinated. This tendency toward procrastination has been found in a number of studies examining perfectionism within individuals (Flett, Blankstein, Hewitt, & Koledin, 1992; Flett, Hewitt, & Martin, 1995; Frost, Marten, Lahart, & Rosenblate, 1990).

Rather than avoiding challenges or procrastinating, some of the socially prescribed perfectionists discussed their tendency to embrace challenges. For example, Joyce described her need to take a full course load of AP classes her senior year because such an intensive course load was recognized by her peers and allowed her to preserve her identity as an intellectual. Paul also described feeling forced to take difficult courses, even though he feared the outcome of his grade because if he did not take it, he would be indicating to his peers and teachers that he was not smart enough to handle the material. On a surface level, this tendency to take on challenging courses may be seen as adaptive because it results in individuals pursuing higher levels of achievement. However, the accompanying anxieties that underlie the motivation to take on the challenge may not be healthy for the individual.

Examining the achievement motives and goals that underlie students' achievement behavior remains critical for practitioners working with gifted students. Practitioners may be quick to judge the perfectionistic behaviors gifted students display as unhealthy. However, if these behaviors are rooted in a need for achievement motive and mastery goals of learning the material, as was the case with the self-oriented perfectionists in the present study, they may not be unhealthy at all. These achievement motives and goals stimulate further motivation to learn and achieve (Elliot, 1999). Consequently, classroom teachers should not try to stymie the behaviors of these students, realizing these behaviors are manifestations of adaptive achievement motives and goals.

Some teachers, on the other hand, may be unaware that perfectionism in students may be the result of unhealthy achievement motives. If their gifted students are maintaining high levels of achievement, teachers may not be concerned, believing that gifted students' perfectionism is not harming them academically. The students' outcome performance, however, might be the result of a motive to avoid failure, with performanceapproach goals set based on this motive as was the case for the socially prescribed participants in the present study. Since living with such a fear of failure is frequently accompanied by high levels of anxiety, depression, and negative feelings of self-worth (Hewitt & Flett, 1991) these students may be experiencing psychological distress, despite their high levels of achievement. Some may be preoccupied with thoughts of suicide, as indicated in past literature on perfectionism in high achieving and gifted students (Adkins & Parker, 1996; Delisle, 1986; Hamilton & Schweitzer, 2000). These findings suggest a need for teachers and counselors working with gifted students to look beyond performance outcomes to the goals and motives behind them.

Multiple goals to achievement. In the present study, the self-oriented perfectionists were found to have higher levels of intrinsic motivation for academic achievement than the socially prescribed perfectionists. This finding offers support for the findings of other research investigating the relationship between these two constructs (Mills & Blankstein, 2000). Examining the specific achievement goals set by both groups of perfectionists offers an explanation for the resulting influence on intrinsic and extrinsic motivation. Although self-oriented perfectionism might be related to higher levels of intrinsic motivation than socially prescribed perfectionism, these levels of intrinsic motivation may still be depressed as a result of the multiple goals of both high mastery and high performance set by self-oriented perfectionists. Setting high performance goals simultaneously with mastery goals may interfere with intrinsic motivation. Pintrich (2000b) explained that the normative goal theory predicts that any concern with performance should have negative effects on task involvement because individuals would either be distracted by making comparisons with others (if they set performance-approach goals) or by the fear of others judging them negatively (if they set performance-avoidance goals). Therefore, according to this theory, adopting simultaneous mastery and performance goals would be less beneficial than adopting a single goal of mastery orientation. If this theory is valid, self-oriented perfectionism would negatively influence the individual's intrinsic involvement in a task, since this trait was found to be accompanied by both high mastery and performance goals.

An alternate theory, the revised goal theory, suggests the opposite outcome. Pintrich (2000b) explained that according to this theory, adopting high levels of mastery and performance goals would be the most adaptive because of the multiplicative interaction effects. He explained that focusing on mastering the task as well as focusing on competing against others would result in an overall net effect of increased involvement in the task. In this case, self-oriented perfectionism would lead to an increase in motivation since both mastery and performance goals are adopted.

Pintrich (2000a; 2000b) tested these alternate theories in classroom contexts by comparing individuals with mastery only goals and those with mastery and performance goals on measures of self-efficacy, cognitive strategy use, and metacognition as well as anxiety, affect, self-handicapping, and risk taking. The results of these studies indicated that individuals who simultaneously activated both mastery goals and performance goals did not differ on the above measures compared to individuals who adopted only mastery goals. While this finding does not offer support for the revised goal theory in that motivation was not enhanced by the adoption of two goals, it does negate the normative theory that predicted a deficit in intrinsic motivation as a result of adopting performance goals in addition to mastery goals. This finding has implications for educators working with self-oriented perfectionists. While these students may seem concerned with competition and outperforming their peers, as was the case with the participants in the present study, this performance orientation may not be detrimental to their levels of intrinsic motivation. As long as they maintain their mastery goal orientation, concern with competition should not adversely affect them.

