5-1-2012

# The Influence of Parent Factors on Child Perfectionism: A Cross-Sectional Study

Lisa Caitlin Cook
*University of Nevada, Las Vegas*, cookL6@unlv.nevada.edu

# THE INFLUENCE OF PARENT FACTORS ON CHILD PERFECTIONISM: A CROSS-SECTIONAL STUDY

by

Lisa Caitlin Cook

A dissertation submitted in partial fulfillment

of the requirements for the

Doctorate of Philosophy in Psychology

Department of Psychology

College of Liberal Arts

The Graduate College

University of Nevada, Las Vegas

May 2012

UNLV
UNIVERSITY OF NEVADA LAS VEGAS

THE GRADUATE COLLEGE

We recommend the dissertation prepared under our supervision by

**Lisa Caitlin Cook**

entitled

**The Influence of Parent Factors on Child Perfectionism: A Cross-Sectional Study**

be accepted in partial fulfillment of the requirements for the degree of

**Doctor of Philosophy in Psychology**
Department of Psychology

Christopher Kearney, Committee Chair

Jeffrey Kern, Committee Member

Brad Donohue, Committee Member

Peggy Whitby, Graduate College Representative

Ronald Smith, Ph. D., Vice President for Research and Graduate Studies
and Dean of the Graduate College

**May 2012**

ABSTRACT

**The Influence of Parent Factors on Child Perfectionism:**

**A Cross-Sectional Study**

by

Lisa Caitlin Cook

Dr. Christopher Kearney, Examination Committee Chair
Distinguished Professor of Psychology
University of Nevada, Las Vegas

Perfectionism is a multidimensional construct that affects adults and children and is associated with psychological problems such as depression, anxiety, and obsessive compulsiveness. Studies regarding risk factors for perfectionism are scarce but extant research and theories suggest parents may be involved in the development of perfectionism in children. The present study included 160 children aged 8-17 years (67 males, 93 females) and their parents. The study examined child perfectionism across five age groups (8-9 years, 10-11 years, 12-13 years, 14-15 years, 16-17 years) as well as relationships between parent and child perfectionism and between parent psychopathology and child perfectionism. Self-oriented perfectionism was highest among children aged 16-17 years and lowest among children aged 12-13 years. Maternal perfectionism and maternal psychopathology predicted child self-oriented and socially prescribed perfectionism, with some age-related trends. Maternal anxiety mediated the relationship between maternal other-oriented perfectionism and socially prescribed perfectionism in children aged 8-12 years. Post hoc analyses also revealed that maternal socially prescribed perfectionism mediated relationships between maternal depression and anxiety and child self-oriented and socially prescribed perfectionism. Maternal

perfectionism and psychopathology may constitute risk factors for child perfectionism and may vary in the way they impact children at different ages. Findings are discussed in terms of their implications for theories of perfectionism development and clinical practices.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

# CHAPTER 1

## Defining Perfectionism

Most researchers agree that perfectionism involves holding oneself to excessively high standards, experiencing mistake-making as highly aversive, and basing feelings of self-worth on ability to meet perfectionist standards (Burns, 1980; Flett & Hewitt, 2002; Frost, Marten, Lahart, & Rosenblate, 1990; Hollender, 1965). Perfectionism has been associated with positive attributes such as conscientiousness, achievement striving, order, self-discipline, organization, life satisfaction, positive affect, and academic success (Flett, Hewitt, Boucher, Davidson, & Munro, 1997; Frost et al., 1990; Gilman & Ashby, 1993a; Hill, Huelsman, & Araujo, 2010; Hill & McIntire, 1997). Perfectionism also seems related to depression, anxiety, obsessive-compulsive disorder, suicidality, low self-esteem, anorexia, bulimia, self-injurious behaviors, workaholism, and fatigue (Antony, Purdon, Huta, & Swinson, 1998; Bell, Stanley, Mallon, & Manthorpe, 2010; Castro et al., 2004; Clark, Lelchook, & Taylor, 2010; Cooper, Cooper, & Fairburn, 1985; Deary & Chalder, 2010; Dittner, Rimes, & Thorpe, 2011; Flett & Hewitt, 1995; Flett, Hewitt, Blankstein, & Mosher, 1995; Flett, Hewitt, & Dyck, 1989; Frost, Heimberg, Holt, Mattia, & Neubauer, 1992; Fujimori et al., 2011; Hewitt & Flett, 1990, 1991a; Hewitt, Flett, & Ediger, 1995; Hewitt, Flett, Turnbull-Donovan, & Mikail, 1991; Hewitt, Newton, Flett, & Callendar, 1997; Luyten et al., 2011; O'Connor, 2007; Sassaroli et al., 2008; Steele & Wade, 2008; Wu & Cortesi, 2009).

The impact of perfectionism is generally viewed as pervasive, though some research suggests work and academics are the domains of life most influenced by

perfectionism (McArdle, 2010; Slaney & Ashby, 1996; Stöeber & Stöeber, 2009). Perfectionism is also consistently identified as deleterious to treatment outcomes for individuals with obsessive-compulsive, mood, and other psychological disorders (Blatt, Quinlan, Pilkonis & Shea, 1995; Blatt, Zuroff, Bondi, Sanislow & Pilkonis, 1998; Chik, Whittal, & O'Neill, 2008; Shahar, Blatt, Zuroff, & Pilkonis, 2003; Shahar, Blatt, Zuroff, Krupnick & Sotsky, 2004; Zuroff et al., 2000). Several studies reveal that treatments for perfectionism also effectively reduce psychological distress (Aldea, Rice, Gormley, & Rojas, 2010; Arpin-Cribbie et al., 2008; Kutlesa & Arthur, 2008).

Perfectionism has been the subject of much curiosity and extensive research among adults, but widespread attention regarding childhood perfectionism is a more recent phenomenon (Accordino, Accordino, & Slaney, 2000; Burns, 1980; Castro et al., 2004; Flett & Hewitt, 2002; Gilman & Ashby, 2003a, 2003b; Herman, Trotter, Reinke, & Ialongo, 2011; Hutchinson & Yates, 2008). Extant studies confirm that significant relationships exist between child perfectionism and symptoms of depression, anxiety, eating disorders, and suicidality (Accordino et al., 2000; Boegers, Spirito, & Donaldson, 1998; Cook & Kearney, 2008; Essau, Leung, Conradt, Cheng, & Wong, 2008; Flett, Hewitt, & Cheng, 2008; Flett, Panico, & Hewitt, 2011; Huggins, Davis, Rooney, & Kane, 2008; McVey, Pepler, Davis, Flett, & Abdolell, 2002; McWhinnie, Abela, Knauper, & Zhang, 2009; Midlarsky & Nitzburg, 2008; Nilsson, Sundbom, & Hagglof, 2008; Soenens et al., 2008; Wilksch, Durbridge, & Wade, 2008). The study of the development of perfectionism is thus important but few have examined this process.

Current theory on the etiology of perfectionism strongly implicates factors such as parent perfectionism and psychopathology. Child perfectionism has been associated

with parent perfectionism in several studies, but the influence of parent factors on perfectionism development has been extensively explored only recently (Cook & Kearney, 2008; Frost et al., 1991; Hutchinson & Yates, 2008; McArdle & Duda, 2008; Rice, Tucker, & Desmond, 2008; Sapieja, Dunn, & Holt, 2011; Soenens, Vansteenkiste, Luyten, Duriez, & Goossens, 2005; Vieth & Trull, 1999).

The present study drew upon theoretical work specific to perfectionism to better understand relationships among parent factors and child perfectionism. The following chapter reviews the relevant literature on perfectionism in adults and children, theories of perfectionism development, and risk factors for perfectionism development, including influences of parent psychopathology on families and children. A brief review of the literature on development of anxiety disorders was also incorporated and informed study hypotheses. Finally, a cross-sectional study of parent influences on the development of perfectionism was proposed as an essential addition to the empirical research on perfectionism.

CHAPTER 2

# A Review of the Literature on Perfectionism

## Initial Representations of Perfectionism

Contemporary research on perfectionism stems from several foundational articles. In these articles, researchers introduced the concept of perfectionism and refined its definition based on their experience with perfectionists in therapy or via scientific study. Current work in the area of perfectionism is informed by the efforts of Hollender (1965), Hamachek (1978), Burns (1980), and Pacht (1984), among others, to explain perfectionism.

Hollender (1965) proposed that perfectionism involves demanding from oneself a much higher quality of work than is necessary and feeling as though less-than-perfect performance is unacceptable. He suggested that desires to improve self-image and receive acceptance from others motivate perfectionists. These motivations may be evident from early childhood. Hollender believed that perfectionists feel overburdened, almost always fail to meet their unrealistic standards, rarely derive satisfaction from their efforts, and focus exclusively on their mistakes. Perfectionists may also undermine themselves by procrastinating and/or avoiding opportunities for success because they fear failure. Hollender (1965) suggested that perfectionism is learned when children feel as though they must earn their parents' love and approval by behaving perfectly. Perfectionists primarily differ from healthy, high-achieving individuals on the basis of their inability to derive a sense of accomplishment from their efforts (Hollender, 1965).

Hamachek (1978) posited that perfectionist strivings become problematic when fear of performing imperfectly prevents an individual from pursuing opportunities. In contrast to Hollender's (1965) negative depiction of perfectionists, Hamachek (1978) differentiated normal from neurotic perfectionists. Normal perfectionists set high standards for their performance but also understand their limits, experience pleasure and satisfaction from their efforts, and have flexible self-expectations. Neurotic perfectionists demand the impossible and feel their performance is never good enough (Hamachek, 1978). Hamachek (1978) believed that neurotic perfectionists seek approval from others (especially parents) through perfect performance and want to avoid disapproval from others. Neurotic perfectionism develops in an environment where approval from significant others is inconsistent or depends on near-perfect performance. Hamachek (1978) also suggested that normal perfectionism develops via positive modeling, whereby a child observes and identifies with an individual who demonstrates normal perfectionism.

Burns (1980) described perfectionists as "those whose standards are high beyond reach or reason, people who strain compulsively and unremittingly toward impossible goals and who measure their own worth entirely in terms of productivity and accomplishment" (p. 34). Burns (1980) linked perfectionism to depression, anxiety, writer's block, obsessive-compulsiveness, health problems, and relationship difficulties. Burns (1980) explained that perfectionists, who frequently feel they have failed because they are unable to meet their impossibly stringent expectations, respond to a sense of failure with depression, anxiety, and loss of self-esteem.

Burns (1980) also suggested that several cognitive errors made by perfectionists likely contribute to their distress. Perfectionists engage in all-or-none thinking: they feel as though imperfect performance means complete failure. Burns (1980) also stated that perfectionists often overgeneralize, believe that negative experiences will recur, and frequently self-criticize, telling themselves that they "should" have worked harder or done something differently. Burns (1980) explained that perfectionists thus feel trapped because their opportunities for success seem very limited but the consequences of failure feel extreme. The fact that perfectionists have trouble forgiving themselves for past mistakes and failures compounds these effects.

Burns (1980) believed that individuals learn perfectionism during childhood and that perfectionism largely reflects interactions with parents. He also suggested that interactions with perfectionist parents are particularly likely to contribute to the development of perfectionism in children. Burns (1980) stated that perfectionist parents are especially likely to reward their children for outstanding performance and seem anxious and disappointed in response to their children's mistakes. Like Hollender (1965) and Hamachek (1978), Burns (1980) emphasized that perfectionism develops when children learn that mistakes will lead to loss of acceptance from parents, whereas perfect performance will result in approval and love. Burns (1980) suggested that perfectionist parents are even more likely than non-perfectionists to feel that their children's performance reflects their own efforts. Perfectionist parents thus transmit their perfectionist standards and cognitive distortions to their children.

Pacht (1984) depicted perfectionism as debilitating and undesirable. He believed that perfectionists repeatedly predispose themselves to failure by setting goals for

achievement that are impossibly high. Even on rare occasions when perfectionists do succeed, they are unable to enjoy their achievements because a fresh opportunity for failure is always waiting. Similar to Burns's (1980) description of all-or-none thinking, Pacht described a "God/scum phenomenon" in which perfectionists are only able to recognize extremes in their performance (perfection or failure). Pacht (1984) also agreed with Burns (1980) that perfectionists overgeneralize and second-guess themselves. Pacht (1984) explained that perfectionists tend to be unhappy and frustrated unless they can unlearn perfectionist behaviors.

The initial representations of perfectionism articulated by Hollender (1965), Hamachek (1978), Burns (1980), and Pacht (1984) are relatively consistent in the core characteristics they use to define the construct. Perfectionism involves demanding an extremely high quality of performance from oneself in many or all aspects of life. Perfectionists are likely to be self-critical, measure their worth in terms of their performance, and be persistently dissatisfied with the quality of their work. These researchers collectively agree that perfectionists are motivated by desires to enhance self-image, avoid disapproval, and earn approval or acceptance from significant others.

Hollender, Hamachek, Burns, and Pacht believed that perfectionism originated during childhood and developed from particular types of parent-child interactions. They suggested that children may model perfectionism from parents or receive reinforcement for behaving in a near-perfect manner. The authors vary about a normal or adaptive aspect of perfectionism but agree that the maladaptive characteristics of perfectionism relate to psychopathologies such as anxiety and depression. They also suggested that perfectionists frequently make cognitive errors such as black and white thinking, second

guessing, and overgeneralization that contribute to the development of psychological problems.

Researchers first introduced perfectionism as maladaptive and relatively unidimensional but allowed for the possibility that positive aspects of perfectionism exist. Perfectionism has recently become a popular area of research, resulting in a plethora of new ideas about its conceptualization. Current researchers generally agree that perfectionism is a complex, multidimensional construct in contrast to the simpler, unidimensional presentation of perfectionism first provided by Hollender, Burns, and Pacht. The following section describes modern conceptualizations of perfectionism that have generated a substantial amount of recent research.

## Modern Perspectives on Perfectionism

Many leading perfectionism researchers agree the construct is multidimensional. A large number of recent empirical investigations of perfectionism also support the idea that perfectionism has adaptive *and* maladaptive components. This second contention is somewhat more controversial than the first, however. The bulk of research on perfectionism is attributable to several core groups of researchers. The conceptualizations of perfectionism developed by each group are described below. Table 1 includes important perfectionism terminology and definitions.

Table 1

*Perfectionism Terms and Definitions*

| Term | Definition |
|---|---|
| | MPS – Frost version |
| Concern over mistakes | Reacting negatively to making mistakes, feeling as though making a mistake indicates failure, and expecting disapproval from others |
| Personal standards | High performance standards for self |
| Parental expectations | Belief that parents are overly harsh |
| Parental criticism | Belief that parents set overly high standards for oneself |
| Doubts about actions | Extent to which an individual doubts his ability to achieve goals or accomplish tasks |
| Organization | Placing importance on order and neatness |
| | MPS – Hewitt and Flett version |
| Self-oriented perfectionism | Having high standards of achievement for oneself and desire to attain perfection |
| Socially prescribed perfectionism | Belief that unrealistically high expectations are imposed on oneself by significant others |
| Other-oriented perfectionism | Having excessively high standards for others |
| | Combined MPS versions |
| Maladaptive evaluative concerns | Negative aspects of perfectionism including socially prescribed perfectionism, concern over mistakes, doubts about actions, parental criticism, and parental expectations |

| | |
|---|---|
| Positive achievement strivings | Positive aspects of perfectionism including self-oriented perfectionism, other-oriented perfectionism, high personal standards, and organization |
| Additional terminology from Hewitt and Flett | |
| Perfectionism cognitions | Automatic thoughts related to perfectionism |
| Perfectionistic self-presentation | Desire to conceal inadequacies and appear perfect to others |
| APS-R – Slaney and colleagues | |
| Adaptive perfectionism | High standards and orderliness |
| Maladaptive perfectionism | Discrepancy experienced between performance expectations and evaluations |
| Adaptive Maladaptive Perfectionism Scale – Rice and Preusser | |
| Sensitivity to mistakes | Undesirable feelings associated with making mistakes |
| Contingent self-esteem | Experiencing satisfaction from success |
| Compulsiveness | Need for organization, order, and fastidiousness |
| Need for admiration | Desire to earn others' approval by doing well |

*Note*. This table is partially adapted from Exhibit 1.1 in Flett & Hewitt, 2002, p. 14.

**Perfectionism According to Frost and Colleagues**

According to Frost, Marten, Lahart, and Rosenblate (1990), previous theorists focused on high personal standards as central to perfectionism. These researchers

suggested, however, that perfectionism is more complex than simply demanding a high level of performance from oneself. Frost and colleagues (1990) contended that defining perfectionism in this way fails to distinguish perfectionists from individuals who merely work hard and are successful. Based on a review of existing perfectionism literature, Frost and colleagues (1990) asserted that perfectionism involves overconcern about making mistakes, extremely high personal standards, high parental expectations and criticism, doubts about one's abilities, and overemphasis on order and organization.

Frost and colleagues (1990) developed the Multidimensional Perfectionism Scale (MPS – Frost version) to measure the aforementioned components of perfectionism. This self-report measure comprises 35 items rated on a 1-5 scale from "strongly disagree" to "strongly agree." The MPS – Frost version yields an overall perfectionism score as well as subscale scores for concern over mistakes, personal standards, parental expectations, parental criticism, doubts about actions, and organization (Table 1).

*Concern over mistakes* involves having a negative reaction to mistakes, feeling as though mistakes equal complete failure, and believing that others' opinions of oneself are greatly influenced by mistake-making. *Personal standards* refer to an individual's need to set and attain very high goals. *Parental expectations* for outstanding performance and the perception of *parental criticism* for failure to meet parents' expectations are also measured. *Doubts about actions* refer to having a general sense that one's performance is somehow lacking. The last subscale, *organization*, includes items about the importance of organization and neatness. Several studies indicate that the MPS – Frost version more accurately conveys 3-4 factors (Hawkins, Watt, & Sinclair, 2000, 2006; Stumpf & Parker, 2000) or even 5 factors (Chan, 2009; Lee & Park, 2011). Many researchers,

however, continue to use the original 6 hypothesized subscales (Purdon, Antony, & Swinson, 1999; Shafran & Mansell, 2001; Stöeber, 1998)

Frost and colleagues' conceptualization of perfectionism has received widespread attention in the literature and the MPS – Frost version is an oft-used measure of perfectionism. Major findings regarding the dimensions of perfectionism suggested by Frost and colleagues have primarily centered on associations with psychopathology. Frost and colleagues (1990) found significant relationships between overall perfectionism, as measured by the MPS – Frost version, and symptoms of depression, anxiety, paranoid ideation, psychoticism, obsessive-compulsiveness, and somatization. Symptomatology was most consistently related to concern over mistakes and doubting of actions (Frost et al., 1990). The researchers also found significant relationships among perfectionism, procrastination, and specific symptoms of obsessive-compulsive disorder (OCD) such as checking, washing, and doubting.

Since the creation of the MPS – Frost version, researchers have also found significant associations among the components of perfectionism measured by the scale and eating disorders, panic disorder, OCD, obsessive-compulsive personality disorder, phobia, anxiety, low self-esteem, loneliness, chronic fatigue syndrome, suicidality, and depression symptoms and diagnoses (Aldea & Rice, 2006; Antony et al., 1998; Bardone-Cone et al., 2008; Bardone-Cone, Weishuhn, & Boyd, 2009; Bastiani, Rao, Weltzin, & Kaye, 1995; Bieling, Israeli, & Antony, 2003; Bieling, Summerfeldt, Israeli, & Antony, 2004; Bulik et al., 2003; Chang, Ivezaj, Downey, Kasima, & Morady, 2008; Clavin, Clavin, Gayton, & Broida, 1996; Deary & Chalder, 2010; Ferrier-Auerbach, & Martens, 2009; Frost et al., 1993; Frost & DiBartolo, 2002; Frost & Steketee, 1997; Halmi et al.,

2005; Harris, Pepper, & Maack, 2008; Hibbard & Davies, 2011; Kawamura, Hunt, Frost, & DiBartolo, 2001; Kempke et al., 2011; Libby, Reynolds, Derisley, & Clark, 2004; Lynd-Stevenson & Hearne, 1999; O'Connor, 2007; Pearson & Gleaves, 2006; Peck & Lightsey, 2008; Pieters et al., 2007; Pleva & Wade, 2006; Rheaume, Freeston, Dugas, Letarte, & Ladouceur, 1995; Rosser, Issakidis, & Peters, 2003; Sassaroli et al., 2008; Sassaroli, Gallucci, & Ruggiero, 2008; Sassaroli & Ruggiero, 2005; Shafran & Mansell, 2001; Shroff et al., 2006; Suzuki, 2005). Lundh, Saboonchi, and Wangby (2008) sought to identify the aspects of perfectionism comprising "clinically significant perfectionism." The researchers identified a combination of high concern over mistakes, doubts about actions, and personal standards as being under-represented in their non-clinical group and over-represented in clinical samples including individuals with panic disorder, social phobia, and depression (Lundh et al., 2008).