Pintrich's (2000a; 2000b) research on multiple goals and multiple pathways to achievement also has implications for socially prescribed perfectionists. The socially prescribed perfectionists in the present study did not set mastery goals; they only set performance goals. Pintrich's research examined how this pattern of goals (low mastery and high performance) influenced patterns of motivation, affect, and strategy use. In these studies, he found that individuals with this combination of goals did not demonstrate adaptive patterns. They reported self-handicapping behaviors and less risk taking. They were less confident, less interested in the task, experienced less positive affect, and were more likely to withdraw their efforts and engagement in challenging tasks. These findings are consistent with prior research (Midgley, Arunkumar, & Urdan,1996) and were also noted in the data of the present study.

Given the maladaptive strategies that may result from setting this combination of goals, educators working with socially prescribed perfectionists may need to assist these students in changing their achievement goals. For example, teachers may consider implementing evaluation systems based on degree of individual improvement to encourage students to compete against their past performance rather than the performance of others. In addition, teachers may try to increase intrinsic motivation by removing the threat of failure through providing opportunities for learning that are not assessed. The socially prescribed perfectionists in the present study indicated that their best learning experiences were those in which they could participate in an activity without fear of assessment, such

as in the Governor's Honors Program or through ungraded, independent studies in the classroom. Unevaluated experiences such as these might help socially prescribed perfectionists increase their intrinsic love of learning, consequently fostering the development of mastery goals in combination with performance goals.

Perfectionism and Attributions

One of the most interesting findings of the present study were the different patterns of attributions given for successes and failures for the self-oriented and socially prescribed perfectionists. The self-oriented perfectionists expressed feelings of pride when discussing their academic successes. They made internal attributions for these successes; although they acknowledged the role of ability, effort emerged as the main attribution to explain their success. They each reflected on how their long hours of studying and preparation of course materials had resulted in good grades, honors, and scholarships. Research has found this pattern of attributions to be healthy because individuals then create the expectation that future success can be achieved through continuing to put forth more effort (Bar-Tal, 1978; Dweck, 1975). When describing their academic failures, no consistent pattern of attributions emerged, a finding consistent with past research on selforiented perfectionism and attributions for failures (Flett, Hewitt, Blankstein, & Pickering, 1998). The participants in the present study made realistic attributions, internal or external, that were situation specific. When they felt that failure was their own fault, they were willing to take responsibility; however, they were also willing to acknowledge the role of external causes beyond their control in other situations as evidenced by John's changing attributions for not doing well on chemistry exams. This flexible attributional style was healthy for the individuals studied because it fueled their motivation to improve by devoting more effort when necessary and also preserved their self-concept when they recognized their inability to control their failures.

For the socially prescribed perfectionists, a different pattern of attributions was found. When discussing their successes, these participants were more likely to give external attributions, explaining that their successes were largely the result of luck or contextual variables. As a result, they were not likely to take pride in their successes. This pattern of attributions is consistent with another study examining attributional styles in perfectionists (Flett, Hewitt, Blankstein, & Pickering, 1998). In this study of undergraduates, the researchers found a correlation between socially prescribed perfectionism and external attributions for success. The researchers commented that this pattern of attributions is unhealthy, for it prevents individuals from experiencing positive self-reinforcement, which may serve as an explanation for the association between socially prescribed perfectionism and depression.

With regard to failure, the socially prescribed participants in the present study overwhelmingly made internal attributions. These attributions were perceived to be both stable and unstable, and controllable and uncontrollable. For failures that involved not receiving specific awards, scholarships, or honors, they were likely to attribute the causes to internal, stable, uncontrollable factors such as "not being a good enough person." In contrast, failures involving academic work, such as tests or projects, were attributed to internal, unstable, controllable causes, such as not putting forth enough effort. The participants were unwilling to make external attributions, even when external causes appeared to play a primary role in contributing to their failures, as evidenced by Paul's unwillingness to make an external attribution for doing poorly on an apparently flawed exam. Despite the fact that all the students in the class did poorly, Paul still attributed his performance to lack of preparation, rather than a problem related to the test or the instruction.

The tendency to make internal attributions for their failures is theoretically consistent when considering other correlates of socially prescribed perfectionism. For

example, Hewitt and Flett (1991) found that socially prescribed perfectionism is correlated with high levels of self-blame and self-criticism. Given these correlations, it follows logically that these individuals would make internal attributions in which they blamed themselves for not succeeding. However, this pattern is not consistent with prior research. Flett and his colleagues (1998) found that socially prescribed perfectionists were far more likely to attribute failures to external causes, exhibiting a "learned helplessness" pattern of behavior stemming from their beliefs that they lacked control over the outcomes in their lives. This relationship between socially-prescribed perfectionism and learned helplessness behaviors has been documented in the literature (e.g. Hewitt & Flett, 1996). Flett and his colleagues hypothesized that socially prescribed perfectionists still feel a great sense of self-blame, despite their willingness to attribute failures to external causes because they believe they should be able to overcome these external influences.