**Perfectionism According to Hewitt, Flett, and Colleagues**

Hewitt, Flett, and colleagues have developed perfectionism measures and conducted extensive empirical research on perfectionism in clinical and nonclinical populations. Hewitt and Flett (1991b) developed their own measure of perfectionism entitled the Multidimensional Perfectionism Scale (MPS – Hewitt and Flett version). Like Frost and colleagues, Hewitt and Flett envisioned a perfectionism scale that encompassed several dimensions of perfectionism. Hewitt and Flett (1991b) conceptualized perfectionism as intrapersonal and interpersonal, meaning that perfectionism demands can exist within oneself as well as between oneself and others. According to Hewitt and Flett (1991b), prior measures of perfectionism focused solely on self-directed performance demands.

The MPS – Hewitt and Flett version measures 3 dimensions of perfectionism: self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism (Table 1). The self-report scale includes 15 items related to each dimension of perfectionism (a total of 45 items). Individuals completing the MPS – Hewitt and Flett version rate each item on a 7-point scale from "strongly disagree" to "strongly agree." The MPS – Hewitt and Flett version yields scores for self-oriented, other-oriented, and socially prescribed perfectionism.

**Self-oriented perfectionism.** Self-oriented perfectionism is most like the type of perfectionism conceptualized by early perfectionism researchers such as Hollender (1965) and Burns (1980). This dimension of perfectionism involves demanding a high level of performance from oneself, being highly self-critical, and focusing on one's shortcomings (Hewitt & Flett, 2002). The self-oriented perfectionism subscale includes items that refer to one's need to perform perfectly and avoid failure. Consistent with this definition, Stöeber and Yang (2010) found that when individuals imagined situations in which they performed perfectly, self-oriented perfectionism predicted higher pride and satisfaction (the same was not true if the imagined scenarios involved flawed performance).

Self-oriented perfectionism has been associated with anxiety, body dissatisfaction, anorexia nervosa, eating disorder symptomatology, anger, suicide ideation, neuroticism, and depression as well as high achievement motivation, conscientiousness, expectations for success, higher grade point average, and superior organizational abilities (Aldea & Rice, 2006; Bastiani et al., 1995; Bieling et al., 2004; Blankstein & Dunkley, 2002; Blankstein & Lumley, 2008; Brannan & Petrie, 2008; Chang et al., 2008; Chang &

Sanna, 2001; Cooper, Cooper, & Fairburn, 1989; Davis, 1997; Flett & Hewitt, 1995; Flett et al., 1995; Flett, Hewitt, & Dyck, 1989; Flett, Hewitt, Endler, & Tassone, 1994-1995; Frost et al., 1993; Hewitt & Flett, 1990; Hewitt, Flett, & Ediger, 1995; Hewitt, Flett, & Weber, 1994; Klibert, Langhinrichsen-Rohling, & Saito, 2005; Kobori, Hayakawa, & Tanno, 2009; Sherry & Hall, 2009; Sherry, Hewitt, Flett, & Harvey, 2003; Sherry, Hewitt, Sherry, Flett, & Graham, 2010; Soares et al., 2009; Vernor-Filion & Gaudreau, 2010; Watson, Raykos, Street, Fursland, & Nathan, 2011; Welch, Miller, Ghaderi, & Vaillancourt, 2009; Yorulmaz, Karancı, & Tekok-Kılıç, 2006).

Longitudinal research indicates that self-oriented perfectionism interacts with achievement stress to predict development of depression and non-remission of depressive symptoms (Enns & Cox, 2005; Hewitt, Flett, & Ediger, 1996). Self-oriented perfectionism also appears to interact with brooding rumination and stress to predict greater depressive symptoms over time (Olson & Kwon, 2008). A recent study revealed a negative relationship between self-oriented perfectionism and number of publications, first-authored publications, and citations, as well as journal impact rating among psychology professors (Sherry et al., 2010).

**Other-oriented perfectionism.** Other-oriented perfectionism involves the expectation that individuals such as one's spouse, family members, and/or employees will perform perfectly across areas of functioning. Other-oriented perfectionists have unrealistically high expectations for others and harshly evaluate their work (Hewitt & Flett, 2002). Other-oriented perfectionism is linked to low agreeableness and interpersonal difficulties, which is not surprising because other-oriented perfectionists often become hostile, disparaging, and resentful when they believe others do not meet

their standards (Hewitt & Flett, 2002; Hill, McIntire, & Bacharach, 1997). Other-oriented perfectionists sometimes have antisocial and narcissistic characteristics (Hewitt & Flett, 1991b; Hewitt, Flett, & Turnbull-Donovan, 1992). They may also be domineering, vindictive, impatient, and competitive (Flett, Hewitt, Blankstein, & Dynin, 1994; Hill, Zrull, & Turlington, 1997).

**Socially prescribed perfectionism.** Socially prescribed perfectionism involves the belief that significant others have overly high expectations for one's performance, pressure one to be perfect, and are stringent in their evaluations of one's work (Hewitt & Flett, 2002). Socially prescribed perfectionists are also motivated to meet the perceived perfectionist demands of significant others to earn approval (Hewitt & Flett, 2002). According to Hewitt and Flett (1991b), individuals who demonstrate high socially prescribed perfectionism are at risk for negative consequences such as anxiety and depression. They perceive others' expectations as excessive and uncontrollable, and frequently feel they have failed to meet standards held for them by others. Socially prescribed perfectionists may also be submissive, insecure, and overly dependent in relationships (Flett, Hewitt, Garshowitz, & Martin, 1997; Hewitt & Flett, 1993).

Socially prescribed perfectionism has been linked to social phobia, depression, bipolar depression, low self-esteem, suicidality, general anxiety, eating disorders, obsessive-compulsive disorder, personality disorders, hostility, anger, shame, and guilt (Aldea & Rice, 2006; Antony et al., 1998; Bastiani et al., 1995; Besser, Flett, Hewitt, & Guez, 2008; Bieling et al., 2004; Blankstein, Flett, Hewitt, & Eng, 1993; Blankstein & Lumley, 2008; Brannan & Petrie, 2008; Chang et al., 2008; Chang & Rand, 2000; Chang & Sanna, 2001; Davis, 1997; Flett, Hewitt, Blankstein, & O'Brien, 1991; Hewitt et al.,

1994, 1995; Hewitt & Flett, 1991a; Hewitt, Flett, Ediger, Norton, & Flynn, 1998; Hewitt, Flett, & Turnbull, 1992; Hunter & O'Connor, 2003; Klibert et al., 2005; O'Connor, 2007; Rasmussen, O'Connor, & Brodie, 2008; Saboonchi & Lundh, 1997; Shafran & Mansell, 2001; Sherry et al., 2003; Sherry & Hall, 2009; Soares et al., 2009; Welch et al., 2009; Yorulmaz et al., 2006). Longitudinal studies also indicate that socially prescribed perfectionism relates to and predicts later depression (Enns & Cox, 2005; Hewitt et al., 1996).

Further research demonstrates that the connection between socially prescribed perfectionism and depression is stronger among individuals who feel unskilled in the area of social problem solving (Besser, Flett, & Hewitt, 2010) and weaker among individuals with strong social support (Sherry, Law, Hewitt, Flett, & Besser, 2008). Olson and Kwon (2008) also found that socially prescribed perfectionism interacted with brooding rumination and stress to predict levels of depression over time. Greater perfectionism, stress, and rumination were associated with significant increases in depressive symptoms (Olson & Kwon, 2008). Socially prescribed perfectionism has also been associated with lower academic satisfaction and achievement, higher test anxiety, and greater negative affect immediately following completion of an academic exam (Flett, Blankstein, & Hewitt, 2009; Stöeber, Feast, & Hayward, 2009; Verner-Filion & Gaudreau, 2010).

Campbell and Di Paula (2002) suggested that self-oriented and socially prescribed perfectionism are each better understood when subdivided into 2 subscales. The researchers recommended dividing self-oriented perfectionism into subscales reflecting 'perfectionistic striving' and tendency to emphasize the 'importance of being perfect.' The researchers divided socially prescribed perfectionism into subscales reflecting

perception of ‘others’ high standards’ and ‘conditional acceptance’ from significant others. According to the researchers, these subscales facilitate a more detailed understanding of perfectionism. More specifically, perfectionistic striving may capture positive aspects of perfectionism and importance of being perfect may relate to ambivalent and/or negative aspects (Campbell & Di Paula, 2002). The conditional acceptance subscale of socially prescribed perfectionism is viewed as having mostly maladaptive correlates and the others’ high standards subscale may be less negative.

Stöeber and colleagues (2008) used the perfectionism subscales suggested by Campbell and Di Paula (2002) to study associations between perfectionism and pride, shame, and guilt. Participants experienced experimentally manipulated success or failure and then completed measures of pride, shame, and guilt. Consistent with a depiction of perfectionistic striving as reflecting adaptive aspects of perfectionism, the subscale was associated with higher pride among individuals in the success condition. Each of the perfectionism facets related to higher shame following failure. Perfectionistic striving, importance of being perfect, and conditional acceptance were also associated with higher guilt after failure. Finally, feeling as though others’ acceptance is contingent on one’s ability to meet high standards was associated with experiencing less pride in the success and failure conditions. Rimes and Chalder (2010) used the same perfectionism subscales and found positive correlations between dysfunctional beliefs and importance of being perfect, others’ high standards, and conditional acceptance, but not perfectionistic striving.

Stöeber and Childs (2010) further examined Campbell and Di Paula’s (2002) perfectionism subscales among university students. A primary goal for the researchers

was validating the 4 independent perfectionism subscales (perfectionistic striving, importance of being perfect, others' high standards, and conditional acceptance) by showing differential relationships among the subscales and other measures of adaptive/maladaptive perfectionism, as well as positive and negative indicators of psychological well-being. Perfectionistic striving showed a stronger positive relationship with having high personal standards and a relatively weaker positive relationship with evaluative concerns and self doubt than importance of being perfect. Perfectionistic striving was also positively correlated with self-esteem, positive affect, and adaptive coping, and negatively correlated with burnout. In contrast, importance of being perfect was positively correlated with negative affect and showed a slightly weaker negative relationship with burnout. Conditional acceptance demonstrated the strongest relationships with measures of maladaptive evaluative concerns. Conditional acceptance was also highly correlated with depressive symptoms, negative affect, maladaptive coping and burnout, and negatively correlated with positive affect, self-esteem, life satisfaction and adaptive coping. The others' high standards subscale was also related to negative affect and low self-esteem, but these relationships were weaker.

Hewitt, Flett and colleagues have contributed to an understanding of aspects of perfectionism beyond the self-oriented, socially prescribed, and other-oriented perfectionism distinctions. The researchers recognized that perfectionism can also include automatic negative thoughts, a desire to appear perfect to others, and a tendency to conceal imperfections. Hewitt, Flett, and colleagues developed measures of these perfectionism characteristics and conducted relevant research. The measures and the corresponding research are described next.

**Perfectionism cognitions.** Flett, Hewitt, Blankstein, and Gray (1998) recognized that perfectionists frequently have automatic negative thoughts associated with perfectionism. This notion is similar to Burns' (1980) contention that perfectionists regularly make cognitive errors such as overgeneralization, all-or-none thinking, and "should" statements. According to Flett and Hewitt (2002), individuals with negative cognitions associated with perfectionism will more likely experience psychological distress related to perfectionism. Perfectionists are more likely than nonperfectionists to want to be perfect, fear failure, and have frequent thoughts about making mistakes (Frost et al., 1997; Frost & Henderson, 1991).

Flett et al. (1998) developed the Perfectionism Cognitions Inventory (PCI) to measure automatic thoughts related to perfectionism. Flett and colleagues (1998) examined the frequency with which individuals make cognitive comparisons between the ideal, perfect self, and the real, current self. The PCI is a 25-item self-report measure of perfectionism-related thoughts (e.g., "I should be perfect," "People expect me to be perfect," and "I can always do better, even if things are almost perfect"). Participants rate each PCI item as occurring not at all (0) to all of the time (4).

Flett and colleagues (1998) found that perfectionism cognitions were associated with greater depressive symptomatology, self-criticism, failure perseveration, general distress, and anxiety. Frequency of perfectionism cognitions explained variance in depression and anxiety scores above that explained by self-oriented, socially prescribed, and other-oriented perfectionism. This finding supported Flett et al.'s (1998) suggestion that perfectionists who experience more automatic negative thoughts related to perfectionism likely have greater psychological distress than perfectionists with fewer

perfectionism cognitions. Barsone-Cone, Sturm, Lawson, Robinson, and Smith (2010) also found that individuals with active or partially recovered eating disorders have more frequent perfectionism cognitions than healthy controls or fully recovered individuals.

The research on perfectionism cognitions is an important addition to contemporary studies that aim to clearly define perfectionism. Another addition to modern conceptualizations of perfectionism that Hewitt, Flett, and colleagues provided is the understanding that perfectionists want others to perceive them as perfect. This facet of perfectionism is described next.

**Perfectionist self-presentation.** Hewitt, Flett, and colleagues (2003) introduced as the concept of perfectionist self-presentation. Perfectionist self-presentation is the tendency to try to appear perfect to others and conceal inadequacies. Based on research indicating that perfectionists tend to be self-conscious, hide their mistakes, and desire admiration, Hewitt and colleagues (2003) developed the Perfectionistic Self-Presentation Scale (PSPS) (Frost et al., 1995; Hobden & Pliner, 1995; Lombardi, Florentino, & Lombardi, 1998; Sorotzkin, 1985). The PSPS measures 3 facets of perfectionist self-presentation: perfectionist self-promotion, nondisplay of imperfection, and nondisclosure of imperfection via 27 self-report items. Perfectionist self-promotion involves making others aware of one's perfection vocally or by ensuring that one always appears physically perfect. Nondisplay of imperfection refers to avoiding behaviors that demonstrate one's imperfection. Nondisclosure of imperfection suggests refraining from verbally admitting one's imperfections.

Perfectionist self-promotion, nondisplay of imperfection, and nondisclosure of imperfection are negatively associated with self-esteem related to academic performance,

appearance, and social situations (Hewitt et al., 2003). Each facet of perfectionist self-presentation positively correlated with depression and anxiety. Nondisclosure of imperfection strongly related to depression and nondisplay of imperfection strongly related to anxiety (Hewitt et al., 2003). In comparison to healthy controls and individuals fully recovered from eating disorders, individuals who were partially recovered and/or had active eating disorders demonstrated higher perfectionistic self-promotion, nondisclosure of imperfections, and nondisplay of imperfections (Bardone-Cone et al., 2010). Other research associates perfectionistic self-presentation with lower sexual satisfaction in women, higher eating disorder symptomatology, elevated heart rate when discussing personal mistakes, negative problem-solving ability, and higher personality pathology (Bardone-Cone et al., 2010; Besser et al., 2010; Habke, Hewitt, & Flett, 1999; Hewitt, Flett & Ediger, 1995; Hewitt, Habke, Lee-Baggley, Sherry et al., 2009; Sherry, & Flett, 2008; Sherry, Hewitt, Flett, Lee-Baggley, & Hall, 2007).

The research described in the previous sections relates directly to conceptualizations of perfectionism suggested independently by Frost and colleagues and Hewitt and Flett and colleagues. The studies discussed thus far in this section have separately examined the perfectionism variables suggested by each group. The next section discusses research in which the MPS – Frost version and the MPS – Hewitt and Flett version were combined to yield 2 overarching perfectionism factors.

**Perfectionism According to Combined Research Initiatives**

Despite the somewhat different dimensions of perfectionism proposed by Frost and colleagues and Hewitt, Flett, and colleagues, evidence suggests the measures developed by each group overlap significantly (Frost, Heimburg, Holt, Mattia, &

Neubauer, 1993). Frost and colleagues (1993) compared the MPS – Frost version with the MPS – Hewitt and Flett version and found that Frost's total perfectionism score and the combined self-oriented and socially prescribed perfectionism scores from the MPS – Hewitt and Flett version reflect a global dimension of perfectionism. The self-oriented perfectionism scale from Hewitt and Flett's measure relates closely to Frost's personal standards subscale. Strong relationships existed between the socially prescribed perfectionism scale from the MPS – Hewitt and Flett version and Frost's concern over mistakes, parental expectations, and parental criticism subscales.

Additional analysis of the combined subscales from the MPS – Hewitt and Flett version and the MPS – Frost version revealed a two-factor solution. Frost and colleagues (1993) termed the first factor "maladaptive evaluation concerns," which included concern over mistakes, parental criticism, parental expectations, doubts about actions, and socially prescribed perfectionism subscales. Components of the maladaptive evaluation concerns factor were positively associated with symptoms of psychopathology and negative affect and unrelated to positive affect. The second factor, called "positive striving," included personal standards, organization, self-oriented perfectionism, and other-oriented perfectionism subscales. Personal standards, organization, and self-oriented perfectionism were positively correlated with positive affect and unrelated to depression and negative affect. Other-oriented perfectionism demonstrated no significant relationships with affect or psychopathology (Frost et al., 1993).

The MPS – Frost version and the MPS – Hewitt and Flett version may thus measure similar characteristics. Hewitt, Flett, and colleagues (1991) developed an intra/interpersonal approach to understand and measure perfectionism. Frost and

colleagues (1990) organized their understanding of perfectionism on the basis of defining characteristics of the construct. Each approach reveals some aspects of perfectionism that are maladaptive and other aspects that may be adaptive. Subsequent analyses of the MPS – Frost version and MPS – Hewitt and Flett version also suggest a two-factor solution in which one factor reflects maladaptive evaluative concerns and the other factor reflects positive strivings (Bieling, Israeli, & Antony, 2004; Cox, Enns, & Clara, 2002).

Cox and Enns (2003) used the 2 factors derived from the combined subscales of the MPS – Frost version and the MPS – Hewitt and Flett version in a longitudinal study of the stability of perfectionism and depression. Participants included adult outpatients who met criteria for a major depressive episode at the beginning of the study but not one year later and who received treatment in the interim. On average, depressive symptoms decreased substantially. Some aspects of maladaptive perfectionism were less evident after one year as well. Socially prescribed perfectionism and concern over mistakes decreased slightly over time, commensurate with the decrease in depressive symptomatology and suggesting state dependence for some maladaptive aspects of perfectionism. Maladaptive aspects of perfectionism at Time 1 strongly predicted the same perfectionism aspects at Time 2, also suggesting that maladaptive perfectionism is a stable trait. The authors thus described the maladaptive perfectionism dimensions as state-trait characteristics representing "enduring psychological vulnerabilities that are exacerbated or elevated during the acute major depressive episode" (p. 130). Adaptive aspects of perfectionism such as self-oriented perfectionism, personal standards, and organization did not vary over time or with change in symptoms of depression. The researchers described adaptive perfectionism dimensions as pure and stable traits.

**Perfectionism According to Slaney and Colleagues**

Slaney and colleagues also developed a multidimensional measure of perfectionism that included positive and negative dimensions (Slaney, Rice, & Ashby, 2002). The research team noted that existing measures of perfectionism such as the Burns scale, MPS – Frost version, and MPS – Hewitt and Flett version focused on unattainable standards that perfectionists set for themselves as well as pathological implications of perfectionism (Slaney, Ashby, & Trippi, 1995). To develop an unbiased measure of perfectionism that allowed for positive aspects of the construct, Slaney and Ashby (1996) conducted interviews with individuals who self-identified, or who others identified, as perfectionists. Slaney and Ashby (1996) defined perfectionism as encompassing high personal standards, orderliness, anxiety, procrastination, and relationship difficulties. The researchers developed items to measure these aspects of perfectionism and created the Almost Perfect Scale (APS; Slaney & Johnson, 1992).

An initial study using the APS indicated that, contrary to expectation, perfectionists did not report more relationship difficulties or greater procrastination than non-perfectionists (Johnson & Slaney 1994). Slaney and colleagues also expected "problematic" perfectionists (those seeking therapeutic help for perfectionism) to show higher personal standards and greater anxiety, procrastination, and interpersonal problems than individuals in therapy who said their perfectionism was not problematic (Johnson & Slaney, 1996). Johnson and Slaney (1994) found that problematic perfectionists were higher on measures of anxiety and procrastination but not personal standards and interpersonal problems.

Slaney, Ashby, and Trippi (1995) also compared the APS to the MPS – Frost version and the MPS – Hewitt and Flett version. The measures were administered to undergraduate students and a two-factor solution was derived. The standards and order scales of the APS loaded on a positive or adaptive factor and the remaining APS scales loaded on a maladaptive factor. Slaney and colleagues (2001) defined the adaptive or positive strivings aspect of perfectionism as high standards. The essence of the maladaptive evaluation concerns factor is more elusive, however. The subscales that comprise the maladaptive aspect of perfectionism (Frost and colleagues' concern over mistakes, parental criticism, parental expectations, and doubts about actions; Hewitt and Flett's socially prescribed perfectionism; and the APS relationships, anxiety, and procrastination subscales) do not necessarily appear central to the definition of perfectionism (Slaney et al., 2001). Slaney and colleagues (2001) pointed out that many of the subscales used to measure perfectionism, including the anxiety, procrastination, and relationship difficulty subscales of the APS, appear based on causes of perfectionism, concomitant variables, and/or the results of being a perfectionist.

Slaney and colleagues thus revised the APS (Slaney, Rice, & Ashby, 2002). They believed a measure of perfectionism should clearly define perfectionism and should differentiate maladaptive from adaptive perfectionism (Slaney et al., 2001). The APS-R was based on the belief that high standards and orderliness are central to adaptive perfectionism. Perception of a discrepancy between one's personal standards and one's actual performance was believed to define maladaptive perfectionism. The APS-R is comprised of 3 subscales: high standards (7 items), order (4 items), and discrepancy (12 items) (Table 1).

The APS-R is particularly useful because the measure differentiates adaptive and maladaptive perfectionists. Maladaptive perfectionists report a significant discrepancy between their performance self-expectations and their performance self-evaluations. In contrast, adaptive perfectionists have high standards and prefer order, organization, and neatness without experiencing a significant expectation/ability discrepancy. Research on the MPS – Frost and the MPS – Hewitt and Flett version indicates that the scales measure adaptive and maladaptive aspects of perfectionism, but the researchers who designed these scales have not attempted to classify adaptive and maladaptive perfectionists on the basis of their measures.

Researchers utilizing the APS-R have found that perfectionists who experience a discrepancy between their self-imposed performance expectations and their actual performance (maladaptive perfectionists) are more likely to demonstrate symptoms of psychopathology. Such individuals report greater depression, hopelessness, body dissatisfaction, bulimic symptomatology, compulsive thought, compulsive checking behavior, anxiety, low self-esteem, and neuroticism (Ashby, Rice, & Martin, 2006; Ashby, Dickinson, Gnilka, & Noble, 2011; Leenaars & Lester, 2006; Mobley, Slaney, & Rice, 2005; Pearson & Gleaves, 2006; Rice & Ashby, 2007; Rice, Leever, Christopher, & Porter, 2006; Rice & Pence, 2006; Rice & Stuart, 2010; Slaney et al., 1995; Van Yperen & Hagedoorn, 2008). Maladaptive perfectionism (as defined above) also appears inversely related to life satisfaction, self-esteem, grade point average (GPA), and extraversion (Gilman, Ashby, Sverko, Florell, & Varjas, 2005; Mobley et al., 2005; Rice et al., 2007; Rice & Ashby, 2007; Slaney et al., 1995). In contrast, high standards and/or need for order and organization are not associated with symptoms of psychopathology

and relate positively to self-esteem, GPA, life satisfaction, conscientiousness, hope, extraversion, and openness (Ashby et al., 2011; Gilman et al., 2005; Mobley et al., 1995; Rice et al., 2007; Rice & Pence, 2006; Slaney et al., 1995).

Rice and Aldea (2006) examined perfectionism using the APS-R and symptoms of depression among university students in a longitudinal study. Perfectionism, operationalized by discrepancy between personal standards and perceived performance, was stable in adults. Rice and Aldea also found that perfectionism predicted later depression but changes in depressive symptomatology did not influence levels of perfectionism. Other longitudinal research suggests that perfectionism predicts the rate of change in depressive symptoms over the course of therapy, with greater perfectionism being associated with slower improvement (Hawley, Ho, Zuroff, & Blatt, 2006).

Wei, Heppner, Russell, and Young (2006) also used the APS-R in a longitudinal study of perfectionism, depression, adult attachment, and coping. They found that maladaptive perfectionism (or discrepancy) mediated the relationship between anxious and avoidant attachment and depression. Wei and colleagues (2006) also suggested that anxious and avoidant attachment influence maladaptive perfectionism tendencies, which then contribute to use of ineffective coping styles and, ultimately, depression. Perfectionism generally appears to be stable for adults and is an important predictor of depression. Longitudinal and cross-sectional research that examines perfectionism in relation to other variables across age groups and time remains necessary, however.

## Modern Perspectives on Child Perfectionism

Most initial perfectionism research involved adult populations, but theory regarding the development of perfectionism suggests that the construct originates in

childhood. The belief that parent characteristics and practices strongly influence the development of perfectionism has been prominent in the literature (Flett & Hewitt, 2002; Enns, Cox, & Clara, 2002; Hutchinson & Yates, 2008; Kenney-Benson & Pomerantz, 2005; McArdle & Duda, 2004; Rice, Ashby, & Preusser, 1996; Soenens, Vansteenkiste et al., 2005; Soenens, Vansteenkiste, Duriez, & Goossens, 2006; Woodside et al., 2002; Zelman, 1996). Parents who are perfectionists may model an emphasis on impressing others, achievement, flawless work, organization, and/or other characteristics associated with perfectionism for their children (Bandura, Grusec, & Menlove, 1967; Bandura & Krupers, 1964; Flett et al., 2002). Perfectionism may occur with greater frequency among individuals who have perfectionist family members (Chang, 2000; Cook & Kearney, 2008; Rice et al., 2008; Vieth & Trull, 1999). This trend for perfectionism to "run in families" may also reflect a heritability component (Bachner-Melman et al., 2007; Tozzi et al., 2004; Woodside et al., 2002).

Researchers have suggested that perfectionism may also develop when children perceive their parents' love, affection, and approval as contingent upon their perfect performance (Flett et al., 2002; Hamachek, 1978; Missildine, 1963). A more extreme version of this theory suggests that children may become perfectionists as a result of living in overly harsh, punitive, chaotic, and/or unpredictable environments (Flett et al., 2002; Frost et al., 1991; Zlotnik et al., 1996). Children exposed to especially adverse conditions may develop perfectionism as a coping strategy. A child who behaves perfectly is less likely to incite the anger and wrath of an abusive caregiver. Perfectionism may also create a personal sense of control when most aspects of life seem uncontrollable. Such scenarios seem especially likely with parents who demonstrate

psychopathology because disorders such as depression, anxiety, and obsessive-compulsive disorder relate to harsh, controlling, unaffectionate, and rejecting types of parenting (Jaser et al., 2005; Lovejoy et al., 2000; Weissman et al., 1972; Whaley et al., 1999). Alternatively, anxious parents may be overprotective of their children and frequently remind their children of the importance of making mistakes and generating a good impression on others. Anxious parents may thus be likely to model and reinforce perfectionism (Flett et al., 2002; Flett, Sherry, & Hewitt, 2001).

**Child Perfectionism According to Hewitt, Flett, and Colleagues**

Child perfectionism is an important area of study because the construct is associated with several maladaptive characteristics. Hewitt, Boucher, Davidson, and Munro (1997) were among the first to create a perfectionism measure specifically for children. Based on their adult measure, the MPS – Hewitt and Flett version, the researchers developed and tested the Child-Adolescent Perfectionism Scale (CAPS), a 22-item self-report measure of self-oriented and socially prescribed perfectionism (Flett et al., 1997). Items such as "I try to be perfect in everything I do" and "I always try for the top score on a test" measure self-oriented perfectionism. Socially prescribed perfectionism items include: "Other people always expect me to be perfect" and "I feel that people ask too much of me." The other-oriented perfectionism subscale was not retained from the MPS – Hewitt and Flett version because children are less likely than adults to successfully impose their standards on others. Flett and colleagues (1997) suggested that child perfectionism is multidimensional and includes demands placed on oneself and the perception of demands for performance from significant others.

Research using the CAPS has predominantly maintained the 2-factor structure described above. Two independent studies, however, have demonstrated that a 3-factor model of socially prescribed, self-oriented-striving, and self-oriented-critical perfectionism may be a better fit (McCreary, Joiner, Schmidt, & Ialongo, 2004; O'Connor, Dixon, & Rasmussen, 2009). Self-oriented-striving perfectionism included items reflecting striving for perfection and self-oriented-critical perfectionism included items reflecting self-criticism in the proposed 3-factor model. This 3-factor model may also reflect extant theory and research regarding adaptive and maladaptive components of self-oriented perfectionism (Flett et al., 1997; O'Connor, 2007; O'Connor & O'Connor, 2003). McCreary and colleagues' (2004) and O'Connor and colleagues' (2009) analyses of the CAPS also suggested the removal of several negatively worded items that were found to be inadequate indicators of their respective target factors.

According to Flett and colleagues (1997), perfectionism in youth (as in adults) is generally maladaptive. Empirical research using the CAPS indicates significant relationships among self-oriented perfectionism, socially prescribed perfectionism, and eating disorder symptomatology, anxiety, fear and sadness, irrational beliefs, and depression (Castro et al., 2004; Castro-Fornieles et al., 2007; Cook & Kearney, 2008; Evans, Bowes, & Drewett, 2008; Flett et al., 1997; Flett et al., 2008; Hewitt et al., 2002; McVey et al., 2002; O'Connor, Rasmussen, & Hawton, 2010; Stornelli, Flett, & Hewitt, 2009). Eating disorder symptomatology and irrational beliefs reflecting low frustration tolerance, pessimism, contingent self-worth, and "should" statements directed at self and others appear especially strongly related to self-oriented perfectionism in youth (Castro-Fornieles et al., 2007; Flett et al., 2008; Nilsson, Sundbom, & Hagglof, 2008). Socially

prescribed perfectionism also relates to symptoms of thought disorder, suicidality, self-harm, anger, persecutory ideas, social introversion, self-deprecation, hypochondriasis, low happiness, and low self-esteem (Boegers et al., 1998; Donaldson, Spirito, & Farnett, 2000; Enns, Cox, & Inayatulla, 2003; Flett et al., 1997; Hewitt et al., 1997, 2002; O'Connor et al., 2010). In contrast to the suggestion that perfectionism is entirely maladaptive, some evidence suggests that self-oriented perfectionism relates to adaptive characteristics of lower self-deprecation and better personal adjustment, academic self-concept, hope for success, motivation for school, school achievement, conscientiousness, and self-worth (Choy & McInerney, 2005; Flett et al., 1997; Stöeber, Otto, & Dalbert, 2009; Stöeber & Rambow, 2007).

Existing research with the CAPS focused primarily on personality, child psychopathology, and motivation-related correlates of child perfectionism. One exception is Cook and Kearney's (2008) examination of parent and child psychopathology and perfectionism. The researchers found that maternal self-oriented and socially prescribed perfectionism and maternal psychopathology each predicted self-oriented perfectionism among sons.

Herman and colleagues (2011) also used the CAPS in their longitudinal study of perfectionism subtypes and potential developmental origins among African American youth. The researchers classified 4 subtypes among their sample: non-critical/adaptive perfectionists (high self-striving, low socially prescribed perfectionism and self-criticism), critical/maladaptive perfectionists (high self-striving, socially prescribed perfectionism, and self-criticism), nonperfectionists (low self-striving, socially prescribed perfectionism, and self-criticism), and non-striving individuals (extremely low self-

striving). Herman and colleagues (2011) found that greater parent supervision and monitoring was associated with the development of non-critical or adaptive perfectionism. Critical or maladaptive perfectionism was more likely to develop among youth who experienced early problems with attention, hyperactivity, and socialization as rated by their teachers. Additional studies are necessary to further understand the relationships among parent variables and child perfectionism, as well as to enhance existing research on child perfectionism and its developmental origins.

Stöeber and colleagues (2009) conducted a longitudinal study of self-oriented perfectionism, socially prescribed perfectionism, and the Big Five personality traits in adolescents. The researchers used items from a German translation of the MPS – Hewitt and Flett version that are largely consistent with items in the CAPS. Participants completed the perfectionism measure on 2 occasions, 5-8 months apart. Self-oriented perfectionism was positively associated with conscientiousness and negatively associated with extraversion and agreeableness. Socially prescribed perfectionism had a positive relationship with neuroticism and negative relationships with extraversion, openness, and agreeableness. Stöeber and colleagues (2009) also determined that conscientiousness predicted an increase in self-oriented perfectionism across time, suggesting that conscientiousness may have a role in the development of self-oriented perfectionism.

Hewitt and colleagues (2011) also created the Perfectionistic Self-Presentation Scale – Junior Form (PSPS-Jr) based on their adult measure of the same concept (the PSPS). Like the PSPS, the PSPS-Jr comprises 3 subscales: perfectionistic self-promotion (e.g., “I always have to look as good as I can”), nondisplay of imperfection (e.g., “I think a lot about mistakes that I have made in front of other people”), and nondisclosure of

imperfection (e.g., “I do not let other people know when I fail at something”). The 18-item questionnaire was developed to measure the extent to which youths strive to present themselves as perfect and conceal inadequacies. Though the measure was only recently developed and has not yet been subjected to extensive empirical scrutiny, initial evidence suggests the PSPS-Jr is a reliable and valid measure of perfectionistic self-presentation in youth (Hewitt et al., 2011). Hewitt and colleagues (2011) demonstrated that greater perfectionistic self-presentation in youth was associated with maladaptive characteristics and outcomes. Further research with the PSPS-Jr will provide a more detailed picture of how presenting oneself as perfect, experiencing discomfort when one’s imperfections are observed by others, and attempting to conceal imperfections impact children and adolescents.

Research using measures of perfectionism other than the CAPS and PSPS-Jr provides additional information with respect to adaptive and maladaptive correlates of perfectionism. The next section describes research involving another child measure of perfectionism.

**Child Perfectionism According to Rice, Preusser, and Colleagues**

Rice and Preusser (2002) spurred additional research on child perfectionism by developing the Adaptive/Maladaptive Perfectionism Scale (AMPS; Table 1). They proposed several reasons for developing the AMPS. First, the researchers noted the relative lack of research on perfectionism in children compared to adults. Second, the researchers noted that neither the stability of perfectionism as a personality characteristic nor the course of development of perfectionism had been adequately examined. Third, comparisons of adult and child perfectionism were virtually nonexistent. Fourth, Rice

and Preusser (2002) observed that most studies of perfectionism assumed the construct was wholly maladaptive but some aspects of perfectionism do seem adaptive. Rice and Preusser (2002) cited works of Adler (1956) and Hamachek (1978) in which the authors defined healthy or adaptive and unhealthy or maladaptive forms of perfectionism. Healthy perfectionism involves striving for attainable goals, experiencing a sense of satisfaction from one's accomplishments, and allowing oneself to make minor mistakes (Adler, 1956; Hamachek, 1978). Unhealthy or maladaptive perfectionism involves setting completely unrealistic goals and never feeling satisfied with one's performance.

Rice and Preusser (2002) created the AMPS to address these concerns and contribute to a more complete understanding of perfectionism among children. The researchers wished to facilitate enhancement of adaptive perfectionism and prevent maladaptive perfectionism among children. A particular concern was that existing perfectionism research with children involved the use of adult measures of perfectionism, which tended to reflect only maladaptive perfectionism. Rice and Preusser (2002) suggested that perfectionism may become maladaptive over time given pressure from significant others to produce flawless work. The authors felt, however, that existing measures did not adequately examine differences in child and adult perfectionism and adaptive versus maladaptive perfectionism. The AMPS was thus designed to measure healthy and unhealthy perfectionism in children.

The AMPS is a 27-item self-report measure of 4 validated dimensions of perfectionism: sensitivity to mistakes, contingent self-esteem, compulsiveness, and need for admiration (Rice, Kubal, Preusser, 2004). Individuals completing the AMPS rate each item on a 4-point scale from "really unlike me" to "really like me" with higher

scores reflecting higher perfectionism in each area. Items on the sensitivity to mistakes subscale reflect undesirable feelings associated with making mistakes (e.g., "When I make a mistake, I feel so bad that I want to hide"). Sensitivity to mistakes is similar to the concern over mistakes subscale of the adult perfectionism measure, the MPS – Frost version. The contingent self-esteem scale includes items reflecting satisfaction from performing well (e.g., "I feel super when I do well at something"). This scale is somewhat the inverse of the discrepancy dimension of the APS-R (another adult measure of perfectionism), which measures the difference between one's performance expectations and one's actual performance.

The compulsiveness subscale measures need for organization, order, and fastidiousness (e.g., "I always make a list of things and check them off after I do them"). The compulsiveness subscale is similar to the order, organization, high standards, and personal standards subscales of several adult perfectionism measures (Frost et al., 1990; Hill et al., 2004; Slaney et al., 2001). Items on the need for admiration subscale refer to one's desire to earn approval from others by doing well (e.g., "I do good work so others think I'm great"). Need for admiration relates somewhat to socially prescribed perfectionism, the interpersonal dimension of perfectionism suggested by Hewitt and colleagues (1991). The AMPS was designed specifically for children but the dimensions of perfectionism assessed by the measure clearly relate to similar dimensions among adults.

According to Rice and Preusser (2002), sensitivity to mistakes is a core dimension of perfectionism and is primarily maladaptive. However, the AMPS creators suggested that the contingent self-esteem, compulsiveness, and need for admiration subscales reflect

adaptive perfectionism (Rice, Kubal, & Preusser, 2004). Indeed, Ye, Rice, and Storch (2008) found that sensitivity to mistakes related significantly to obsessive-compulsive symptoms, depression, loneliness, and peer victimization among children. In contrast, significant negative relationships existed among contingent self-esteem and measures of depression and loneliness, and a positive relationship existed between contingent self-esteem and quality of primary peer relationship.

Factor analysis of adolescent scores on the AMPS revealed 3 factors: sensitivity to mistakes, need for admiration, and compulsiveness (the contingent self-esteem subscale was eliminated) (Rice, Leever, Noggle, & Lapsley, 2007). Research using the AMPS with adolescents indicated that sensitivity to mistakes predicted depressive symptoms, and compulsiveness negatively predicted depressive symptoms among girls (Rice et al., 2007). No significant relationships existed among the AMPS dimensions of perfectionism and a measure of depression in adolescent boys. These results are consistent with the AMPS developers' assertion that the sensitivity to mistakes subscale reflects maladaptive perfectionism, whereas contingent self-esteem and compulsiveness reflect adaptive perfectionism. Rice and colleagues (2007) expected sensitivity to mistakes to be the only maladaptive AMPS subscale. Other research with adolescents, however, relates sensitivity to mistakes, compulsiveness, and need for admiration to a less favorable self-concept in areas such as emotional stability, ability to make friends, behavior at home and school, physical appearance, leadership ability, and general happiness (Rice et al., 2004).

Empirical investigations of child perfectionism benefit greatly from the availability of child-specific measures of the construct. Much research on child

perfectionism focuses on relations between components of child perfectionism and indicators of adjustment, self-concept, and psychopathology. Perfectionism is associated with numerous undesirable characteristics. Additional knowledge about positive and negative aspects of perfectionism among children comes from research using adult perfectionism measures and is described next.

**Child Perfectionism and Adult Measures**

A substantial number of studies over the past decade have focused on perfectionism in children using adult measures such as the MPS – Frost version and APS-R (Accordino et al., 2000; Dixon, Lapsley, & Hanchon, 2004; Gilman & Ashby, 2003a, 2003b; Hawkins, Watt, & Sinclair, 2006; Libby et al., 2004; LoCicero, Ashby, & Kern, 2000; Nounopoulos, Ashby, & Gilman, 2006; Sassaroli & Ruggiero, 2005; Stumpf & Parker, 2000; Woodside et al., 2002). The MPS – Frost version measures 6 components of perfectionism: concern over making mistakes, high personal standards, parental expectations, parental criticism, doubts about actions, and organization (Frost et al., 1990). The APS-R comprises 3 subscales that measure standards of performance, discrepancy between performance and standards, and need for order and organization (Slaney et al., 2001). The discrepancy subscale of the APS-R distinguishes adaptive and maladaptive perfectionists; maladaptive perfectionists report actual performance significantly below their expected standards. Researchers using the MPS – Frost version and APS-R with youth report that the measures should be easily understood by children aged 9 years and older (Accordino et al., 2000; Nounopoulos et al., 2006; Parker & Stumpf, 1995). Parker and Stumpf (1995) also administered the MPS – Frost version and found the measure to be appropriate for use with youth.