Why might the socially prescribed participants in the present study have differed in their attributional pattern for failures from the socially prescribed participants in past studies? One plausible explanation centers on their giftedness. The individuals in the present study described a history of high achievement in academics, stating that they were able to achieve academic perfection throughout most of their school experiences without much effort because the curriculum was not challenging for them. During this time, the adults in their lives, including their parents and teachers, noticed their intellectual capabilities and communicated to the students that since they were gifted, they should be capable of meeting high academic standards. Over time, the participants may have internalized this message and therefore, when they encountered an academic failure, they automatically assumed it was their fault, since, according to their teachers and parents, they should have been capable of succeeding due to their intellectual abilities. Future studies comparing the attributions of socially prescribed perfectionists in both gifted and

non-gifted populations would help to explain the discrepancies in results between the present study and previous research.

Researchers examining attributions have suggested that the most optimal pattern involves attributing successes to internal stable causes, such as ability, and failures to internal, unstable causes, such as insufficient effort (Bar-Tal, 1978; Pintrich & Schunk, 1996; Platt, 1988). This attributional pattern for failure, however, may not be the most beneficial for individuals with perfectionistic tendencies who already may be over exerting themselves in terms of the amount of effort they put into a particular task. Consequently, attributing a failure they may experience to lack of effort would not be beneficial, as it would only induce greater feelings of self-blame, anger, frustration guilt, and shame. Perhaps a healthier attribution would be for these individuals to learn that sometimes failures are beyond their control, due to situational circumstances, such as an invalid test or an incompetent professor.

Perfectionistic students could benefit from learning how to make appropriate attributions for failure, such as those made by the self-oriented perfectionists in the present study. These would include attributing failures to internal causes when justified, but recognizing the role of external causes when valid as well. Teachers could help students learn how to make healthy attributions by discussing a variety of possible explanations for their performance, both internal and external. Such discussions would help perfectionistic students realize many factors contribute to performance, some of which may be beyond their control. This realization may help them learn how to control their tendencies toward self-criticism and self-blame and therefore, allow them to process through failures in a more psychologically healthy manner.

Perceptions of Successes and Failures

Not only did the socially prescribed and self-oriented perfectionists differ in the attributions they made for their successes and failures, they also differed in their

perceptions and the significance they attributed to them. The socially prescribed perfectionists were dismissive in their discussion of their successes because they attributed them to external causes and also because success for them was defined as the norm. Since they felt they were expected to succeed academically, they merely viewed their achievements as meeting basic standards rather than accomplishing something extraordinary. In contrast, failures were prominent in their minds. To the socially prescribed perfectionists, failures were so looming that they wiped out the significance of any past successes. They also tended to overgeneralize failure, viewing it as having a cascading effect where failure in one area would spill over into all other areas. Their tendency to place so much emphasis on failures led the socially prescribed participants to experience a host of negative emotions such as anxiety, self-blame, guilt, and shame. These findings support the findings of multiple studies conducted by Hewitt and Flett (1991) on socially prescribed perfectionists and various personality dimensions. Consistent with the relationships identified in the present research, Hewitt and Flett found that socially prescribed perfectionism correlated significantly with overgeneralization of failure, depression, anxiety, and self-blame.

In contrast to the socially prescribed perfectionists, the self-oriented perfectionists in the present study took greater pride in their successes since they attributed them to their hard work. They were also able to keep their failures in perspective. The self-oriented perfectionists viewed failures as temporary setbacks and motivators to improve in the future as evidenced by Carl's comment, "If I fall short of [my goals] the next time I am working even harder to get there." Again, this is consistent with Hewitt and Flett's (1991) multi-study analysis of self-oriented perfectionism. The researchers found no correlation between self-oriented perfectionism and overgeneralization of failure. Although the self-oriented perfectionists in the present study were able to keep failures in perspective, they still indicated that they experienced a lot of anger and frustration as a result of their failures. These negative emotions have also been reported in the literature, with self-oriented perfectionists exhibiting high levels of self-criticism, self-blame, and anxiety (Hewitt & Flett, 1991).

The feelings of frustration and anger following academic failure experienced by the self-oriented perfectionists in the present study may also have been exacerbated by their school experiences and their giftedness. The participants indicated that because of their giftedness, they were able to succeed with little or no effort throughout the majority of their school experiences. When they did encounter challenging materials, they were able to master them by applying effort. Therefore, failure was not an outcome they were accustomed to experiencing. When they entered their last years of high school and first semester of college, however, school became far more challenging for them. For the first time, many met an academic challenge they could not master, despite the amount of effort they put forth. They did not know how to cope with this new experience of failure, and they became extremely frustrated and angry with themselves.

The findings on how the gifted socially prescribed and self-oriented perfectionists interpreted successes and failures have implications for educators and counselors. These students may need help learning how to interpret their successes and failures. Socially prescribed perfectionists may need attributional retraining which would help them learn to take pride in their successes and perceive them as the product of their hard work. Both the self-oriented and socially prescribed perfectionists may also benefit from counseling sessions that focus on managing emotions resulting from experiencing failure. Several of the participants in the present study said they wished such a counseling service was available for them. Honors Programs on college campuses might want to consider offering such a counseling service, especially for first-year honors students. Since many first-year students may be experiencing their first encounters with academic challenges and failures, in addition to all the other adjustments of college, they may be especially vulnerable to psychological distress due to their perfectionism. Utilizing available counseling resources may help them learn to manage their perfectionism and emotions related to academic pressures, allowing them to adopt a psychologically healthier approach to achievement.