**Child studies using the MPS – Frost version.** Research using the MPS – Frost version with children and adolescents has yielded several interesting findings. Libby and colleagues (2004) found that youngsters with obsessive-compulsive disorder demonstrated higher levels of concern over mistakes, a component of perfectionism identified by the MPS – Frost version, than controls. Severity of OCD symptoms was positively associated with concern over mistakes, personal standards, and organization when measured among non-clinical individuals and individuals with OCD and anxiety disorders. Sassaroli and Ruggiero (2005) examined perfectionism, eating disorder symptomatology, self-esteem, and worry among female adolescents. Low self-esteem, worry, and parental criticism (another component of perfectionism measured by the MPS – Frost version) were positively associated with eating disorder symptomatology during a stressful situation. The concern over mistakes component of perfectionism was also associated with eating disorder symptomatology in stressful and nonstressful situations.

McArdle and Duda (2008) used the MPS – Frost version with young athletes to examine relationships among perceived parental expectations, perceived parental criticism, concern over mistakes, doubts about actions, personal standards, and self-esteem. The researchers found that perceived parental criticism was a strong predictor of concern over mistakes and doubts about actions among youth. High parental criticism also related to low self-esteem. McArdle and Duda (2008) additionally found that high parent expectations predicted high personal standards, and older youth set higher standards (which are central to the construct of perfectionism) for themselves than younger children. According to the same researchers, high perceptions of parental

expectations and low perceptions of parental criticism combine to predict high self-esteem.

Soenens and colleagues (2008) studied the influence of maladaptive perfectionism (defined by the MPS – Frost version subscales of concern over mistakes and doubts about actions) on the relationship between parental control and depression in adolescents. The researchers found that parental control at age 15 years predicted relatively higher levels of maladaptive perfectionism one year later and that maladaptive perfectionism at age 16 years predicted greater depression one year later. Maladaptive perfectionism also acted as an intervening variable in the relationship between parent control and adolescent depression 2 years later. Controlling parents may contribute to the development of maladaptive perfectionism among children, which subsequently contributes to increased depressive symptomatology.

Clark and Coker (2009) examined dysfunctional perfectionism (also defined by the MPS – Frost version subscales of concern over mistakes and doubts about actions) and self-criticism among mothers and their children. Children who reported high dysfunctional perfectionism had mothers who were more self-critical and who made significantly more critical comments about their children. Dysfunctional perfectionism in mothers did not relate directly to dysfunctional perfectionism in children in this study.

Few studies have directly assessed the relationship between parent factors and perfectionism development in youth. Additional research in this area, especially research that examines trends in perfectionism development across age groups, is necessary. Research on the relationships between perfectionism in youth and parent variables other than parental criticism, expectations, and control is particularly lacking.

Several studies with gifted youth have examined perfectionism using the MPS – Frost version (Dixon et al., 2004; Parker, 1997, 2000; Parker & Mills, 1996; Parker & Stumpf, 1995; Schuler, 2000; Stumpf & Parker, 2000). Perfectionism has long been anecdotally associated with giftedness, but at least one empirical study suggests that perfectionism occurs equally often among gifted and non-gifted youth (Parker, 1997). Studies of perfectionism among gifted youth provide interesting additional knowledge about the construct but must be interpreted with caution because they do not involve examination of perfectionism in the general child population.

Factor analyses of gifted youths' scores on the MPS – Frost version indicate a differentiation between healthy or adaptive and unhealthy or maladaptive perfectionism types (Parker, 1997, 2000; Parker & Stumpf, 1995; Stumpf & Parker, 2000). Concern over mistakes, doubts about actions, parental criticism, and parental expectations comprise unhealthy perfectionism in these studies (Dixon et al., 2004; Parker, 1997; Parker & Stumpf, 1995; Schuler, 2000; Stumpf & Parker, 2000). Having high personal standards and placing an emphasis on organization appear to be the most important components of healthy perfectionism among gifted youth (Parker, 1997; Parker & Stumpf, 1995; Schuler, 2000; Stumpf & Parker, 2000).

The same components of perfectionism appear to define adaptive and maladaptive perfectionism among adults (Frost et al., 1993). When Frost and colleagues (1993) compared their version of the MPS with the MPS – Hewitt and Flett version among adults, they derived a 2-factor solution. One factor, maladaptive evaluation concerns, was similar to the unhealthy perfectionism factor found with gifted youth. Maladaptive evaluation concerns included concern over mistakes, doubts about actions, parental

criticism, and parental expectations from the MPS – Frost version and socially prescribed perfectionism from the MPS – Hewitt and Flett version (Frost et al., 1993). The second factor, positive achievement strivings (similar to the healthy perfectionism factor found in research with gifted youth), included personal standards and organization from the MPS – Frost version and other-oriented and self-oriented perfectionism from the MPS – Hewitt and Flett version (Frost et al., 1993). Several recent adult studies also reveal a 2-factor solution, indicating healthy and unhealthy perfectionism dimensions (Bieling, Israeli, & Antony, 2004; Cox, Enns, & Clara, 2002; Slaney et al., 1995).

Empirical studies of perfectionism among gifted youth indicate different relationships among healthy and unhealthy perfectionism and personality characteristics, symptoms of psychopathology, and self-esteem. Parker and Stumpf (1995) found that healthy perfectionism was significantly associated with conscientiousness and extroversion, whereas unhealthy perfectionism was associated with neuroticism and negatively associated with agreeableness, conscientiousness, and extroversion among gifted youth. Stumpf and Parker (2000) found that healthy perfectionism correlated with conscientiousness and that unhealthy perfectionism most correlated with neuroticism among academically talented youth and college students.

Dixon and colleagues (2004) examined perfectionism among gifted adolescents. The adolescents were classified as mixed adaptive perfectionists (high scores on healthy perfectionism dimensions and low scores on unhealthy perfectionism dimensions), pervasive perfectionists (high scores in all areas of perfectionism), self-assured nonperfectionists (low scores on the personal standards, parental expectations, parental criticism, concern about mistakes, and organization components of perfectionism), and

mixed-maladaptive perfectionists (high scores on unhealthy perfectionism and low scores on healthy perfectionism dimensions). Mixed-adaptive perfectionists and self-assured nonperfectionists were most well-adjusted and reported the highest self-image and self-esteem scores. Mixed-adaptive perfectionists and self-assured nonperfectionists also reported fewest symptoms of somatization, obsession-compulsiveness, interpersonal sensitivity, depression, and anxiety. Pervasive perfectionists and mixed-maladaptive perfectionists reported relatively low self-image and self-esteem and higher symptomatology.

Schuler (2000) examined qualitative data from gifted perfectionist youth and found that normal perfectionists often considered at least one parent to be a perfectionist, felt encouraged by their parents and teachers to do their best, and believed their success was due to hard work. Teachers also tended to describe normal perfectionists in positive terms. Unhealthy or neurotic perfectionists focused primarily on concern over making mistakes, became angry with themselves when they made mistakes, and feared embarrassment if they did not perform well enough. Neurotic perfectionists also perceived others as having especially high expectations for them and did not have healthy coping strategies in stressful situations.

**Child studies using the APS-R.** LoCicero and Ashby (2000) used the APS-R to examine perfectionism among gifted youth and controls. The researchers wanted to extend Parker and Mills' (1996) research and found that gifted youth demonstrated significantly higher levels of personal standards than controls. The gifted sample also experienced significantly less discrepancy between self-expectations and actual performance than controls (LoCicero & Ashby, 2000). LoCicero and Ashby (2000)

believed gifted youth are more likely than average youth to be adaptive perfectionists. They suggested their results likely differed from Parker and Mills (1996) because the latter used a measure of perfectionism (the MPS – Frost version) that primarily examines maladaptive aspects of perfectionism.

Accordino and colleagues (2000) studied perfectionism among high school students and found that personal standards positively predicted academic achievement and achievement motivation, and negatively predicted depressive symptoms. Discrepancy between personal standards and actual performance positively predicted depression and negatively predicted self-esteem (Accordino et al., 2000). Gilman and Ashby (2003) also found positive relationships among standards of performance and grade point average (GPA), interpersonal relations, relations with parents, overall adjustment, and favorable perception of the school environment among middle school students. Discrepancy between standards and performance was negatively associated with GPA, parent relationships, and personal adjustment and positively associated with social stress, signs of clinical maladjustment, and emotional symptoms (Gilman & Ashby, 2003).

Nounopoulos and colleagues (2006) also found a positive relationship between high personal standards and GPA and a negative relationship between discrepancy and GPA among youth. High performance standards related to academic confidence and performance. Discrepancy between one's expectations for performance and one's actual performance, however, contributed to lower confidence in one's academic abilities, which then negatively impacted achievement. Nounopoulos and colleagues (2006) also found positive relationships between personal standards and perception of family support

and peer acceptance, and a negative relationship between discrepancy and perceived family support.

Rice and colleagues (2008) examined perfectionism and depression among low-income chronically ill European American and African American adolescents and their mothers. Discrepancy between performance expectations and actual abilities related to depression for all groups. The researchers found that having high standards was inversely related to depression for European American adolescents and African American adolescents and mothers. Among European Americans, adolescent depression and experience of discrepancy between standards and performance were positively associated with maternal experience of discrepancy and depression. Among African Americans, adolescent depression and high standards were inversely related to maternal high standards.

These studies suggest that adaptive perfectionism (defined by holding high personal standards without experiencing discrepancy between one's personal standards and one's actual performance) relates to desirable characteristics such as academic achievement, high self-esteem, and good coping resources in the absence of clinical symptomatology. These studies also reveal that youth with high personal standards for performance who feel unable to meet those standards (maladaptive perfectionists) are less academically successful, have lower self-esteem, report more depression, and cannot access adaptive coping mechanisms in times of stress. Maladaptive perfectionism in European American youth also appears related to maternal maladaptive perfectionism and depression.

Additional research using the APS-R to examine perfectionism in youth has revealed differences among adaptive perfectionists, maladaptive perfectionists, and nonperfectionists with respect to lifestyle approaches and life satisfaction (Gilman & Ashby, 2003; LoCicero, Ashby, & Kern, 2000). Adaptive perfectionist youth were more willing than maladaptive perfectionists and nonperfectionists to modify their behavior to match social and environmental cues (LoCicero et al., 2000). These individuals reported a greater sense of belonging and more desire to cooperate with others than nonperfectionists. Adaptive and maladaptive perfectionists also reported greater desire for recognition and need to do things well than nonperfectionists. Gilman and Ashby (2003) found positive relationships between personal standards and measures of self, family, school, friends, living environment, and global satisfaction among adolescents. The same measures of life satisfaction, however, related inversely to a measure of perceived discrepancy between standards and performance. A separate study identified high standards of performance and emphasis on the importance of order as positive predictors of life satisfaction in the areas described above for Turkish youth (Ongen, 2009). Discrepancy between standards and performance negatively predicted life satisfaction in all the aforementioned areas (Ongen, 2009).

Ashby, Dickinson, Gnilka, and Noble (2011) also examined differences among adaptive, maladaptive, and nonperfectionist youth using the APS-R. The researchers found relatively higher levels of hope and lower levels of depression among adaptive perfectionist middle school students. A positive relationship existed between maladaptive perfectionism and depression, and was mediated by hope (Ashby et al., 2011).

Research using the APS-R suggests that high personal standards are adaptive unless an individual believes he is incapable of meeting standards he sets for himself. Experiencing a discrepancy between standards and performance appears maladaptive because it relates to depression, low self-esteem, lower academic achievement, social stress, lower life satisfaction, fewer coping resources, and general symptoms of psychopathology (Accordino et al., 2000; Gilman & Ashby, 2003; LoCicero et al., 2000; LoCicero & Ashby, 2000; Nounopoulos et al., 2006; Ongen, 2009). These findings are relatively consistent among adult and youth samples. Additional research on perfectionism among children and adolescents garnered via use of more obscure adult perfectionism measures is described next.

**Child studies and other adult measures of perfectionism.** Several studies of perfectionism in youth have used other adult measures of perfectionism such as the Sport Multidimensional Perfectionism Scale (MPS – Sport; Dunn et al., 2006), Multidimensional Inventory of Perfectionism in Sport (Stöeber, Otto, & Stoll, 2004), perfectionism subscale of the Eating Disorders Inventory (EDI; Garner, Omsted, & Polivy, 1983) and perfectionism subscale of the Dysfunctional Attitudes Scale (DAS; Jacobs et al., 2009). Young hockey players who reported high perfectionism also reported substantial anger during competition, especially when making mistakes at critical points in competition (Vallance, Dunn, & Dunn, 2006). Other research with young athletes revealed a significant relationship between perceived parental pressure and somatic complaints (Stöeber & Rambow, 2007). Stöeber and Rambow (2007) also found relationships between experiencing negative reactions to imperfection and fear of failure, depressive symptoms, and somatic complaints.

Nilsson, Sundbom, and Hagglof (2008) conducted a longitudinal study of perfectionism in adolescents with anorexia nervosa. Higher perfectionism was associated with longer illness duration. Levels of perfectionism stayed the same even after symptoms of anorexia nervosa remitted, indicating that perfectionism is a stable characteristic that exists prior to and after onset of eating disorder symptoms. Canals, Sancho, and Arija (2009) examined parent characteristics and eating disorder risk among adolescents and identified father's perfectionism as a risk factor for long-term eating disorders. Soenens and colleagues (2008) found higher levels of maladaptive perfectionism and father's psychologically controlling behavior among adolescents with an eating disorder.

Jacobs and colleagues (2009) examined the impact of perfectionism on treatment outcomes among clinically depressed adolescents. Higher perfectionism was associated with greater suicidality and depressive symptoms at baseline. Participants received cognitive behavior therapy (CBT), fluoxetine, a combination of CBT and fluoxetine, or pill placebo over 12 weeks. Participants in each treatment condition demonstrated lower depression, suicidality, and perfectionism at the end of treatment. Individuals with high perfectionism at the beginning of the study, however, demonstrated elevated levels of depression and less improvement in suicidality than individuals with low perfectionism, regardless of treatment condition. Jacobs and colleagues (2009) suggested that adolescent perfectionists who experience depression and/or suicidality may require lengthier treatment that incorporates CBT and medication.

Child perfectionism research has grown substantially over the past two decades but there continue to be large holes in the literature. Researchers have particularly

neglected to examine factors contributing to the development of perfectionism. Flett, Hewitt, and other prominent perfectionism researchers suggest several models of perfectionism development that should inspire future empirical investigations (Flett et al., 2002). These models are described next.

## Theories of Development of Perfectionism

Few studies have directly examined factors involved in the etiology of perfectionism, but several developmental models do exist. The following sections describe models of social expectations, social learning, social reaction, and anxious rearing to explain potential modes of perfectionism development. Supporting research for each model is also reviewed.

### Social Expectations Model

The social expectations model suggests that perfectionism develops when children learn they must meet achievement and/or behavioral expectations held by their parents to earn their parents' love and approval (Flett et al., 2002). This model of development comes from Rogers's (1951) work on contingent self-worth. Rogers (1951) thought low self-esteem may be associated with children's beliefs that parental approval is contingent on meeting certain expectations. Missildine (1963) also believed children strive to do their best and consistently receive promises of affection and approval if only they can do a little better. Missildine (1963) suggested that perfectionist parents who belittle their children's achievements and refuse to accept them as good enough create perfectionist children.

Hollender (1965) agreed with Missildine's portrayal of perfectionism and thought perfectionism is most likely to develop in a child who is sensitive, insecure, and desperate

for parental approval. The child believes he must be perfect to earn parental love and acceptance because his parents are demanding and, at times, rejecting. Hollender (1965) further suggested the demand for perfectionism eventually becomes internalized and is ultimately motivated by pursuit of personal satisfaction and praise, acceptance, and admiration from others.

Hamachek (1978) differentiated normal perfectionism (which involves painstaking work, striving for perfection, desire for approval from others, ability to feel satisfied with one's work, and capacity for making situationally appropriate self-demands) from neurotic perfectionism (which involves feeling as though one must be perfect without feeling one has done well enough). Hamachek (1978) posited that neurotic perfectionism develops in an environment where certain conditions must be met before approval from significant others is forthcoming. In these circumstances, individuals learn that being themselves is not enough – high standards must be met for praise and affection to occur. Neurotic perfectionists experience frustration and failure because they strive for unattainable perfection (Hamachek, 1978).

Burns (1980) also thought the development of perfectionism begins during childhood and is partially a function of seeking parental acceptance. Parents of burgeoning perfectionists respond to their children's failures with irritation rather than love and guidance. Children thus learn to feel ashamed of their mistakes and their self-esteem becomes contingent upon parental approval. Pacht (1984) described an adult perfectionist as one who is "still trying to convince his or her parents that he or she is lovable" (p. 388) and that love can be obtained by performing perfectly. Sorotzkin (1985) suggested parents of perfectionists may demand total success from their children

and are likely harsh and excessively critical. Blatt (1995) also suggested a belief that perfectionism develops when children fear they will fail to meet the demanding expectations of their parents and will therefore lose parents' love and support. Blatt (1995) thought such individuals eventually become harsh self-critics who demand perfection from themselves in the same way their parents once demanded perfection from them.

The social expectations model suggests that perfectionism develops when individuals believe significant others hold them to lofty standards they cannot meet. This situation is especially likely to occur between children and their parents because children generally venerate their parents and are motivated to please them. When children cannot meet the standards they perceive others as holding them to, they may feel helpless. A sense of contingent self-worth also develops as children learn they must perform in a near perfect manner to avoid negative feedback and earn praise. This path of perfectionism development is manifest in the socially prescribed perfectionism scale of the MPS – Hewitt and Flett version (Hewitt & Flett, 1991) and the CAPS (Flett et al., 1997) as well as the parental expectations subscale of the MPS – Frost version (1990). Hewitt and Flett (1991) contended that socially prescribed perfectionism can involve the perception of high expectations held by teachers, peers, extended family members, and other significant persons in addition to parents.

Multiple studies that have validated the socially prescribed perfectionism and parent expectations subscales of the MPS – Hewitt and Flett version, CAPS, and MPS – Frost version suggest these are important dimensions of perfectionism (Clavin et al., 1996; Frost et al., 1990, 1991, 1993; Hewitt et al., 2002; Hewitt & Flett, 1991b). Several

other empirical studies also support the social expectations model of perfectionism. Speirs Neumeister, Williams, and Cross (2009) interviewed gifted high school students identified as perfectionists and found that most identified parent approval contingent upon academic performance as intrinsic to their own perfectionism development. Furthermore, adolescents demonstrated greater academic achievement when they perceived their parents as highly valuing achievement and expecting the best possible performance (Paulson, 1994). Yoon and Lau (2008) found, among Asian American university students, that higher concern over mistakes and personal standards were linked with higher ratings of parent-driven perfectionism and lower ratings of parent support.

Ablard and Parker (1997) examined child perfectionism and parents' achievement goals. Parents were classified as performance goal-oriented (they expected high achievement from their children for reasons relating to social status, recognition, and appearance of intelligence) or learning goal-oriented (they encouraged their children to learn, challenge themselves, and do well for the intrinsic benefits associated with understanding new material). Consistent with the social expectations model of perfectionism, children of performance-goal parents were significantly more likely than other children to be in a high perfectionism group. Paulson (1994) also found that adolescents demonstrated greater academic achievement when they perceived their parents as highly valuing achievement and expecting the best possible performance.

Hutchinson and Yates (2008) also studied the relationship between child perfectionism (specifically self-striving, socially prescribed perfectionism, and concern for mistakes) and mothers' expressed goals for their children. Parent goals included direct expectations (high standards without emotional contingencies), controlling

expectations (parent need for child's high performance linked with emotional contingencies), and noncontingent encouragement (encouragement of effort). A positive link was found between direct expectations and self-striving in children, suggesting that children whose parents clearly express high expectations also hold themselves to high standards. Socially prescribed perfectionism in children was negatively associated with self-striving and positively associated with controlling parent expectations. Thus, when parent goals implied a contingency between child performance, parent emotions, and/or child worth, children endorsed greater socially prescribed perfectionism. This particular study not only supports the notion that parent expectations contribute to child perfectionism, but also demonstrates that the manner in which parents express goals for their children may play a role in whether perfectionism is adaptive or maladaptive.

Several studies have also found positive relationships between psychologically controlling behavior on the part of parents and perfectionism in children. Soenens, Vansteenkiste and colleagues (2005) found a positive relationship between perfectionism among adult daughters and parents perceived as psychologically controlling. Kenney-Benson and Pomerantz (2005) discovered that mothers who demonstrated greater use of control with their young children had children who exhibited greater socially prescribed and self-oriented perfectionism. Undergraduate female perfectionists have also described their mothers as harsh and demanding (Frost, Lahart, & Rosenblate, 1991). Foy (1998) also found that perceived parental psychological control predicted self-oriented and socially prescribed perfectionism among university students. Similar results with respect to parental control and child perfectionism exist in other studies (Brookings & Wilson, 1994; Findlay & Watts, 1998; Flynn, Hewitt, Flett, & Caelian, 2001; Rice et al., 1996).