Parenting Styles and Achievement Motivation

The relationship between different dimensions of perfectionism and achievement motivation and attributional style found in the present study may also be explained by examining differences in parenting styles. Research has found that authoritarian and authoritative parenting are related to differences in achievement motivation in students. In their examination of undergraduate students' goal orientations and their relationship to parenting styles, Gonzalez, Greenwood, and WenHsu (2001) found that having authoritarian parents, specifically fathers, was related to setting performance-approach goals of proving one's ability. In contrast, the researchers found that authoritative parenting, specifically from the mother, was related to greater mastery orientation.

Authoritarian parenting has also been shown to relate to higher extrinsic motivational orientation and lower intrinsic motivation, whereas authoritative parenting has been related to higher levels of intrinsic motivation (Ginsburg & Bronstein, 1993; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994). In addition, parenting styles have also been related to achievement behaviors. Authoritarian parenting has been related to students' avoidance of challenging tasks in school settings, learned helplessness, and passive behaviors (Aunola, Stattin, & Nurmi, 2000; Maccoby & Martin, 1983). In contrast, authoritative parenting has been found to relate to adaptive achievement strategies, including lower levels of failure expectation, task-irrelevant behavior, and passivity in school (Aunola, Stattin, & Nurmi). Finally, research has also found parenting styles to be related to attributional styles, with authoritarian parenting corresponding to a tendency to attribute school achievements to external causes and school failures to low ability. Authoritative parenting corresponds to more self-enhancing attributions (Aunola, Stattin, & Nurmi, 2000; Glasgow, Dornbusch, Troyer, Steinberg, & Ritter, 1997).

The findings of the studies reviewed above suggest a need for future research examining how the relationship between perfectionism and various motivational constructs may be mediated by the influence of parenting styles. Such studies would give an indication of how much unique influence perfectionistic tendencies have on achievement motivation, independent of parenting styles. Until such studies are completed, caution must be exercised in drawing implications and making recommendations from these findings.

Conclusion

The findings in the present study suggest that different dimensions of perfectionism – socially prescribed and self-oriented – have unique implications for gifted students' achievement motivation, thoughts, and behaviors. Consequently, to better understand the influence of perfectionism on gifted students' lives, individuals working with these students need to conceptualize the construct as multidimensional instead of viewing it as unidimensional. Parents, teachers, and counselors should also develop an awareness of how these various dimensions of perfectionism may develop and their differential influences on the achievement and psychological well-being of gifted students. Such an understanding will enable these individuals to guide gifted students toward adaptive thoughts and behaviors that facilitate, rather than inhibit, their academic achievement.

REFERENCES

- Adderholdt, M. & Goldberg, J. (1999). Perfectionism: What's bad about being too good? (2nd ed.). Minneapolis, MN: Free Spirit Publishing.
- Adkins, K.K., & Parker, W. D. (1996). Perfectionism and suicidal preoccupation. Journal of Personality, 64, 529-543.
- Adler, A. (1956). Striving for superiority. In H. L. Ansbacher & R. Ansbacher (Eds.), The individual psychology of Alfred Adler: A systematic presentation in selections from his writings (pp. 101-125). New York: Harper & Row.
- Ainsworth, M. (1989). Attachments beyond infancy. *American Psychologist, 44,* 709-716.
- Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological wellbeing in adolescence. *Journal of Youth and Adolescence*, 16, 427-453.
- Atkinson, J. (1957). Motivational determinants of risk-taking behavior. *Psychological Review*, 64, 359-372.
- Aunola, K., Stattin, H., & Nurmi, J. K. (2000). Parenting styles and adolescents' achievement strategies. *Journal of Adolescence*, 23, 205-222.
- Bar-Tal, D. (1978). Attributional analysis of achievement-related behavior. *Review of Educational Research*, 48, 259-271.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, 61, 226-244.

- Baumrind, D. (1971). Current patterns of parental authority. Developmental Psychology Monograph, 4, 1-103.
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence*, 11, 56-95.
- Berger, P., & Luckmann, T. (1966). The social construction of reality. New York: Doubleday.
- Bhar, S., & Kyrios, M. (1999). Cognitive personality styles associated with depressive and obsessive compulsive phenomena in a non-clinical sample. *Behavioural & Cognitive Psychotherapy*, 27, 329-343.
- Blatt, S. J. (1995). The destructiveness of perfectionism: Implications for the treatment of depression. *American Psychologist*, 50, 1003-1020.
- Boergers, J., Spirito, A., & Donaldson, D. (1998). Reasons for adolescent suicide attempts: Associations with psychological functioning. *Journal of the American Academy of Child & Adolescent Psychiatry*, 37, 1287-1293.
- Bogdan, R., & Biklen, S. (1998). *Qualitative research for education: An introduction to theory and methods*. Boston, MA: Allyn & Bacon.
- Bowlby, J. (1980). Attachment and loss. Vol. 3. Loss. New York: Basic Books.
- Bowlby, J. (1988). A secure base. New York: Basic Books.
- Brown, E. J., Heimberg, R. G., Frost, R. O., Makris, G. S., Juster, H. R., & Leung, A. W. (1999). Relationship of perfectionism to affect, expectations, attributions and performance in the classroom. *Journal of Social and Clinical Psychology*, 18, 98-120.
- Cassidy, J. (1999). The nature of the child's ties. In J. Cassidy, & P. Shaver (Eds.), Handbook of attachment: Theory, research, and clinical applications (pp.3-20). New York: Guilford Press.

- Coffey, A., & Atkinson, P. (1996). *Making sense of qualitative data*. Thousand Oaks, CA: Sage.
- Covington, M., & Beery, R. (1976). Self-worth and school learning. New York: Holt, Rinehart, & Winston.
- Covington, M. (1984). The self-worth theory of achievement motivation: Findings and implications. *The Elementary School Journal*, *85*, 5-20.
- Covington, M. (1992). *Making the grade: A self-worth prospective on motivation and school reform*. Cambridge, England: Cambridge University Press.
- Crotty, M. (1998). The foundations of social research. Thousand Oaks, CA: Sage.
- Crowell, J., Fraley, R.C., & Shaver, P. (1999) Measures of individual differences in adolescent and adult attachment. In J. Cassidy, & P. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp.434-468). New York: Guilford Press.
- Dabrowski, K. (1956). Positive disintegration. Boston, MA: Little, Brown.
- Delisle, J. (1986). Death with honors: Suicide among gifted adolescents. *Journal of Counseling and Development*, 64, 558-560.
- Dey, I. (1993). Qualitative data analysis: A user friendly guide for social scientists. London: Routledge and Kegan Paul.
- Dweck, C. (1975). The role of expectations and attributions in the alleviation of learned helplessness. *Journal of Personality and Social Psychology, 31*, 674-685.
- Dweck, C. (1986). Motivational processes affecting learning. *American Psychologist*, *41*, 1040-1048.
- Elliot, A. J. (1994). *Approach and avoidance achievement goals: An intrinsic motivation analysis*. Unpublished doctoral dissertation, University of Wisconsin-Madison.
- Elliot, A. J. (1997). Integrating the "classic" and "contemporary" approaches to achievement motivation: A hierarchical model of approach and avoidance

achievement motivation. In M. Maehr, & P. Pintrich (Eds.), *Advances in motivation and achievement* (Vol. 10, pp. 143-179). Greenwich, CT: JAI.

- Elliot, A. J. (1999). Approach and avoidance motivation and achievement goals. *Educational Psychologist, 34,* 169-189.
- Elliot, A. J., & Church, M. (1997). A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, 72, 218-232.
- Elliot, A., & Harackiewicz, J. (1996). Approach and avoidance achievement goals and intrinsic motivation: A mediational analysis. *Journal of Personality and Social Psychology*, 70, 968-980.
- Ferrari, J. R. (1995). Perfectionism cognitions with nonclinical and clinical samples. *Journal of Social Behavior and Personality*, 10, 143-156.
- Fish, S. (1990). How to recognize a poem when you see one. In D. Bartholomae & A.
 Petrosky (Eds.), *Ways of Reading: An anthology for writers*. (2nd ed.). Boston, MA: St. Martins's Press.
- Flett, G., Blankstein, K., Hewitt, P., & Koledin, S. (1992). Components of perfectionism and procrastination in college students. *Social Behavior and Personality*, 20, 85-94.
- Flett, G. L., Hewitt, P. L., Blankstein, K. R., & Pickering, D. (1998). Perfectionism in relation to attributions for success or failure. *Current Psychology*, 17, 249-262.
- Flett, G., Hewitt, P., & Martin, T. (1995). Dimensions of perfectionism and procrastination. In J. Ferrari, J. Johnson, & W. McCown (Eds.), *Procrastination* and task avoidance: Theory, research, and treatment (pp. 113-136). New York: Plenum.
- Flett, G. L., Hewitt, P. L., & Singer, A. (1995). Perfectionism and parental authority styles. *Individual Psychology*, 51, 50-60.

- Flett, G. L., Sawatzky, D. L., & Hewitt, P. L. (1995). Dimensions of perfectionism and goal commitment: a further comparison of two perfectionism measures. *Journal of Psychopathology and Behavioral Assessment, 17,* 111-124.
- Fraley, R. C. & Shaver, P. R. (1997). Adult attachment and the suppression of unwanted thoughts. *Journal of Personality and Social Psychology*, 73, 1080-1091.
- Frost, R. O., Heimberg, R. G., Holt, C. S., Mattia, J. I., & Newbauer, A. L. (1993). A comparison of two measures of perfectionism. *Personality and Individual Differences*, 14, 119-126.
- Frost, P. O., Lahart, C. M., & Rosenblate, R. (1991). The development of perfectionism:
 A study of daughters and their parents. *Cognitive Therapy and Research*, 15, 469-490.
- Frost, R. P., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research*, 14, 449-468.
- Ginsburg, G. S., & Bronstein, P. (1993). Family factors related to children's intrinsic/extrinsic motivational orientation and academic performance. *Child Development, 64*, 1461-1474.
- Glasgow, K., Dornbusch, S., Troyer, L., Steinberg, L., & Ritter, P. (1997). Parenting styles, adolescents' attributions, and educational outcomes in nine heterogeneous high schools. *Child Development*, 68, 507-529.
- Gonzalez, A., Greenwood, G., & WenHsu, J. (2001). Undergraduate students' goal orientations and their relationship to perceived parenting styles. *College Student Journal, volume,* 182-192.
- Gottfried, A. E., & Gottfried, A. W. (1996). A longitudinal study of academic intrinsic motivation in intellectually gifted children: Childhood through early adolescence. *Gifted Child Quarterly, 40,* 179-183.