Parenting style also appears to be associated with perfectionism development in children. Baumrind (1971) classified parenting styles on the basis of demandingness (parental control, supervision, and expectations of maturation) and responsiveness (parental displays of warmth, acceptance, and involvement in their children's lives). Baumrind (1971) suggested 3 styles of parenting: authoritarian, authoritative, and permissive. Maccoby and Martin (1983) also differentiated a fourth, neglectful style of parenting. Authoritarian parenting, which involves a high level of demandingness and a low level of responsiveness, is most frequently associated with socially prescribed and/or maladaptive perfectionism (Flett, Hewitt, & Singer, 1995; Rice et al., 1996; Speirs Neumeister, 2004b). Authoritative parenting has been associated with self-oriented perfectionism among female youth (Flett et al., 1995) and healthy perfectionism among adolescent male athletes (Sapieja et al., 2011). Authoritative parenting also positively relates to achievement motivation, academic grades, and use of adaptive achievement strategies (Aunola, Stattin, & Nurmi, 2000; Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Hein & Lewko, 1994).

Craddock, Church, and Sands (2009) examined family of origin characteristics including parental psychological control, parenting style, family enmeshment, and family chaos as predictors of functional and dysfunctional perfectionism among university students. Consistent with the studies described above, dysfunctional perfectionism was significantly predicted by higher levels of parent psychological control and authoritarian parenting, as well as family enmeshment. Functional perfectionism was also predicted by authoritarian parenting and family enmeshment, as well as low levels of family chaos. Parent psychological control was not, however, a predictor of functional perfectionism.

The researchers suggested that parent psychological control involving use of guilt, anxiety, and withdrawal of affection may be a more insidious and manipulative style of parenting than authoritarianism. This difference may explain why perceived authoritarian parenting, but not psychologically controlling parenting, predicts both forms of perfectionism. Children in highly enmeshed families may be particularly aware of their parents' expectations for them and are motivated to meet those expectations, especially when parents are highly demanding (authoritarian) and/or controlling.

Speirs Neumeister and Finch (2006) found that the relationship between parenting style and child perfectionism seems affected by attachment. Authoritarian parenting was associated with insecure attachment, which was associated with self-oriented and/or socially prescribed perfectionism among high-ability college students. These results are consistent with the social expectations model and show that controlling parents who demand the best performance and complete obedience tend to have offspring high in maladaptive perfectionism. In some cases, the attachment relationship between child and parent may affect the relationship between parenting style and child perfectionism. Securely attached children may be less likely to demonstrate high levels of maladaptive perfectionism (Speirs Neumeister & Finch, 2006).

**Social Learning Model**

Like the social expectations model, the social learning model of perfectionism suggests that parents contribute significantly to the development of perfectionism in their children (Flett et al., 2002). This model focuses primarily on the notion that perfectionism can be learned by observing and imitating perfectionist models. Social learning of perfectionism is especially likely to occur in young children who have a

greater tendency to idealize and imitate their parents (Flett et al., 2002). According to Hamachek (1978), perfectionism can develop via "positive modeling," which involves identifying with a perfectionist who demonstrates preference for, and satisfaction with, doing one's best.

Social learning theory is primarily attributable to the work of Bandura and his colleagues (Bandura, 1986; Bandura, Grusec, & Menlove, 1966; Bandura & Kupers, 1964). Individuals can learn certain responses by observing the behaviors of others as well as the consequences of those behaviors. To the extent that individuals attend to others' behaviors and can remember what they observed, they may reproduce the behaviors if they believe the consequences of doing so will be favorable (Bandura, 1977, 1986). Individuals are especially likely to imitate the behaviors of people they admire. Bandura (1964) also found that children are more likely to imitate self-reinforcing behaviors modeled by adults than by similarly aged peers. Bandura's theory suggests that some children may learn to be perfectionists by observing their perfectionist parents and/or other significant perfectionist adults in their lives. Empirical evidence suggests young children will behave in a manner more similar to that of their primary caregivers with whom they spend the most time (Cook & Kearney, 2008; Fox, 2000; Welch, 1996).

Numerous studies indicate that perfectionism develops at least partially as a function of social learning processes. In one study, a group of children watched models self-reward after meeting stringent or low-level standards (Bandura & Kupers, 1964). When given the opportunity to perform a similar task, children were most likely to match the self-reward style of the model they observed. Children were also more likely to imitate an adult model than a same-aged peer.

Other studies assessed the relationship between parent and child perfectionism and generally supported the social learning model. Frost and colleagues (1991) examined female undergraduate students' self-reported levels of perfectionism and levels of perfectionism they ascribed to their parents. They found a significant positive relationship between maternal perfectionism and perfectionism in daughters (Frost et al., 1991). Vieth and Trull (1999) found that self-oriented and socially prescribed perfectionism in undergraduate daughters correlated with the same types of perfectionism in their mothers. These researchers found a positive relationship between self-oriented perfectionism in undergraduate sons and fathers (Vieth & Trull, 1999). The results of Chang's (2000) study also suggested a positive relationship between female adult perfectionism and parental perfectionism. Maladaptive perfectionism in daughters was associated with maladaptive perfectionism in mothers, and adaptive perfectionism in daughters was associated with adaptive and maladaptive perfectionism in mothers in yet another study (Soenens, Vansteenkiste et al., 2005).

An important criticism of these studies is that each examined perfectionism in adult "children." Several of the studies also examined perfectionism using only females. Cook and Kearney (2008) studied perfectionism in youth aged 11-17 years and their parents. Self-oriented perfectionism in sons was positively associated with self-oriented perfectionism in mothers. A negative relationship existed between maternal socially prescribed perfectionism and sons' self-oriented perfectionism (Cook & Kearney, 2008). Gifted high schools students who demonstrated high perfectionism also described witnessing their parents' perfectionist attributes and behaviors as essential to their own

perfectionism development (Speirs Neumeister et al., 2009). The existing literature is consistent with the theory that perfectionism can develop via social learning.

**Social Reaction Model**

Flett and colleagues (2002) proposed a third potential path of perfectionism development. The social reaction model suggests some children become perfectionists after consistent exposure to harsh environments. Children who are physically or psychologically abused or raised in overly chaotic homes learn their parents are unreliable and/or are frequently made to feel ashamed. These children may react to their difficult circumstances by becoming perfectionists. Hamachek (1978) also believed when parents fail to set standards for their children and do not provide appropriate feedback regarding their children's performance, children may establish their own unreasonably high standards. Children exposed to harsh living conditions and lack of proper feedback may become perfectionists for self-protective reasons. Behaving in a perfect manner is not only likely to satisfy even the most demanding parents but may have the added benefit of decreasing the number and severity of conflicts with significant others. A "perfect" child is less likely to draw negative attention via criticism, verbal abuse, and physical violence than a child without such a coping mechanism. Flett and colleagues (2002) also suggested that perfectionism may provide a sense of control for children who spend their time in harsh and unpredictable environments.

Kenney-Benson and Pomerantz (2005) found that mothers who demonstrated hostility and criticism toward their children while their children attempted to complete a challenging task had children with higher levels of socially prescribed perfectionism. Clark and Coker (2009) found a similar relationship between maternal criticism and

dysfunctional perfectionism in children. Mothers of children in a high dysfunctional perfectionism group made significantly more critical comments about their child than mothers of children in a low dysfunctional perfectionism group. Maternal and paternal harshness also appear related to perfectionism among daughters (Frost et al., 1991). Additional research demonstrates that parents of perfectionists are more rejecting and less affectionate with, and tolerant of, their children than parents of nonperfectionists (Findlay & Watts, 1998; Richter, Eisemann, & Perris, 1994; Speirs Neumeister et al., 2009). Families of individuals demonstrating high perfectionism are often more maladjusted, lower in cohesion, and higher in conflict than families of persons demonstrating low perfectionism (Brookings & Wilson, 1994; Flynn et al., 2001; Graber et al., 1994; Rickner & Tan, 1994).

Multiple studies, several of which come from the eating disorder literature, suggest that physical and sexual abuse sometimes lead to perfectionism. In a study of 27 incest victims, 8 were perfectionists (Lindbert & Distad, 1985). The researchers who studied the victims suggested that perfectionism was one of many survival responses that were adaptive during the period of abuse. Lindbert and Distad (1985) explained that, for one 14-year-old sexually abused by her grandfather for 10 years, "expressing the need to act or think 'perfectly' may have allowed her to temporarily escape feelings of despair, bitterness, and worthlessness" (p. 523). Another study demonstrated, among individuals with bulimia, that those with a history of being battered had higher perfectionism scores than those with no such history (Kaner, Bulike & Sullivan, 1993). Schaaf and McCanne (1994) examined college undergraduate students who reported physical abuse, sexual abuse, or no abuse during childhood. Individuals who reported childhood physical abuse

demonstrated significantly higher perfectionism than those who had not experienced such abuse (Schaaf & McCanne, 1994). Finally, Zlotnik and colleagues (1996) found significantly higher perfectionism among persons with a history of childhood sexual abuse than controls.

These studies are consistent with the idea that perfectionism may develop as a protective mechanism in cases of abuse and harsh parenting. Flett and colleagues (2002) did not specifically suggest that the social reaction model applies to children whose parents demonstrate symptoms of psychopathology, but this connection seems reasonable. Cook and Kearney (2008) found that maternal symptoms of depression, obsessive-compulsive disorder, and anxiety predicted self-oriented perfectionism in male children. Rice and colleagues (2008) also found a relationship between maternal depression and child maladaptive perfectionism for European Americans but not African Americans. Many empirical studies attest to the fact that psychopathology influences parenting practices and impacts children in lasting, predictable, and undesirable ways (e.g., Elgar, 2007; Goodman & Gotlib, 1999; Grillon, 1997; Marchland & Hock, 1998; Weissman et al., 2006). The literature on influences of parent psychopathology on children is reviewed in a later section.

**Anxious Rearing Model**

Burns (1980) described perfectionism as developing when a child receives reinforcement for outstanding work but perceives anxiety and disappointment in his parents when he makes mistakes. Burns (1980) suggested that child perfectionists and their parents likely experience failure as dangerous, undesirable, and anxiety-inducing. Flett and colleagues (2002) also suggested a path of development, the anxious rearing

model, in which "being exposed to anxious parents who promote a focus on mistakes and the negative consequences of making mistakes" (p. 95) leads to perfectionism. According to the anxious rearing model, children are more likely to develop perfectionism when parents are overprotective, overemphasize the importance of making positive impressions on others, provide frequent reminders of the dangers of mistake-making, regularly indicate that others will judge one harshly for making mistakes, and model other anxious behaviors (Flett et al., 2002).

Flett, Sherry, and Hewitt (2001) found a significant relationship between socially prescribed perfectionism and anxious parental rearing among university students. Other studies also suggest that anxious rearing is associated with symptoms of anxiety and emotional distress in youth (Barrett, Rapee, Dadds, & Ryan, 1996; Grüner, Muris, & Merckelbach, 1999; Hudson & Rapee, 2001; Muris, 2006; Muris, Meesters, & van Brakel, 2003; Muris & Merckelbach, 1998; van Brakel, Muris, Bögels, & Thomassen, 2006). The results of Cook and Kearney's (2008) study in which maternal anxiety related to socially prescribed perfectionism in male youth also suggest that parental anxiety may contribute to the development of perfectionism in offspring. Additional research is clearly necessary to determine whether the anxious rearing model of perfectionism has merit.

The previously described perfectionism models concentrate on ways in which family and parent factors influence the development of perfectionism. Other important variables such as cultural influences, significant figures such as peers and teachers, temperament, intellectual ability, cognitive style, and genetics can also impact perfectionism. Research that deals directly with perfectionism and the related construct of

anxiety facilitates an understanding of potential risk factors for perfectionism. Extant research on perfectionism and possible environmental, familial, and individual risk factors is discussed next.

## Risk Factors for Perfectionism in Children

### Culture and Ethnicity

Few researchers have examined perfectionism from the perspective that the construct may manifest differently on the basis of cultural and ethnic diversity. Flett and colleagues (2002) proposed that individualistic cultures place greater emphasis on personal perfection and that collectivist cultures demonstrate greater socially prescribed perfectionism given their emphasis on the relationship between self and others. These authors also referenced the relationship between perfectionism and eating disorders as an example of a perfectionism-related issue that has long existed in Western nations, where thinness is idealized (Flett et al., 2002). Research on perfectionism among multicultural groups helps determine whether the construct is manifest similarly among individuals with diverse backgrounds. To the extent that dissimilarities in perfectionism exist across cultures and ethnicities, researchers should consider different risk factors and paths of development. A review of the literature on perfectionism and multiculturalism is included here because of the importance of considering diversity issues in all aspects of psychological research. The present study included an analysis of the measured constructs by ethnicity to determine whether related differences exist.

Castro and Rice (2003) compared Asian American, African American, and European American university students on the MPS – Frost version subscales and on a measure of depression. One primary finding was that Asian Americans reported greater

concern over mistakes, parental criticism, and doubts about actions than other groups. Asian Americans also reported higher personal standards than European Americans. These results suggest that Asian Americans perceive greater demands to perform at a high level from their parents, families, and society as well as increased criticism when they do not meet expected standards (Castro & Rice, 2003).

Perhaps because of these perceived external pressures, Asian American students reported a greater tendency to doubt their abilities and be worried about making mistakes than their African American and European American peers (Castro & Rice, 2003). According to Castro and Rice (2003), this interpretation is consistent with Sue and Okazaki's (1990) suggestion that Asian American cultural values include a strong emphasis on accomplishment. Despite the relatively higher emphasis on potentially maladaptive aspects of perfectionism (i.e., parental criticism, doubts about actions, concern over mistakes) among Asian American students, members of this ethnic group did not report higher levels of depression and *did* report higher GPAs than European Americans and African Americans (Castro & Rice, 2003).

African American students scored significantly higher than European American students on a measure of parental expectations in at least two studies (Castro & Rice, 2003; Nilsson, Paul, Lupini, & Tatem, 1999). According to Castro and Rice (2003), these results support the hypothesis that middle-class African American parents tend to demand high achievement from their children, perhaps in response to their own difficulties arriving at and preserving their status (see also Hines & Boyd-Franklin, 1996). Results of Castro and Rice's (2003) study indicate, for African American students, that perceiving relatively high parental expectations was not necessarily

associated with higher academic performance. African American students reported significantly lower GPAs than Asian American and European American students (Castro & Rice, 2003). Doubting one's abilities, which related inversely to GPA, may be especially detrimental to African American students' achievement (Castro & Rice, 2003).

Concern over mistakes, parental criticism, and doubts about actions were positively associated with depression for African Americans, Asian Americans, and European Americans (Castro & Rice, 2003). MPS – Frost version subscale scores also significantly predicted depression for Asian American and European American students. In each case, doubts about actions most strongly predicted depression. Yoon and Lau (2008) also found positive relationships between maladaptive perfectionism (comprising concern over mistakes and doubts about actions), parent-driven perfectionism (comprising parental criticism and expectations), and depression among Asian American students. Interdependence (affiliation and responsibility to one's group), which is typically valued by members of collectivist cultures, moderated the relationship between maladaptive perfectionism and depression. Vulnerability to depression was especially great for Asian Americans who scored high on measures of maladaptive perfectionism and interdependence.

The results of the Castro and Rice (2003) study are consistent with other research on perfectionism in African Americans, Asian Americans, and European Americans. Chang (1998), for example, also found that Asian American students reported higher levels of concern over mistakes, parental criticism, and doubts about actions than European American students. Wang (2010) found that Asian Americans were more likely to report being unable to meet their own standards for performance and standards

held for them by their families than European Americans. Chang and Chang (2009) also found that Asian Americans had higher levels of negative perfectionism (defined as self-oriented and socially prescribed perfectionism emphasizing the negative consequences of having high standards) than European Americans. Another study revealed higher levels of self-oriented perfectionism and other-oriented perfectionism among African American than European American adolescents (van Hanswijck, de Jonge, & Waller, 2003). African American and European American adolescents in this study reported comparable levels of socially prescribed perfectionism, suggesting that African Americans did not perceive greater perfectionist demands from others (van Hanswijck et al., 2003).

Additional research revealed higher perfectionism among adolescent African Americans and black South African females than European Americans and white South African females, respectively, when the EDI perfectionism subscale was used (Striegel-Moore et al., 2000; Wassenaar, le Grange, Winship, & Lachenicht, 2000). African American adolescents reported higher maladaptive perfectionism than European American peers among low-income, chronically ill adolescents (Rice et al., 2008). In another study, African American women reported less adaptive perfectionism and the same rate of maladaptive perfectionism than European American women (Chang, Watkins, & Banks, 2004).

Some researchers have examined the applicability of existing perfectionism measures to individuals from countries outside the United States and to non-European Americans. Slaney, Chada, Mobley, and Kennedy (2000) studied the meaning of perfectionism in India by examining whether the APS was useful with a Hindu, Asian Indian sample and by interviewing university students and faculty members identified as

"perfectionists." The same 4-factor structure of the APS (standards and order, anxiety, relationships, and procrastination) was a good fit for a US sample and for the Asian Indian sample (Slaney et al., 2000). One exception to the cross-cultural similarities regarding perfectionism occurred for interpersonal relationships. Asian Indian students reported greater relationship-related concerns on the APS than US students.

Asian Indian students and faculty considered high standards for performance to be central to perfectionism, with organization and orderliness also emphasized. Participants evaluated their perfectionism positively but each also admitted distress from their perfectionism. Several individuals said perfectionism greatly affected all aspects of their lives and others felt their perfectionism related primarily to academic and professional pursuits. Slaney and colleagues (2003) believed that the similarities between Asian Indian perfectionists and US perfectionists were more prominent than the differences.

Several studies have examined the relevance of various perfectionism measures with multicultural youth. In one case, researchers used the APS-R to compare perfectionism in school-aged students from Croatia and the US (Gilman, Ashby, Sverko, Florell, & Varjas, 2005). The only major difference between groups was that Croatian youth reported slightly lower scores on the standards subscale.

Hawkins and colleagues (2006) assessed the MPS – Frost version among Australian adolescent girls. A factor analysis revealed 4 factors (organization, parental expectations and criticism, concern over mistakes, and doubts about actions) rather than the 6 factors originally found when the MPS – Frost version was used with a US sample (Hawkins et al., 2006). Several recent studies using the MPS – Frost version with US

samples also indicate that the measure is more stable with 4 factors (Hawkins et al., 2000; Stöeber, 1998; Stumpf & Parker, 2000).

McCreary and colleagues (2004) examined the applicability of the CAPS among African American children. They found that subscales of socially prescribed, self-oriented-critical (self-criticism related to perfectionism), and self-oriented-striving (striving for perfectionism) perfectionism fit the sample better than the original socially prescribed and self-oriented perfectionism subscales. Socially prescribed and self-oriented-critical perfectionism were significantly associated with depression and anxiety for African American children (McCreary et al., 2004).

Additional studies that address relationships between perfectionism, culture, and ethnicity are necessary despite a greater emphasis on these variables in recent publications. The most popular perfectionism measures (e.g., the MPS – Hewitt and Flett version, the MPS – Frost version, the APS-R, and the CAPS) seem to apply to individuals from several countries and ethnic backgrounds. These studies bear replication and similar work must be done with individuals from other understudied groups (e.g., Hispanic and Native Americans).

Preliminary multicultural studies of perfectionism suggest more similarities than differences regarding presentation of the construct among diverse groups. Some research, however, has revealed higher levels of some types of perfectionism among minority groups and lower levels of other aspects of perfectionism among the same individuals. Future adult and youth studies should examine demographic variables and determine whether consistent differences exist among groups with respect to perfectionism. Determining whether members of some ethnic or cultural groups are at

heightened risk for perfectionism development is an especially important goal. Additional potential risk factors for perfectionism are discussed next.

**School, Teachers, and Peers**

Certain school, teacher, and peer characteristics may also contribute to the etiology of perfectionism, though little research is available. Consistent with the social expectations and social learning models of perfectionism development (Flett et al., 2002), one can speculate that perfectionism is more likely among individuals whose teachers have consistently demanded and reinforced the best possible performance in academics and athletics. Schools that emphasize competition, offer advanced courses for individuals who excel, openly publicize gifted programs, and reinforce students who model perfectionism-related characteristics may also foster perfectionism.

The social expectations and social learning models also suggest that individuals who observe their peers expending maximum effort, being disappointed with imperfect work, striving for perfection, and being rewarded and praised for excellent performance will be more likely to develop perfectionism-related characteristics. Perfectionism will also be more likely when peers admire and praise behaviors such as obtaining good grades, presenting outstanding work, and devoting extensive time to pursuing academic and other achievements. In contrast, when an individual's peer group detracts from the desirability of setting and achieving high standards by ridiculing these behaviors, or by emphasizing the importance of conflicting pursuits (e.g., attending social events in lieu of completing academic work or practicing athletic skills, drug use), the individual may be less likely to develop perfectionism.

Miller and Vaillancourt (2007) found evidence to suggest that indirect aggression (covert and socially manipulative acts such as telling others to avoid an individual, developing friendships as a form of revenge, making derogatory comments about individuals without their knowledge, and divulging one person's secrets to another) from one's peers may also contribute to perfectionism development. Retrospective accounts of aggression among female undergraduate students predicted greater socially prescribed and self-oriented perfectionism, with indirect aggression being the most important predictor in each case (Miller & Vaillancourt, 2007). This research best relates to the social reaction model in which individuals become perfectionists partly to assert control over some aspect of their otherwise unwieldy and conflict-filled lives.

Several studies support the contention that peers play an important role in the development of personality characteristics, which is consistent with the notion that peers likely influence perfectionism development (Harris, 1995; Kandel & Lesser, 1969; Phelps, 2005; Vandell, 2000). The present study did not address these particular variables, but research that directly examines the influences of school, teachers and peers on perfectionism development is important.

**Family Factors**

Family factors likely play a role in the development of perfectionism. The anxious rearing and social reaction models portray perfectionism as a response to environments that emphasize fear or anxiety and that are conflictual, tumultuous, and chaotic. Brookings and Wilson (1994) found that perfectionism in female children is associated with high family conflict and control and low cohesiveness, expressiveness, and independence. Kawamura and Frost (2004) also found that maladaptive

perfectionism related to concealing distressing or negative personal information. The researchers suggested that maladaptive perfectionists may be especially unlikely to confide in family members, leading to greater psychological distress. Additional studies also suggest that families of perfectionists demonstrate relatively greater conflict and maladjustment, lower cohesion, and more extreme enmeshment than families of nonperfectionists (Brookings & Wilson, 1994; Craddock et al., 2009; Flynn et al., 2001; Graber et al., 1994; Rickner & Tan, 1994).

Wang (2010) developed the Family Almost Perfect Scale (FAPS) to measure perceived familial achievement expectations (family standards), familial expectations for order (family order), and discrepancy between family expectations and individual performance (family discrepancy). Wang (2010) found that individuals who perceived their families as having high standards also held themselves to high standards and perceived high parental criticism and expectations. To a lesser extent, such individuals emphasized the importance of order and experienced discrepancy between their own performance expectations and abilities. Individuals who felt unable to meet their families' high standards were more likely to experience depression, anxiety, and low self-esteem. High family discrepancy was further associated with an individual experience of discrepancy between one's own expectations and abilities, which is considered a hallmark of maladaptive perfectionism. Perceiving one's family as having high standards relates to setting high standards for oneself. When a person feels unable to meet the standards set by his family, he is more likely to demonstrate maladaptive perfectionism and other signs of distress.

The perfectionism literature on family-related risk factors is relatively sparse, but research on child anxiety and associated familial characteristics may be relevant. This is especially true because anxious concerns about performance, others' opinions, and one's ability to succeed are central to perfectionism. A review by Bögels and Brechman-Toussaint (2006) revealed that marital fighting and family conflict in the home are associated with greater anxiety in children and adolescents, particularly when conflicts are child-related.

Other research suggests that state anxiety in children relates to parental aggression during conflicts at home, and trait anxiety strongly relates to parents' fear, sadness, and lack of problem-solving skills (Cummings, Goeke-Morey, & Papp, 2003; Du Rocher Schudlich & Cummings, 2003). An observational study revealed a relationship between child anxiety and familial disengagement, conflict, and domineering behavior (Katz & Low, 2004). Hughes, Hedtke, and Kendall (2008) found worse family functioning among families with anxious children than families without anxious children. Low familial encouragement of autonomy and poor communication, as well as low family sociability, have also been linked to child test and social anxiety respectively (Bögels, van Oostern, Muris, & Smulders, 2001; Peleg-Popko, 2002).

Overall, the existing literature suggests poorer functioning among families that have perfectionist and anxious children. These families are often more chaotic, less encouraging of independence, and less successful at communicating than families without perfectionist children. The same family characteristics may be risk factors for perfectionism development, though causal relationships are not established (child perfectionism could conceivably cause the same family problems). The child anxiety

literature supports the possibility that problematic family characteristics such as conflict, poor communication, and domineering behavior may comprise risk factors for perfectionism. In a related manner, the following section addresses specific parent variables that may be risk factors for perfectionism development.

**Parent Factors**

A focus on parents is evident in each major model of perfectionism development. An examination of the research on parent factors potentially involved in the etiology of perfectionism is thus imperative. Such factors include specific methods of transmission, parent psychopathology, and parenting style. Research on perfectionism in children and developmental pathways for perfectionism is considerably less extensive than research on conditions such as anxiety disorders. Many aspects of perfectionism such as concern about making mistakes, worry regarding others' perceptions of one's performance, doubts about one's ability to succeed, and desire to avoid the negative feelings and repercussions associated with failure involve substantial anxiety. Perfectionism in children and adults has also been consistently associated with anxiety disorder symptomatology (Bieling et al., 2004; Dunkley, Blankstein, Halsall, Williams, & Winkworth, 2000; Flett et al., 1989, 1994-1995; Frost et al., 1993; Frost & DiBartolo, 2002; Hewitt et al., 2002; Juster et al., 1996). Findings regarding development of anxiety disorders may therefore provide a useful context for research on the development of perfectionism. These findings are thus incorporated in the following section on parent-related risk factors and perfectionism development in children. Three specific parent-related risk factors and distinctions within each will be discussed: transmission, psychopathology, and parenting style.

**Methods of transmission: Parental modeling, information transfer, and reinforcement.** Contemporary models of perfectionism development suggest that learning modes of transmission such as parent modeling, information transfer, and reinforcement of perfectionist tendencies may be involved in the development of perfectionism. Parents are especially likely to transmit perfectionism and anxiety to children via learning processes because of the proportion of time spent with their children compared to other influential figures (Fisak & Grills-Taquechel, 2007). Research that directly examines these modes of transmission is scarce, however. The following sections describe existing literature on ways in which perfectionism may be learned. Research on the same modes of transmission as they relate to anxiety development supplements the small amount of relevant perfectionism literature.

***Parental modeling.*** Bandura's (1986) social learning theory provides a basis for research on child acquisition of perfectionism and anxiety via parental modeling. The social learning model of perfectionism development suggests that perfectionism may develop when children observe and imitate their parents' perfectionist behaviors such as talking about their need to do things perfectly, being overly cautious, and correcting their work repeatedly until they are completely satisfied. Parent modeling of perfectionism may also involve behaviors like complaining frequently about mistakes and avoiding situations in which failure or imperfect performance are likely. In a similar manner, children may learn anxious or avoidant behaviors by observing their parents' signs of anxiety such as shaking, sweating, avoiding anxiety-provoking stimuli, and speaking about their fears (Bandura, 1986; Fisak & Grills-Taquechel, 2007; Rapee, 2002). Children may then replicate behaviors they observed in their parents.

Evidence for transmission of perfectionism from parents to children via modeling is mostly correlational and inconclusive. Several studies indicate concordance of parent and child perfectionism that suggests the possibility of a modeling effect (Chang, 2000; Cook & Kearney, 2008; Frost et al., 1991; Rice et al., 2008; Soenens, Vansteenkiste et al., 2005; Vieth & Trull, 1999). Clark and Coker (2009) also found greater dysfunctional perfectionism among children whose mothers modeled heightened self-criticism. Conclusions regarding a specific mode of transmission for perfectionism, however, are impossible to make on the basis of existing data.

Evidence for child learning of anxiety via parental modeling comes in the form of self-report and observational studies. Researchers have found that mothers who frequently expressed their fears in the presence of their children tend to have children with greater anxiety (Muris et al., 1996). Children with the lowest reported anxiety generally had mothers who said they never demonstrated anxiety in front of their children. Other studies have also demonstrated a relationship between child observations of anxious parenting and child experiences of anxiety via child-report measures (Muris, Meesters, Merckelbach, & Hulsenbeck, 2000; Muris & Merckelbach, 1998). Muris and colleagues (2000; Muris & Merckelbach, 1998) found that children who reported high anxiety and worry also tended to say their parents engaged in anxious rearing behaviors.

Retrospective studies conducted with adult participants meeting criteria for disorders such as social phobia, specific phobias, and panic disorder also suggest a relationship between parental modeling of anxious behaviors and development of anxiety among offspring (Bruch & Heimberg, 1994; Bruch, Heimberg, Berger, & Collins, 1989; Caster, Inderbitzen, & Hope, 1999; Ehlers, 1993; Watt, Stewart, & Cox, 1998). Anxious

adults often referred to observational experiences and instructional learning when asked to indicate the most likely source of their specific phobia (Menzies & Clarke, 1995; Merckelbach, de Jong, Muris & van den Hout, 1996). In a similar manner, anxiety sensitivity and panic symptoms in offspring have been associated with retrospective reports of parent modeling of panic symptoms and sick-role behaviors (Ehlers, 1993; Fisak & Grills-Taquechel, 2007; Watt et al., 1998; Watt & Stewart, 2000).

Several observational studies also provide support for the role of parent modeling in development of anxiety among children. In one such study, researchers observed mothers and children working together on a difficult and stressful task (Buckley & Woodruff-Borden, 2006). Anxious mothers modeled fewer adaptive coping strategies than non-anxious mothers. Other observational studies of mother-child dyads have demonstrated that mothers of anxious children, as well as anxious mothers (regardless of the anxiety status of their children), tend to catastrophize more than non-anxious mothers (Moore, Whaley, & Sigman, 2004; Whaley et al., 1999).

Future research on perfectionism may help clarify the etiological role of modeling via similar studies. Such studies will ideally incorporate parent-report, child-report, observational, cross-sectional, and longitudinal methodologies to examine parental modeling of perfectionism and perfectionistic concerns, as well as related child reactions. An important caveat to the studies described in this section is that associations between anxious offspring and parent modeling of anxiety may be bi-directional. Anxious and/or perfectionist parents may influence the development of anxiety and/or perfectionism in children. Child characteristics, however, may also influence parent behaviors (Fisak & Grills-Taquechel, 2007). The ability to examine the developmental progression of

perfectionism and related parent variables through studies of differently aged cross-sections of the population and/or through longitudinal research will help provide clarification.

***Reinforcement.*** Children may also develop perfectionism via reinforcement. This learning mechanism generally involves parents who reward perfect behavior and performance and punish their children for making mistakes or ignore imperfect performance. In a related manner, parents may reward or facilitate children's anxious behaviors by permitting them to escape frightening situations and trying to ameliorate distress by providing special attention or tangible rewards (Fisak & Grills-Taquechel, 2007; Rapee, 2002).

Few studies have directly examined the hypothesis that parents contribute to their children's perfectionism or anxiety via reinforcement of particular behaviors. Ablard and Parker (1997) found that children were more likely to demonstrate a maladaptive form of perfectionism if they had parents who strongly emphasized the importance of academic achievement. The results of at least two studies also suggested that adults with symptoms of panic disorder recalled parental reinforcement of panic symptoms and sick-role behaviors during childhood (Ehlers, 1993; Watt et al., 1998). In addition, observational studies of parent-child interactions reveal that parents of anxious children are less likely to encourage courageous behaviors and more likely to reinforce avoidant behaviors (Barrett, Fox, & Farrell, 2005; Dadds et al., 1996). Observational studies of perfectionist children and their parents would certainly help clarify the role of reinforcement.

***Information transfer.*** Children may also develop perfectionism via information transfer or instructional learning. Parents may overemphasize factors such as the

undesirable consequences of making mistakes, importance of making a good impression on others, and other personal feelings about perfectionism. Consistent exposure to these and other pro-perfectionism messages may result in children becoming hypervigilant, hesitant to take chances, anxious about making mistakes, and overly concerned with others' opinions of them (Dadds et al., 1996; Fisak & Grills-Taquechel, 2007; Flett et al., 2002). Indeed, perceptions of parental criticism and expectations have predicted aspects of perfectionism including concern over making mistakes, doubts about one's abilities, and high personal standards among children (McArdle & Duda, 2008).

The anxious rearing model strongly emphasizes the potential contributions of information transfer from parents to children in the etiology and maintenance of perfectionism (Flett et al., 2002). This model suggests that exposure to parents who are anxious and who highlight problems associated with making mistakes can lead offspring to be overly apprehensive about mistakes and strive for perfectionism. Multiple studies found that adult offspring reports of their parents' perfectionism converged with self-reports of perfectionism, suggesting the individuals who developed perfectionism were also aware of perfectionism in their parents (Enns et al., 2002; Soenens, Elliott, et al., 2005; Vieth & Trull, 1999). The most obvious manner in which these individuals might have learned of their parents' perfectionist tendencies is through their parents' perfectionism-related verbalizations.

The manner in which mothers express goals for their offspring may also impact the development of child perfectionism. Hutchinson and Yates (2008) found higher levels of personal striving among children whose mothers communicated goals and expectations directly; socially prescribed perfectionism was more common among

children whose mothers expressed their goals in a more controlling and manipulative manner. The research described here supports the notion that information transfer between parents and children may contribute to perfectionism development; however, these suggestions are speculative and warrant additional study.

A review of the literature did not reveal studies that directly examined perfectionism transmission via information transfer, but evidence for this option is available in the anxiety literature. Several studies indicate that child anxiety may develop when parents overemphasize well-being, awareness of potentially dangerous situations, and importance of safety to protect their children (Fisak & Grills-Taquechel, 2007). Similar parental behaviors associated with perfectionism-related anxieties may lead to transmission of perfectionism.

Field, Argyrus, and Knowles (2001) found that when adults provided negative information about a fictional monster, young children's ratings of fear regarding the monster increased significantly. Children provided with negative information about a fictional animal demonstrated increased fear ratings and more avoidance behavior in relation to the animal (Field & Lawson, 2003). Muris, Bodden, Merckelbach, Ollendick, and King (2003) demonstrated an increase in fear of a pretend dog-like creature among children who received negative information about the animal. The same researchers found that the increase in fear transferred to real dogs. Providing negative information also appears to influence child fears of social situations such as public speaking, meeting new people, and eating before others (Field, Hamilton, Knowles, & Plews, 2003). Research on information transmission of anxiety that relates directly to perfectionist anxieties does not currently exist, but the broader anxiety research theoretically applies.

**Parent psychopathology.** Parent psychopathology clearly relates to symptoms of maladjustment and psychopathology among offspring. In light of previously described social reaction and anxious rearing models of perfectionism development, parent psychopathology may relate to perfectionism among offspring. This is especially true given that psychopathologies such as depression, anxiety, and obsessive-compulsive disorder are more common within families and correlate with perfectionism, which may also be partially heritable. This section reviews research on the impact of several types of parent psychopathology on parenting practices and children. An overview of this literature is important because links among aspects of perfectionism and psychopathology, parent and child psychopathology, and parent and child perfectionism suggest the possibility that parent psychopathology may play a role in the development of child perfectionism.

***Parental depression.*** Depression affects more than 16% of individuals over the course of a lifetime, with mothers more likely to experience depressive symptoms (Brown & Harris, 1978; Kendler & Prescott, 1999; Kessler, Berglund, Demler, Jin, & Walters, 2005). Children with one or more depressed parents are considerably more likely than children of non-depressed parents to develop psychopathologies such as major depression, anxiety disorders, and substance dependence (Elgar, Curtis, McGrath, Waschbusch, & Stewart, 2003; Goodman & Gotlib, 1999; Hirsch, Moos, & Reischl, 1985; Sarigiani, Heath, & Camarena, 2003; Timko, Cronkite, Berg, & Moos, 2002; Weissman et al., 2006). Parental depression is associated with several maladaptive characteristics in offspring such as low self-esteem, depression, internalizing and externalizing problems, anxiety, aggression, hyperactivity, obsessive-compulsiveness,

diminished cognitive functioning, and medical problems (Bayer, Sanson, & Hemphill, 2006; Burt et al., 2005; Elgar et al., 2003; Hirsch et al. 1985; Kramer et al., 1998; Langrock, Compas, Keller, Merchant, & Copeland, 2002; Marchand & Hock, 1998; Weissman et al., 2006).

The maladaptive effects of parental depression on children are commonly ascribed to genetic influences, attachment, modeling, emotional regulation, parenting, and family dysfunction (Cicchetti, Rogosch, & Toth, 1998; Elgar, 2007; Goodman & Gotlib, 1999). Depression is moderately heritable (Jonson, McGue, Gaist, Vaupel, & Christensen, 2002; Kendler, Gatz, Gardner, & Pederson, 2006; Kendler, Neale, Kessler, Heath, & Eaves, 1992; O'Connor, McGuire, Reiss, Hetherington, & Plomin, 1998; Rende, Plomin, Reiss, & Hetherington, 1993). Genetics cannot fully explain the development of depression, however (Cicchetti & Toth, 1998). Research that addresses the influence of parental depression on children and additional factors that may contribute to the relationship is described next. These studies may identify characteristics of depressed parents and their children that directly relate to perfectionism development.

A review of the early literature on childhood depression suggests several undesirable correlates for children with one or more depressed parents (Orvaschel, Weissman, & Kidd, 1980). Children with depressed parents are more withdrawn, shy, socially isolated, inattentive, impatient, disrespectful, depressed, and more likely to report "death wishes" than peers without depressed parents (Orvaschel, Weissman, & Kidd, 1980; Weintraub, Neale, & Liebert, 1975; Welner, Welner, McCrary, & Leonard, 1977). Offspring of depressed parents demonstrate lower self-esteem, participation in fewer

extracurricular activities, greater negative life events, and greater depressive and obsessive-compulsive symptomatology than controls (Hirsch et al., 1985).

More recent studies confirm a relationship between parent and child depression (Bouma, Ormel, Verhulst, & Oldehinkel, 2008; Langrock et al., 2002; Sarigiani et al., 2003) and have found that exclusion from peer groups and internalizing behaviors in children are predicted by maternal and paternal depressive symptoms (Cummings, Keller, & Davies, 2005; Marchand & Hock, 1998). In a 10-year follow-up study of depressed parents and their children, Timko and colleagues (2002) found that children of parents who had remitted were just as distressed as children of partially-remitted or non-remitted parents. More severe parent depression was associated with poorer adaptation in offspring. Children whose parents demonstrated severe psychopathology fared the worst, regardless of the course of parental symptomatology (Timko et al., 2002). A 25-year follow-up study of offspring of depressed parents also suggested worse outcomes when parents had chronic depression and/or were institutionalized when children were very young (Peisah, Brodaty, Luscombe, & Anstey, 2005).

Children clearly react strongly and negatively to exposure to depressed parents. Some youth may respond to difficult circumstances associated with parent depression by attempting to be perfect. A child may blame himself for his mother's depressive mood and may try to behave in a perfect manner to compensate for his mother's problems. A child may also learn that she receives less negative attention from her depressed parent if she can refrain from making mistakes, or that she will only receive praise from the same parent if she does something extraordinary. These goals are frustratingly impossible to

achieve and may interact with the maladaptive characteristics often evidenced in children of depressed parents (Flett et al., 2002).

A number of parenting and family environment factors also appear to contribute to the outcomes of children of depressed parents. Depressed mothers can be emotionally uninvolved, controlling, unaffectionate, withdrawn, hostile, distant, rejecting, insensitive, and demonstrate a greater proportion of negative to positive interactions with their children than non-depressed mothers (Jaser et al., 2005; Lovejoy et al., 2000; Weissman et al., 1972). Each of these correlates of maternal depression is likely to negatively impact children and may contribute to the development of child psychopathology and/or perfectionism. Marchland and Hock (1998) also found that restrictive and punishing behavior among depressed mothers predicted child internalizing problems.

Marital conflict and insecurity also relate to parental depressive symptoms and child problems (Cummings et al., 2005). Family conflict mediated the relationship between maternal depression and emotional and behavioral problems among sons in one study (Burt et al., 2005). Adolescents with at least one depressed parent also reported greater family conflict and higher levels of depression than controls (Sarigiani et al., 2003). Parental monitoring, nurturance, and rejection each mediated a relationship between parental depression and child internalizing and externalizing problems in the expected directions (Elgar et al., 2007). On a more encouraging note, Hirsch and colleagues (1985) found better outcomes for children of depressed parents who reported a positive family social environment.