- Griffin, D. W., & Bartholomew, K. (1994). The metaphysics of measurement: The case of adult attachment. In K. Bartholomew & D. Perlman, (Eds.), Advances in personal relationships: Vol. 5. Attachment processes in adulthood (pp. 17-52). London: Jessica Kingsley.
- Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology*, 15, 27-33.
- Hamilton, T., & Schweitzer, R. (2000). The cost of being perfect: Perfectionism and suicide ideation in university students. *Australian & New Zealand Journal of Psychiatry, 34*, 829-835.
- Hart, B. A., Gilner, F. H., Handal, P. J., Gfeller, J. D. (1998). The relationship between perfectionism and self-efficacy. *Personality and Individual Differences*, 24, 109-113.
- Hewitt, P. L. & Flett, G. L. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology*, 60, 456-470.
- Hewitt, P. L. & Flett, G. L. (1996). Personality traits and the coping process. In M.Zeidner, & N. Endler (Eds.), *Handbook of coping* (pp. 40-433). London: Wiley.
- Hewitt, P. L., Flett, G. L., & Turnbull-Donovan, W. (1992). Perfectionism and suicide potential. *British Journal of Clinical Psychology*, 31, 181-190.
- Honigmann, J. J. (1982). Sampling in ethnographic fieldwork. In R. G. Burgess (Ed.),*Field research: A sourcebook and field manual.* London: Allen and Unwin.
- Kline, B. E., & Short, E. B. (1991). Changes in emotional resilience: Gifted adolescent females. *Roeper Review*, 13, 118-121.
- Lamborn, S., Mounts, N., Steinberg, L., & Dornsbusch, S. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development*, 62, 1049-1065.

- Lask, B., & Bryant-Waugh, R. (1992). Early on-set of anorexia nervosa and related eating disorders. *Journal of Child Psychology & Psychiatry & Allied Disciplines*, 33, 281-300.
- Lincoln, Y., & Guba, E. (1985). Naturalistic inquiry. Beverly Hills, CA: Sage.
- LoCicero, K. A. & Ashby, J. S. (2000). Multidimensional perfectionism in middle school aged gifted students: A comparison to peers from the general cohort. *Roeper Review, 22,* 182-185.
- Maccoby, E., & Martin, J. (1983). Socialization in the context of the family: Parent-child interaction. In E. M. Hetherington (Ed.), P. H. Mussen, (Series Ed.), *Handbook* of child psychology: Vol. 4: socialization, personality, and social development (pp. 1-101). New York: Wiley.
- Maehr, M. (1989). Thoughts about motivation. In C. Ames & R. Ames (Eds.). Research on motivation in education: Goals and cognitions (Vol. 3, pp. 299-315). New York: Academic.
- Main, M. & Goldwyn, R. (1985). *Adult attachment classification system*. Unpublished manual.
- Mandler, M. & Sarason, S. (1952). A study of anxiety and learning. *Journal of Abnormal Psychology*, 47, 166-173.
- Maslow, A. H. (1970). *Motivation and personality* (Rev.ed.). New York: Harper & Row.
 McClelland, D., Atkinson, J., Clark, R., & Lowell, E. (1953). *The achievement motive*. New York: Appleton-Century-Crofts.
- McClelland, D., Atkinson, J., Clark, R., & Lowell, E. (1953). *The achievement motive*. New York: Appleton-Century-Crofts.

McCracken, G. (1988). The long interview. Thousand Oaks, CA: Sage.

- Midgley, C., Arunkumar, R., & Urdan, T. (1996). "If I don't do well tomorrow, there's a reason:" Predictors of adolescents' use of academic self-handicapping strategies. *Journal of Educational Psychology*, 89, 710-718.
- Miles, M., & Huberman, A. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd Ed.). Thousand Oaks: Sage.
- Mills, J. S., & Blankstein, K. R. (2000). Perfectionism, intrinsic vs extrinsic motivation, and motivated strategies for learning: A multidimensional analysis of university students. *Personality and Individual Differences, 29*, 1191-1204.

Moustakas, C. (1994). Phenomenological research methods. Thousand Oaks, CA: Sage.