The relevant research provides consistent evidence of a relationship between parental depression and undesirable outcomes for children. Various parent and family

characteristics such as controlling behavior, hostility, family conflict, and marital insecurity may partially account for the relationship. The same parental behaviors likely relate to perfectionism development, suggesting parent depression as a risk factor for perfectionism among children. Indeed, Rice and colleagues (2008) identified a relationship between maternal depression and adolescent maladaptive perfectionism among European Americans but not African Americans. To the extent that child perfectionists do exist in families with one or more depressed parents, they may be at risk for greater detrimental effects associated with their perfectionism. Demonstrated relationships between depression and perfectionism among adults and children provide additional support for the possibility that parent depression may be involved in the etiology of child perfectionism.

The following section reviews empirical evidence of relationships between parental anxiety and child outcomes. Like depression, anxiety is consistently associated with perfectionism among youth and adults. A review of the relevant literature facilitates an understanding of whether anxiety-related disorders in parents likely relate to perfectionism development in children.

***Parental anxiety.*** Children of anxious parents are also at increased risk for psychopathology. Children with at least one parent with an anxiety disorder have more than 7 times the risk of developing an anxiety disorder than children of non-anxious parents (Andrews, Steward, Allen, & Henderson, 1990; Eley et al., 2003; Eley, Gregory, Clark, & Ehlers, 2007; Kendler et al., 1992; Silberg & Bulik, 2005; Turner, Beidel, & Costello, 1987; Weissman, 1993). This heightened risk is partially, but not entirely, attributable to genetics.

Children of anxious parents are more fearful, have more somatic complaints, spend more time alone, and report more school difficulties and family worries than other children (Bayer et al., 2006; Beidel & Turner, 1997; Merikangas, Dierker, & Szatmari, 1998; Turner et al., 1987). The physiological reactivity of offspring of anxious parents also differs from offspring of non-anxious parents (Grillon, 1997, 1998; Merikangas, Avenenoli, Dierker, & Grillon, 1999; Turner, Beidel, and Roberson-Nay, 2005). Turner and colleagues (2005) examined the offspring of anxious parents and found, while at rest before and between presentations of fear-related stimuli, that they displayed significantly more electrodermal activity than controls.

Children of parents with obsessive-compulsive disorder (OCD) also seem at greater risk for several problems. Black, Gaffney, Schlosser, and Gabel (2003) examined the children of 21 adults with OCD. Children of parents with OCD were at higher risk than controls for anxiety, depression, somatization, and social problems (Black et al., 2003). The same children were more likely than controls to have separation anxiety disorder, OCD, and other anxiety disorders during their lifetime (Black et al., 2003).

Anxious parent symptoms such as avoiding stressful situations, obsessing over cleanliness and orderliness, and worrying constantly are often observable to children. Anxious parents are also likely to verbalize their psychopathology-related concerns and reinforce similar concerns in their children by over-empathizing. Children may thus develop related symptoms and, to the extent parent symptoms are perfectionism-related, develop perfectionism. Several studies have examined anxious parenting variables that impact child outcomes and may relate to the etiology of perfectionism.

Anxious mothers tend to show less warmth and positive emotion, catastrophize more, and encourage less psychological autonomy during interactions with their children than nonanxious parents (Whaley et al., 1999). Anxious parents are also significantly more critical of their children (Hirshfeld et al., 1997; Whaley et al., 1999). According to Silverman, Cerny, and Nelles (1988), children with anxious parents perceive their parents as more controlling and engendering more conflict and less cohesiveness among family members. Families with one or more anxious or obsessive-compulsive parents are also less emotionally expressive, more chaotic, and more achievement-oriented than other families (Black et al., 1998; Turner et al., 2003; Warner, Mufson, & Weissman, 1995). Models of perfectionism development implicate the same parent characteristics. This parallel is consistent with a depiction of parental anxiety and obsessive-compulsiveness as risk factors for perfectionism.

Research on parent psychopathology indicates these factors may relate to child perfectionism. Parents with depression, anxiety, and/or OCD may engage in certain behaviors that relate to increased perfectionism tendencies among offspring. Other parent factors such as parenting style may also contribute to perfectionism development and are discussed next.

**Parenting style.** Numerous studies have demonstrated consistent associations between parental control or overprotection as well as rejection or lack of warmth, and child perfectionism and anxiety (Craddock et al., 2009; Dadds et al., 1996; DiBartolo & Helt, 2007; Dumas, LaFreniere, & Serketich, 1995; Enns et al., 2002; Hudson & Rapee, 2001, 2002; Hutchinson & Yates, 2008; Kawamura, Frost, & Harmatz, 2002; Kenney-Benson & Pomerantz, 2005; Krohne & Gutenberg, 1990; McClure, Brennan, Hammen, &

LeBrocque, 2001; McLeod et al., 2007; Rice et al., 1996; Siqueland, Kendall, & Steinberg, 1996; Soenens et al., 2006; Soenens, Vansteenkiste et al., 2005, 2008; Brakel et al., 2006). Parental control is conceptualized as the inverse of granting autonomy and involves behaviors intended to protect a child from harm (Rapee, 1997). Excessive parental control may reduce individuality and give children the impression they are constantly in the presence of threat. High parental control may also prevent children from developing adaptive coping mechanisms in the face of anxious situations (Dadds & Roth, 2001; Rapee, 1997). Parental warmth generally refers to responsiveness, affection, expression of positive emotion, and acceptance (DiBartolo & Helt, 2007).

Research on parental control, criticism/lack of warmth, and child perfectionism and anxiety includes observational studies as well as studies using self-report and parent report measures. Many relevant studies have compared children with their respective parents (Alnaes & Torgersen, 1990; Bruch & Heimberg, 1994; Enns et al., 2002; Laraia, Stuart, Frye, Lydiard, & Ballenger, 1994; Leon & Leon, 1990; Parker, 1981; Rice et al., 1996; Soenens, Elliott et al., 2005; Soenens, Vansteenkiste et al., 2008; Tearnan & Telch, 1988). Soenens and colleagues (2006) found relationships among parent perfectionism, parent psychological controlling behavior, child depression, child loneliness, and child self-esteem in expected directions. Soenens, Vansteenkiste, and colleagues (2008) found positive relationships between paternal and maternal psychological control and maladaptive perfectionism in offspring. Paternal psychological control was also related to adaptive perfectionism in offspring. These investigations provide support for the suggestion that high parental control, criticism, and harshness, and low parental warmth are associated with perfectionism and clinical anxiety among youth.

Additional support for the suggestion that high parental criticism, control, and harshness, and low parental warmth are related to perfectionism and anxiety in children comes from observational studies of parent-child interactions (Barrett et al., 2005; Clark & Coker, 2009; Dadds et al., 1996; DiBartolo & Helt, 2007; Dumas et al., 1995; Dumas, Hudson & Rapee, 2001; Dumas & LaFreniere, 1993; Hummel & Gross, 2001; Krone & Hock, 1991; Lieb et al., 2000; Siqueland et al., 1996). Kenney-Benson and Pomerantz (2005) observed mothers' use of control with their children during completion of an assigned task. The researchers found that mothers who were relatively more controlling tended to have children with perfectionist concerns. Clark and Coker (2009) asked mothers to describe their child over the past 6 months, including details about their relationship with their child and their child's behavior. Mother's comments were scored for frequency of positive and critical comments about their children. Higher levels of dysfunctional perfectionism were found in children whose mothers were more critical of them.

Hudson and Rapee (2001) observed mothers' behavior while their children attempted to solve complicated puzzles and found that mothers of anxious children provided excessive help and were overly intrusive. Siqueland and colleagues (1996) also found support for the parent control/child anxiety hypothesis when they videotaped children and parents as they discussed topics likely to provoke conflict. Parents of clinically anxious children were more controlling and gave their children less freedom to be independent than parents of non-anxious children (Siqueland et al., 1996). Furthermore, mothers of anxious children granted less autonomy, showed less warmth, had fewer positive and more aversive interactions, were less accepting, and behaved more

critically with their children than mothers of non-anxious children (Dumas et al., 1995; Siqueland et al., 1996; Whaley, Pinto, & Sigman, 1999). In each case, the available perfectionism and anxiety literature suggests that parental controlling, harsh, and critical tendencies may be risk factors for perfectionism in their children.

The broader categories of authoritarian and authoritative parenting style also relate to perfectionism. Research on these parenting styles and perfectionism is consistent with the research on parenting that is controlling and lacks warmth. Authoritarian parenting, involving low responsiveness and high demandingness, relates to socially prescribed or maladaptive perfectionism in offspring (Craddock et al., 2009; Flett et al., 1995; Kawamura et al., 2002; Rice et al., 1996; Speirs Neumeister, 2004b). Authoritative parenting may contribute to adaptive perfectionism development. Authoritative parenting relates to self-oriented perfectionism in young females and higher school grades, achievement motivation, and adaptive problem solving (Aunola et al., 2000; Dornbusch et al., 1987; Flett et al., 1995; Hein & Lewko, 1994).

Extensive empirical literature suggests that parent-related factors of transmission, psychopathology, and parenting style contribute to perfectionism development in children. Parent factors are certainly not exclusive in their contributions to perfectionism, however. Numerous child characteristics related to temperament, intelligence, cognitive style, and biology likely play a role in the etiology and presentation of perfectionism. These child factors are described next.

**Child Factors**

**Temperament.** Temperament reflects the manner in which individuals tend to respond to emotional stimuli and this construct is moderately heritable and stable

(Cloninger, 1986). Few empirical investigations have directly assessed the relationship between temperament and perfectionism, but this variable warrants consideration as a possible risk factor.

Kobori, Yamagata, and Kijima (2005) examined relationships among Hewitt and Flett's types of perfectionism (self-oriented, socially prescribed, and other oriented) and Cloninger's dimensions of temperament (novelty seeking, harm avoidance, reward dependence, and persistence). They found that socially prescribed perfectionism was associated with high harm avoidance. Individuals demonstrating high harm avoidance tend to worry, be pessimistic, and are motivated by fear of failure. These characteristics are consistent with the general desire of socially prescribed perfectionists to avoid negative consequences of not performing well and their perception that they cannot meet others' standards (Cloninger, 1986; Hewitt, Flett, Besser, Sherry, & McGee, 2003; Kobori et al., 2005).

Socially prescribed and self-oriented perfectionists in Kobori and colleagues' study (2005) demonstrated relatively low levels of the novelty seeking dimension of temperament. Novelty seeking is associated with impulsivity, seeking excitement and exhilaration via pursuit of new stimuli, and active avoidance of punishment. Socially prescribed and self-oriented perfectionists, therefore, may be prone to stay with things that are familiar and comfortable rather than seeking novel situations and experiences (Kobori et al., 2005). Self-oriented perfectionism was also associated with high reward dependence and high persistence. Reward dependence generally involves placing a high level of importance on others' approval and being socially sensitive and sentimental (Cloninger, 1986; Kobori et al., 2005). Self-oriented perfectionism is not associated with

perceiving pressure from others to be perfect, but results from Kobori and colleagues' (2005) study suggest that self-oriented perfectionists are concerned about the impression others have of them. Individuals characterized as highly persistent will persevere even when tired and frustrated, suggesting that self-oriented perfectionists may have a greater tendency than others to be hard working and overachieving (Cloninger, 1986; Kobori et al., 2005).

Another aspect of temperament possibly implicated in perfectionism development is behavioral inhibition, which involves the tendency to withdraw from situations involving actual or implied negative responses from others (Flett & Hewitt, 2006). Behavioral inhibition has largely been associated with development of anxiety disorders among children and adults (Biederman et al., 1993; Kagan & Snidman, 1999; Manassis & Bradley, 1994; van Brakel, Muris, Bogels, & Thomassen, 2006). Behavioral inhibition has also been associated with high sympathetic arousal and strong physiological responses to stress and fear stimuli (Kagan et al., 1990; Kagan, Reznick, & Snidman, 1987; Turner et al., 2005). According to Flett and Hewitt (2006), behaviorally inhibited individuals are likely to respond to possibilities of failure or criticism by withdrawing and/or becoming anxious. Perfectionists who emphasize superior performance and avoid failure are likely to respond similarly.

Two studies have examined the possibility that behavioral inhibition is involved in the development of perfectionism. Flett and Hewitt (2004b) found that socially prescribed, self-oriented, and other-oriented perfectionism related strongly to a measure of behavioral inhibition. O'Connor and Forgan (2007) examined perfectionism, behavioral activation/inhibition, goal adjustment, and suicidal thinking. Behavioral

inhibition correlated significantly with socially prescribed, self-oriented, and other-oriented perfectionism. Behavioral inhibition predicted socially prescribed perfectionism and both variables predicted suicidal thinking. Socially prescribed perfectionism may thus have mediated the relationship between behavioral inhibition and suicidal thinking.

The anxiety literature provides additional evidence of behavioral inhibition as an etiological factor. Behaviorally inhibited individuals tend to avoid new things and situations, so they do not adjust well to new experiences and are thus unable to develop adaptive coping mechanisms (Kagan et al., 1987; Kagan, Reznick, Snidman, Gibbons, & Johnson, 1988; Kagan et al, 1990; Lader & Matthews, 1968). Roth and Dadds (1999) suggested that anxious children believe they have inadequate skills for coping with and affecting difficult situations. Parents may further contribute to anxiety disorder development by allowing their children's avoidant behaviors and failing to help their children develop alternative prosocial plans (Dadds, Barrett, Rapee, & Ryan, 1996; Manassis & Bradley, 1994). In this way, children are likely to develop anxiety disorders when they encounter novel situations, cannot avoid them, and feel unable to handle the situations. In a similar manner, behaviorally inhibited children may develop perfectionism when they face difficult situations and wish to avoid unfavorable outcomes.

Recent studies of child anxiety and, in particular, social phobia support behavioral inhibition as an important contributing factor (Biederman et al., 2001; Merikangas, 2005; Mick & Telch, 1998; Neal & Edelmann, 2003; Rapee, 2002). Anxious youth are more likely than nonclinical children to perceive ambiguous situations as threatening and are more likely than other groups to provide an avoidant response. Additional studies have

found evidence of a relationship between early behavioral inhibition and heightened risk for anxiety disorders later in life (Barrett, Rapee, Dadds, & Ryan, 1996; Hirshfeld et al., 1992; Hirshfeld-Becker et al., 2003; Rosenbaum et al., 1993; Schwartz, Snidman, & Kagan, 1999).

Gest (1997) demonstrated that behavioral inhibition at age 8-12 years predicts social and emotional problems during adulthood. Another longitudinal study revealed that the social avoidance and fearfulness components of behavioral inhibition predicted onset of social phobia over a four-year period (Hayward, Killen, Kraemer, & Taylor, 1998). Behavioral inhibition was also a risk factor for social anxiety among individuals assessed at ages 2 and 13 years (Schwartz, Snidman, & Kagan, 1999). Empirical research provides reason to consider behavioral inhibition as a risk factor for perfectionism.

**Intellectual ability.** Perfectionism may also be more likely to develop when individuals are intelligent and perceive themselves as able to pursue lofty goals. A student who has consistently received feedback indicating he is "smart" or "intelligent," who always attains good grades, and who feels capable of learning new material with relative ease is more likely to pursue lofty achievement goals and demand perfect performance from himself than someone who has never felt able to excel. Stöeber and Kersting (2007) found that higher perfectionist strivings were associated with higher scores on measures of verbal, numeric, and figural reasoning, verbal speed, and work-related tasks. Certain aspects of perfectionism such as high personal standards, striving for excellence, self-oriented perfectionism have also been positively associated with medical school performance and GPA across several adult and child studies (Accordino

et al., 2000; Bieling et al., 2003; Cox, Enns, & Clara, 2002; Enns, Cox, Sareen, & Freeman, 2001; Grzegorek, Slaney, Franze, & Rice, 2004; Rice & Slaney, 2002; Stöeber & Rambow, 2007).

The suggestion of a link between intellectual ability and perfectionism is most easily applied to self-oriented perfectionism. An individual's tendency to demand perfection from herself is likely affected by whether she has experienced achievement success and perceives herself as intelligent. This may be especially true for older children and adolescents who are more aware of their abilities and their performance history (Flett et al., 2002). Socially prescribed perfectionism is unlikely to be greatly impacted by perceptions of one's abilities and performance history because these considerations do not affect the extent to which others demand perfection. Socially prescribed perfectionists may fare worse, however, if they perceive others' demands as far beyond their own capabilities.

The influence of intellectual ability on perfectionism is likely to change over time. Frost and colleagues (2002) pointed out that, as children mature, they are able to identify their own abilities. Some children who once perceived themselves as capable of meeting standards of perfection may realize such expectations are unrealistic and thus may demonstrate fewer perfectionist tendencies. Other individuals may become perfectionists as they realize their high intellectual abilities and incorporate achievement striving and pursuit of perfection into their identities. Further study of the relationship between intellectual ability and perfectionism, and whether the relationship manifests differently in younger versus older individuals, is certainly warranted.

**Cognitive features.** Particular thoughts about self and others largely define perfectionism. Most researchers agree that perfectionism involves irrational beliefs and cognitions such as need for others' approval, unreasonably high self-expectations, extreme fear of failure, belief that others demand perfection, tendency to blame oneself, belief that one is worthwhile only if one is perfect, and a persistent focus on what one could have done better. Other cognitive features may be risk factors for perfectionism development as well.

Ferrari and Mautz (1997) examined behavioral rigidity and perfectionism among college students. Significant negative relationships were found between attitudinal flexibility and self-oriented, socially prescribed, and other-oriented perfectionism, suggesting that perfectionists have difficulty adjusting to new and unfamiliar circumstances. Motor cognitive rigidity and attitude inflexibility also predicted self-oriented perfectionism, revealing that self-oriented perfectionism occurs more often among individuals who have difficulty shifting cognitive sets and adapting to novel situational demands. A causal relationship cannot be determined from Ferrari and Mautz's research, but their results suggest the possibility that difficulty shifting from one activity to the next and adjusting to different conditions may be cognitive risk factors for perfectionism.

Chang and Sanna (2001) examined relationships among types of perfectionism, negative attributional style, and depressive symptoms. Self-oriented and socially prescribed perfectionism related significantly to negative attributional style, indicating that perfectionism may be associated with feeling helpless to prevent or control negative outcomes. Perfectionism and negative attributional style also predicted depressive

symptoms, so a negative attributional style may add to the negative effects of perfectionism. Individuals with negative attributional styles generally believe that life problems have internal, global, and stable causes. These tendencies may constitute risk factors for perfectionism development on the basis of their relationship with perfectionism characteristics. Additional research is necessary, however, to test the possibility that perfectionism leads to development of negative attributional styles or that some third variable causes both.

Additional research suggests that relationships between perfectionism cognitions, tendency to ruminate, and tendency to have intrusive thoughts relate to negative experiences. Flett, Madorsky, Hewitt, and Heisel (2002) measured perfectionism cognitions, types of perfectionism, response styles, impact of negative events, and mood/anxiety symptoms among university students. Individuals who frequently ruminated about negative emotions were more likely to experience frequent intrusive thoughts about stressful events, have automatic thoughts related to perfectionism, and demonstrate high self-oriented and socially prescribed perfectionism. The same variables related to symptoms of depression and anxiety. Research by Flett and colleagues (2002) and Blankstein and Lumley (2008) suggests that tendencies to ruminate and experience automatic intrusive thoughts about stressful experiences may contribute to maladaptive effects of perfectionism.

According to Beck's cognitive theory of depression, "stressful life events can activate dysfunctional attitudes and lead to a cognitive bias where information is processed in an unrealistically negative manner" (Beevers & Miller, 2004, p. 126; Beck, Rush, Shaw, & Emery, 1979). Beevers and Miller (2004) examined perfectionism,

cognitive bias, and hopelessness vis-à-vis suicidal ideation. According to these researchers, a strong relationship exists between cognitive bias and perfectionism. Perfectionism and cognitive bias also contributed to prediction of later suicidal ideation. Cognitive bias may therefore contribute directly or indirectly to perfectionism and its relationship with maladaptive characteristics such as suicidal ideation.

Burns and Fedewa (2005) sought to distinguish positive from negative perfectionists on the basis of cognitive processes. Burns and Fedewa used the Positive and Negative Perfectionism Scale (PNPS) to measure perfectionism. The PNPS is based on a functional perspective in which positive reinforcement of perfectionist behaviors causes and maintains positive perfectionism. Negative perfectionism results from negative reinforcement from perfectionist behaviors. Significant relationships were found between negative perfectionism and poor constructive thinking and maladaptive coping style. Positive perfectionism related to active coping style and conscientiousness. Perfectionism that develops to avoid undesirable experiences and/or emotions may thus be more likely occur among individuals who lack adaptive coping skills and constructive thinking abilities.