- Nicholls, J. (1984). Achievement motivation: Conceptions of ability and achievement motivation: A theory and its implications for education. In S. Paris, G. Olson, & H. Stevenson (Eds.), *Learning and motivation in the classroom* (pp. 211-237). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Pacht, A. R. (1984). Reflections on perfectionism. American Psychologist, 39, 386-390.
- Parker, W. (1997). An empirical typology of perfectionism in academically talented children. *American Educational Research Journal*, 34, 545-562.
- Parker, W., & Adkins, K. (1995). A psychometric examination of the Multidimensional Perfectionism Scale. *Journal of Psychopathology & Behavioral Assessment*, 17, 323-334.
- Parker, W., & Mills, C. J. (1996). The incidence of perfectionism in gifted students. *Gifted Child Quarterly*, 40, 194-199.
- Parker, W., & Stumpf, H. (1995). An examination of the Multidimensional Perfectionism Scale with a sample of academically talented children. *Journal of Psychoeducational Assessment, 13,* 372-383.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Thousand Oaks, CA: Sage Publications.

- Payne, S. (1999). Interviewing in qualitative research. In A. Memon & R. Bull (Eds.), Handbook of the psychology of interviewing (pp. 89-102). NY: John Wiley & Sons.
- Pintrich, P. R. (2000a). The role of goal orientation in self-regulated learning. In M.
 Boekaerts, P. Pintrich, & M. Zeidner (Eds.), *The handbook of self-regulation* (pp. 451-502). San Diego, CA: Academic Press.
- Pintrich, P. R. (2000b). Multiple goals, multiple pathways: The role of goal orientation in learning and achievement. *Journal of Educational Psychology*, *3*, 544-555.
- Pintrich, P. R., & Schunk, D. H. (1996). Motivation in education: Theory, research, and applications. Englewood Cliffs, NJ: Prentice-Hall.
- Platt, C. (1998). Effects of attributions for success on first-term college performance: A covariance structure model. *Journal of Educational Psychology*, *80*, 569-578.
- Rasmussen, S. A., & Eisen, J. L. (1992). The epidemiology and clinical features of obsessive compulsive disorder. *Psychiatric Clinics of North America*, 15, 743-758.
- Reis, S., Burns, D., & Renzulli, J. (1992). Curriculum compacting: The complete guide to modifying the regular curriculum for high-ability students. Mansfield Center, CT: Creative Learning Press.
- Rice, K. G., Ashby, J. S., Preusser, K. J. (1996). Perfectionism, relationships with parents, and self-esteem. *Individual Psychology*, 52, 246-260.
- Rice, K. G., & Mirzadeh, S. A. (2000). Perfectionism, attachment, and adjustment. _____Journal of Counseling Psychology, 47, 238-250.
- Roberts, S. M. & Lovett, S. (1984). Examining "F" in gifted: Academically gifted adolescents' physiological and affective responses to scholastic failure. *Journal for the Education of the Gifted, 17,* 241-259.

- Robin, A. L., Koepke, T., & Moye, A. (1990). Multidimensional assessment of parentadolescent relations. *Psychological Assessment: A Journal of Consulting and Clinical Psychology, 2*, 451-459.
- Roedell, W. C. (1984). Vulnerabilities of highly gifted children. *Roeper Review, 6,* 127-130.
- Rossman, G. B., & Rallis, S. F. (1998). Learning in the field: An introduction to qualitative research. Thousand Oaks, CA: Sage Publications.
- Rutter, M., & O'Connor, T. (1999). Implications of attachment theory for child care policies. In J. Cassidy, & P. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 823-844). New York: Guilford Press.
- Schuler, P. A. (2000). Perfectionism in the gifted adolescent. *Journal of Secondary Gifted Education, 11,* 183-196.
- Seidman, I. (1998). Interviewing as qualitative research: A guide for researchers in education and the social sciences. New York: Teachers College Press.
- Spangler, D., & Burns, D. (1999). Is it true that men are from Mars and women are from Venus? A test of gender differences in dependency and perfectionism. *Journal of Cognitive Psychotherapy*, 13, 339-357.
- Spence, J. T. & Helmreich, R. L (1983). Achievement-related motives and behaviors. In J. T. Spence (Ed.), Achievement and achievement motives: Psychological and sociological perspectives (pp. 7-74). San Francisco: Freeman.
- Spielberger, C. (1972). Anxiety as an emotional state. In C. Spielberger (Ed.), *Anxiety: Current trends in theory and research* (Vol. 1, pp. 23-49). New York: Academic.
- Steinberg, L., Lamborn, S., Darling, N., Mounts, N., & Dornsbusch, S. (1994). Overtime changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development*, 65, 754-770.

- Strauss, A. (1987). Qualitative analysis for social scientists. Cambridge, UK: Cambridge University Press.
- Stumpf, H. & Parker, W. (2000). A hierarchical structural analysis of perfectionism and its relation to other personality characteristics. *Personality and Individual Differences*, 28, 837-852.
- Tomlinson, C. (1999). The differentiated classroom: Responding to the needs of all learners. Alexandria, VA: Association for Supervision and Curriculum Development.
- Vieth, A. Z., Trull, T. J. (1999). Family patterns of perfectionism: an examination of college students and their parents. *Journal of Personality Assessment*, 72, 49-67.
- Weiner, B. (1994). Integrating social and persons theory theories of achievement strivings. *Review of Educational Research, 64,* 557-575.
- Weiner, B., & Kukla, A. (1970). An attributional analysis of achievement motivation. Journal of Personality and Social Psychology, 15, 1-20.
- Wolcott, H. (1994). *Transforming qualitative data: Description, analysis, and interpretation*. Thousand Oaks, CA: Sage.

APPENDIX A

INTERVIEW GUIDE

I. Academic Achievement Goals

Tell me about your academic goals.

Think of a course that really challenged you and tell me about it in as much detail as possible.

Think of a situation in which you experienced an academic success. Tell me about that.

Probes: How would you describe your reaction to this success?

What did you view as the cause(s) of your success?

How did (or will) this experience influence your future motivation

to achieve in this area?

How did you parents respond to your success?

(Additional stories were requested when necessary)

Think of an experience when you did not do as well as you thought you would.

Tell me about this.

Probes: What was your reaction to this experience?

What did you view as the cause(s) of your performance?

How did (or will) this experience influence your future motivation

to achieve in this area?

How did your parents respond to your performance?

(Additional stories were requested when necessary)

II. Perfectionistic Tendencies

Think of a time when you were aware of being perfectionistic and tell me about it in as much detail as possible.

How do you think your perfectionistic tendencies evolved?

III. Relationship with Parents

How would you describe your relationship with your parents?

(When the participant did not automatically do so, I asked him to answer for both mother and father).

How would you describe the type of support they offer you in terms of your academic endeavors? Can you describe an experience that exemplifies this type of support/lack of support?

Do you seek comfort from your parents during times of stress? If so, how? Can you describe a specific experience that provides an example?

APPENDIX B

SURVEY MEASURES

Thank you for agreeing to participate in this study. Please fill out the following information. **Note:** Your name and contact information is required only so I may contact you for a potential follow-up interview. All of your responses will be kept confidential.

DEMOGRAPHICS

Please print responses		
Name:	Phone Number	er:
E-mail address:SAT		scores:
Age: Gende	er: Ethnicity (opt	tional):
City/State of Permanent Resi	dence:	
Number of siblings:	Birth order rank:	
Mother's level of formal educ	cation (check one):	
High school	Trade/Technical	Graduate/professional
	College	
Mother's occupation:		
Father's level of formal education	ation (check one):	
High school	Trade/Technical	Graduate/professional
	College	
Father's occupation:		

Please indicate on a scale of 1-7 the extent to which each statement is true of you. (*Note: 1 indicating not at all true of me to 7 indicating very true of me*).

 It is important to me to do better than the other students.
 I want to learn as much as possible from my classes.
 It is important for me to understand the content of my courses as
thoroughly as possible.
 I worry about the possibility of getting bad grades in my courses.
 My goal in my classes is to get a better grade than most of the other
students.
 My fear of performing poorly in my classes is often what motivates me.
 I wish my classes were not graded.
 I am striving to demonstrate my ability relative to others in my classes.
 I prefer course material that really challenges me so I can learn new things.
 I am motivated by the thought of outperforming my peers in my classes.
 I desire to completely master the material presented to me in my classes.
 I often think to myself, "What if I do badly in my classes?"
 It is important for me to do well compared to others in my classes.
 I hope to have gained a broader and deeper knowledge of course material
when I am finished with each course.
 I prefer course material that arouses my curiosity even if it is difficult to
learn.
 I just want to avoid doing poorly in my classes.
 I want to do well in my classes to show my ability to my family, friends,
advisor, or others.
 I'm afraid if I ask my TA or instructor a "dumb" question he or she might
not think I'm very smart.

Please check the **one** paragraph description that characterizes you the best.

_ It is easy for me to become emotionally close to others. I am comfortable depending on them and having them depend on me. I don't worry about being alone or having others not accept me.

I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.

I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them.

I am comfortable without close emotional relationships. It is very important for me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me. Please mark the paragraph description that characterizes your parents'/caregiver's style of parenting the best. Answer for mother (M), father (F), or other caregiver (O), specify relationship of other caregiver:

M F O

- _____ My parent/caregiver is very restrictive, imposing many rules on me and expecting strict obedience. He or she rarely explains why it is necessary for me to follow the rules and will often rely on power tactics to ensure I follow them. My parent/caregiver is not understanding of differing viewpoints that I may have and instead expects me to follow his or her word as law and respect his or her authority.
- _____ My parent/caregiver makes many reasonable demands of me. My parent/caregiver gives me a rationale for complying with the limits he or she sets and ensures that I follow his or her guidelines. He or she is accepting and responsive to my point of view and often seeks my participation in family decision making. My parent/caregiver exercises control in a rational, democratic way, showing he or she recognizes and respects my perspective.
- _____ My parent/caregiver is accepting of me and my viewpoints. He or she makes relatively few demands on me. My parent/caregiver allows me to freely express my feelings and impulses and does not closely monitor my activities. He or she rarely exhibits firm control over my behavior.
 - My parent/caregiver makes few if any demands on me and seems unconcerned about my behaviors. He or she seems uncaring or aloof. My parent/caregiver may be too involved in his or her own stresses and problems to devote a lot of time and energy to raising me.

APPENDIX C

SAMPLE DATA DISPLAY: LEIGH