Rudolph, Flett, and Hewitt (2007) examined frequency of perfectionism cognitions, perfectionism characteristics, cognitive emotion regulation, and depression among university students. Maladaptive cognitive emotion regulation tendencies such as rumination, lack of positive reappraisal, self-blame and catastrophization were associated with frequent perfectionist thoughts and socially prescribed perfectionism. In turn, perfectionism cognitions, socially prescribed perfectionism, and inadequate cognitive emotion regulation skills were linked with depression. According to Rudolph and

colleagues (2007), interventions to teach adaptive coping skills may benefit individuals at risk for perfectionism and depression. This study also suggests that individuals who lack adaptive coping skills and tend to ruminate, catastrophize, and self-blame may be more likely to develop perfectionism.

Research on treatment of perfectionism supports the suggestion that teaching adaptive coping skills via cognitive restructuring can reduce maladaptive symptoms of perfectionism. DiBartolo, Frost, Dixon, and Almodovar (2001) found that examining worries, decatastrophizing, and developing coping statements successfully reduced perfectionists' reported estimations of cost and likelihood of a feared event during a public speech. Cognitive changes associated with the same intervention also resulted in decreased anxiety among perfectionists. Kutlesa and Arthur (2008) developed a group treatment for perfectionism that involved identifying and restructuring thoughts, feelings, behaviors, and interpersonal interactions related to maladaptive perfectionism. Treatment also aimed to increase understanding for perfectionism development and motivations. Participants demonstrated significantly lower levels of perfectionism, depression, and anxiety (Kutlesa & Arthur, 2008). Other research supports cognitive restructuring to reduce maladaptive symptoms of perfectionism (Ashbaugh et al., 2007; Ferguson & Rodway, 1994). These treatment findings provide further support for the idea that certain cognitive tendencies are risk factors for perfectionism development.

Studies of cognitive features related to perfectionism do not establish causal relationships between the examined cognitive variables and aspects of perfectionism. Future developmental research will hopefully determine whether specific cognitive features constitute risk factors for perfectionism. Existing research provides ample

reason, however, to consider the possibility that unskilled coping, cognitive rigidity, negative attributional style, and tendency to ruminate contribute to the development of perfectionism.

**Genetics**. Tozzi and colleagues (2004) found monozygotic twins to be more similar on measures of perfectionism than dizygotic twins. The researchers concluded that perfectionism is moderately heritable (Tozzi et al., 2004). The notion that perfectionism may be partially determined by genetics is supported by the fact that perfectionism is consistently associated with psychological disorders such as depression and anxiety for which there is ample evidence of familial transmission. Several studies of perfectionism also demonstrate that perfectionism often co-occurs in children and at least one parent (Appleton, Hall, & Hill, 2010; Chang, 2000; Cook & Kearney, 2008; Frost et al., 1991; Soenens, Elliott et al., 2005; Vieth & Trull, 1999). Bachner-Melman and colleagues (2007) and Woodside and colleagues (2002) have also suggested a genetic influence on perfectionism based on their research with individuals with eating disorders.

Research on genetic contributions to perfectionism is limited, so parallel research on the heritability of anxiety disorders (which are theoretically and empirically related to perfectionism) provides a useful supplement. A strong literature base suggests a genetic role in the transmission of anxiety. A genetic component explains approximately one-third of the variance in child anxiety disorders (Eley, 2001; Eley et al., 2003; Jang, 2005; Kendler, Neale, & Kessler, 1993; Legrand, McGue, & Iacono, 1999). Heredity plays an important part in the etiology of anxiety disorders and thus may be involved in the etiology of perfectionism. Genetic factors cannot completely account for anxiety and

perfectionism development, however, which makes research on other developmental influences especially important.

The existing perfectionism studies indicate that perfectionism is a construct associated with many psychological disorders and maladaptive characteristics among adults and children. Correlates of perfectionism are well-described and have received extensive attention in the literature. Researchers have also suggested several variables that likely make important contributions to the development of perfectionism. Parents appear to have an especially important role in this etiology. Perfectionism researchers have failed to adequately study risk factors for perfectionism, however, and longitudinal or cross-sectional studies that examine developmental trends in perfectionism are notably absent. In addition, most of the research on parent factors involved in perfectionism has involved characteristics such as controlling behavior and lack of warmth, but other significant parent-related risk factors such as parent symptoms of psychopathology have not received sufficient attention. The present study sought to address some of these important issues.

## Purpose of Study

The present study aimed to enrich the literature on perfectionism in children and help address the significant lack of research on factors influencing the development of perfectionism. Extant research reveals that perfectionism has several maladaptive correlates such as depression, suicidality, anxiety, obsessive-compulsiveness, low self-esteem, and eating disorder. The relationships among aspects of perfectionism and forms of psychopathology extend to children and adults, making perfectionism especially relevant to clinical psychology. Despite serious concerns regarding perfectionism, very

little research has addressed its risk factors. The present study addressed parent factors of perfectionism and psychopathology thought to be involved in child perfectionism.

Several paths to perfectionism have been proposed. Flett and colleagues (2002) described perfectionism as a response to social expectations held by parents and significant others and through social learning processes such as modeling. They suggested that exposure to harsh environments and/or to anxious childrearing may also contribute to perfectionism. These paths are expected to be more ingrained over time, so older children may be more likely to exhibit higher levels of perfectionism. Extrafamilial influences such as peers, teachers, the school environment, and cultural pressures, as well as personal factors such as genetics, temperament, and attachment style, may also be potential risk factors (Flett et al., 2002).

The anxiety literature provides additional support for these theories. Parent psychopathology, parenting practices, social learning, reinforcement, information transfer, temperament, attachment relationships, and genetics (among other factors) are risk factors for anxiety in children (Barrett et al., 2005; Burstein, Ginsburg, & Tein, 2010; Dadds et al., 1996; Eley et al., 2007; Fisak & Grills-Taquechel, 2007; Jang, 2005; Moore et al., 2004; Muris et al., 1996, 2000, 2003; Muris & Merckelbach, 1998; Silverman et al., 1988; Siqueland et al., 1996; Watt & Stewart, 2000). This information is relevant because perfectionism and anxiety are related. Perfectionism involves a significant amount of anxiety regarding performance, impressions made on others, ability to succeed, and expectations of others.

On the basis of existing theory and research related to child perfectionism and anxiety, parent perfectionism and psychopathology were expected to influence child

perfectionism. Older children were expected to demonstrate higher levels of perfectionism than younger children. The present study used a cross-sectional design to examine age differences vis-à-vis parent factors and child perfectionism. This research is especially important given the dearth of studies that directly examine risk factors related to perfectionism. Specific hypotheses regarding relationships among parent variables of symptomatology and perfectionism types, and child variables of perfectionism types, are described next.

## Hypotheses

Three primary hypotheses were examined in this study. The first hypothesis was that older children would display higher levels of self-oriented and socially prescribed perfectionism than younger children. Mean self-oriented and socially prescribed perfectionism scores were expected to be significantly higher for children in older versus younger age groups. The age groups assessed included children aged 8-9 years, 10-11 years, 12-13 years, 14-15 years, and 16-17 years.

The second hypothesis was that parent perfectionism and parent depression, anxiety, and obsessive compulsiveness would significantly predict child perfectionism. Specifically, higher levels of parent self-oriented, other-oriented, and socially prescribed perfectionism as well as depression, anxiety, and obsessive compulsiveness were expected to predict higher levels of self-oriented and socially prescribed perfectionism in children. Each set of predictive relationships was expected to be stronger for children aged 13-17 years than children aged 8-12 years.

The third hypothesis was that parent psychopathology variables would mediate relationships between (1) parent perfectionism variables and (2) child perfectionism

variables. Regression models from the second hypothesis informed specific mediation analyses. Multiple pathways were examined in which each parent psychopathology variable was expected to mediate relationships between (1) parent self-oriented, other-oriented, and socially prescribed perfectionism and (2) child self-oriented and socially prescribed perfectionism. Pathways were examined separately for each combination of parent perfectionism, parent psychopathology, and child perfectionism variables.

CHAPTER 3

# Methodology

## Participants

The computational program G*Power was used for power analysis; power of .80+ is considered statistically acceptable (Faul & Erdfauler, 1992; Howell, 2002). Power analyses for analyses of variance (ANOVA) and multiple regression analyses were conducted. A compromise power analysis was initially conducted to determine number of participants needed for ANOVA with 5 groups, power of .80+, and a medium effect size (.25) (Cohen, 1988). A sample size of 125 families was derived (Faul & Erdfelder, 1992). A power analysis was then conducted for a multiple regression with 3 predictors for power (.80+) and medium effect size for regression (.15) (Cohen, 1988). A sample size of 77 families was derived (Faul & Erdfelder, 1992). A minimum of 30 child participants and their parents were thus recruited for each of the following age groups: 8-9 years, 10-11 years, 12-13 years, 14-15 years, and 16-17 years.

Participants were 160 children and their parents. Child participants included 93 females and 67 males aged 8-17 years ($M$ = 12.29, $SD$ = 2.92). Child participants were aged 8-9 years ($n$ = 35, 21.9%), 10-11 years ($n$ = 35, 21.9%), 12-13 years ($n$ = 30, 18.8%), 14-15 years ($n$ = 30, 18.8%), and 16-17 years ($n$ = 30, 18.8%). Child participants were European American ($n$ = 102; 63.7%), Hispanic American ($n$ = 20; 12.5%), multiracial ($n$ = 19; 11.9%), Asian American ($n$ = 7; 4.4%), African American ($n$ = 5; 3.1%), other ($n$ = 5; 3.1%), or Native American ($n$ = 2; 1.3%). Child participants attended public schools ($n$ = 113, 70.6%), home-based schools ($n$ = 16, 10.0%), religious

private schools (*n* = 14, 8.8%), non-religious private schools (*n* = 10, 6.3%), or were identified as attending some "other" form of school (*n* = 7, 4.4%). Table 2 provides more detailed information regarding children attending each type of school.

Parent participants included 112 mothers and 86 fathers. Parents were European American (*n* = 137; 69.2%), Hispanic American (*n* = 24; 12.1%), Asian American (*n* = 11; 5.6%), African American (*n* = 10; 5.1%), multiracial (*n* = 9; 4.5%), other (*n* = 6; 3.0%), or Native American (*n* = 1; 0.5%). Most families (93.1%) comprised biologically related parents and children. Some families (6.3%) comprised a stepparent and a biological parent. One family (0.6%) comprised 2 parents with an adopted child. Participating parents who were not biologically related to their participating child(ren) were required to have lived with the child for greater than 50% of the child's life.

Child participants came from 116 families. Some families (*n* = 44, 37.9%) had 2 children who were eligible and who participated in the study. Most families (70.7%) were dual-parent but other families (29.3%) were single-parent or had one parent who was unable to participate. Table 3 provides more detailed information regarding family structure. Families reported an annual income of less than $20,000 (1.9%), $20,000-40,000 (5.6%), $40,000-60,000 (14.4%), $60,000-80,000 (14.4%), $80,000-100,000 (15.0%), and greater than $100,000 (32.5%; 16.3% unreported).

**Parent Measures**

**Demographic and Background Assessment.** Parents provided demographic and background information via the form in Appendix I. This information included contact data, ethnicity of each family member, parental occupation, family income, parental education level, number of siblings in the family, and gender, age, and school grade level

of each child. Information was provided as to whether each child was the biological child, stepchild, or adopted child of each parent as well as number of years that participating children and parents lived together.

**Multidimensional Perfectionism Scale – Hewitt and Flett version.** The MPS – Hewitt and Flett version (Hewitt & Flett, 1991b) is 45-item self-report measure of 3 perfectionism dimensions: self-oriented perfectionism (demanding perfection from oneself), socially prescribed perfectionism (perceiving others as expecting one to be perfect), and other-oriented perfectionism (having perfectionist expectations of others) (Appendix II). Each dimension (subscale) was used in the present study. Individuals rate their level of agreement with each item on a 7-point scale, with some reverse scoring. Higher scores indicate greater perfectionism. The MPS – Hewitt and Flett version takes approximately 15 minutes to complete and can be administered to persons aged 18+ years. Normative scores for the MPS – Hewitt and Flett version are available for clinical and nonclinical male and female adults.

The subscales of the MPS – Hewitt and Flett version are internally consistent (coefficient $\alpha$ = .89, .86, and .79 for self-oriented, socially prescribed, and other-oriented perfectionism) (Hewitt & Flett, 1991b). Self-ratings of the self-oriented, socially prescribed, and other-oriented perfectionism dimensions were significantly correlated with observer ratings of the same dimensions for students and psychiatric patients (Hewitt & Flett, 1991b). Test-retest reliabilities have been reported for self-oriented (.88), socially prescribed (.75), and other-oriented (.85) perfectionism (Hewitt & Flett, 1991b).

Factor analyses indicate that the MPS – Hewitt and Flett version has a 3-factor structure consistent with its proposed factors (Hewitt & Flett, 1991b). Self-oriented, socially prescribed, and other-oriented perfectionism are significantly related to measures of other constructs that comprise each dimension. Self-oriented perfectionism was significantly related to measures of high self-standards, self-criticism, self-blame, authority, self-importance of performance and goals, personal standards, concern about mistakes, doubts about actions, and organization (Frost et al., 1993; Hewitt & Flett, 1991b).

Positive relationships exist between socially prescribed perfectionism and measures of other-blame, authoritarianism, social standards, social importance of goal attainment, narcissism, parental expectations and criticism, concern about mistakes, and doubts about actions (Frost et al., 1993; Hewitt & Flett, 1991b). Socially prescribed perfectionism also related significantly to high self-standards, self-criticism, and personal standards but to a smaller degree than self-oriented perfectionism.

Other-oriented perfectionism related to overgeneralization, self- and other-blame, fear of negative evaluations, need for approval from others, self-criticism, high social and personal standards, social importance of goal attainment, and concern about mistakes (Hewitt & Flett, 1991b). Initial examinations of the MPS – Hewitt and Flett scale revealed that self-oriented and socially prescribed perfectionism correlate positively with symptoms of depression, anxiety, and obsessive-compulsive disorder (Hewitt & Flett, 1991b). Higher levels of psychopathology are associated with socially prescribed versus self-oriented perfectionism. In contrast, other-oriented perfectionism appears related only to symptoms of paranoia and phobic anxiety (Hewitt & Flett, 1991b).

**Symptom Checklist-90-Revised.** The Symptom Checklist-90-Revised (SCL-90-R) (Derogatis, 1994) is 90-item self-report measure of 9 symptom dimensions: somatization, obsessive compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. The measure also comprises 3 global indices: global severity index (GSI; combined rating of symptom intensity and number of symptoms reported), positive symptom distress index (PSDI; symptom intensity), and positive symptom total (PST; number of symptoms reported). The obsessive compulsive, depression, and anxiety subscales were used for the present study. Item severity is rated on a scale of 0 (not at all) to 4 (extremely). The SCL-90-R takes 12-15 minutes to complete, requires at least a sixth-grade reading level, and can be administered to persons aged 13+ years. Normative scores for the SCL-90-R are available for psychiatric outpatients, nonpatients, psychiatric inpatients, and nonpatient adolescents.

Reliability and validity of the SCL-90-R are well established (Derogatis, 1994; Derogatis & Savitz, 1999; Schmitz, Kruse, Heckrath, Alberti, & Tress, 1999). The 9 symptom dimensions are internally consistent among psychiatric outpatients ($r$ = .79-.90) and symptomatic volunteers ($r$ = .77-.90) (Derogatis, 1994). Test-retest reliability of the measure ranged from .78-.90 over 1-week (Derogatis & Savitz, 1999). The SCL-90-R has converged with the General Health Questionnaire and the Minnesota Multiphasic Personality Inventory on predicted dimensions (Derogatis, 1994; Schmitz, et al., 1999).

**Child Measure**

**Child and Adolescent Perfectionism Scale.** The Child and Adolescent Perfectionism Scale CAPS (Flett, Hewitt, Boucher, Davidson, & Munro, 1997) is a 22-

item self-report measure of self-oriented and socially prescribed perfectionism (Appendix IV). Both perfectionism subscales were used in the present study. CAPS items are rated on a 5-point scale with some reverse scoring (1 = "false – not at all true of me," 2 = "mostly false," 3 = "neither true nor false," 4 = "mostly true," and 5 = "very true of me"). Twelve items reflect self-oriented perfectionism and 10 items reflect socially prescribed perfectionism. The CAPS takes approximately 15 minutes to complete. Readability analyses suggest that individuals completing the CAPS should have at least a third grade reading level. The CAPS has been used with clinical and non-clinical samples of children aged 7-18 years (Donaldson et al., 2000; Enns et al., 2003; Hewitt et al., 1997; Hewitt et al., 2002; Kenney-Benson & Pomerantz, 2005; McVey et al., 2002). Consistent with previous research using the CAPS, when children under age 10 years completed the CAPS, items were read aloud by the experimenter (Kenney-Benson & Pomerantz, 2005).

Flett and colleagues (1997) examined internal consistency, test-retest reliability, concurrent and discriminant validity, and the factor structure of the CAPS. Internal consistency was reported for self-oriented (.85) and socially prescribed (.81) perfectionism. Test-retest reliability over 5 weeks was reported for self-oriented (.74) and socially prescribed (.66) perfectionism in a child/adolescent sample. Evidence of concurrent and discriminant validity was also found. Self-oriented perfectionism was significantly related to school effort and enjoyment, personal desire for perfection, and internal locus of control. Socially prescribed perfectionism was related to school effort but not school enjoyment, external locus of control, and parents' desire for perfection. Strong correlations were found between the CAPS and the perfectionism subscale of the EDI. The 2-factor structure of the CAPS was also confirmed (Flett et al., 1997).

## Procedure

The present study was approved by the UNLV Institutional Review Board (protocol number: 0812-2957; initial approval date: 2/18/09; approval dates following continued review: 1/29/10, 1/07/11). Administrators for private schools, after-school activity groups, religious facilities, home school groups, and community centers in Nevada were contacted and provided with information about the nature and purpose of the study. Permission was obtained to post and send home flyers advertising the study. The study advertisement informed families that a doctoral student at UNLV was conducting research to learn about parent and child factors that influence personality characteristics among children. Participants were also recruited by referral from other participants. Undergraduate students helped advertise the research study, recruit participants, and administer assessment materials. Eligible study participants were English-speaking and included children aged 8-17 years. One family was excluded after completing the study because the child was less than age 8 years. A second family was excluded because a parent failed to complete the SCL-90-R.

Interested families were asked to contact the primary investigator via email or telephone. Additional information about the requirements for participating in the study was provided and families were given the option of completing the necessary assessments in their home or in the UNLV Psychology Department. Participating families opted to complete the assessments at home. Six families expressed interest in the study but did not participate due to scheduling difficulties. Undergraduate research team members were required to complete the Collaborative Institutional Review Board (IRB) Training Initiative (CITI) Program. Completion of the CITI Program ensured that research team

members understood ethical research practices. Research team members were also trained to explain the study, supply contact information for the primary researcher, obtain informed consent, provide directions to participants, administer the study assessments, and respond to questions.

Each family in the study was assessed by the primary investigator ($n$ = 60; 52%) or one of the trained research team members ($n$ = 56; 48%). Details about the study were provided to parents and children via written consent and oral explanation. Participants could ask questions about the study and were informed that participation would require 30-45 minutes. Informed consent was then obtained from child and parent participants; families were provided with copies of these documents that included contact information for the primary investigator. Parents and children were asked to complete their measures without speaking to one another. A research team member was available for questions throughout administration of the assessments.

Parents completed the MPS – Hewitt and Flett version and the SCL-90-R. Data from mothers and fathers were coded and analyzed separately (see also below). A parent in each family was also asked to complete the demographic questionnaire (one per child). A research team member explained the instructions for the CAPS to child participants. Children aged 8-10 years had items read aloud by a research team member. For children aged 10+ years, the research team member asked whether the child understood the instructions and then asked the child to complete the assessment. Assessments and other written materials were coded to protect the confidentiality of participants.

## Data Analyses

Means and standard deviations for child self-oriented and socially prescribed perfectionism, maternal and paternal self-oriented, other-oriented, and socially prescribed perfectionism, and maternal and paternal depression, anxiety, and obsessive compulsiveness are in Tables 4, 5, and 6. Pearson correlations were derived for (1) child self-oriented and socially prescribed perfectionism, (2) maternal and paternal self-oriented, other oriented, and socially prescribed perfectionism, and (3) maternal and paternal depression, anxiety, and obsessive compulsiveness (Table 7).

Independent samples t-tests were conducted to identify gender differences with respect to child (male versus female) self-oriented and socially prescribed perfectionism as well as parent (mother versus father) self-oriented, other-oriented, and socially prescribed perfectionism and depression, anxiety, and obsessive compulsiveness. No gender differences were found. One-way analyses of variance (ANOVA) were conducted to identify ethnic group differences and/or differences based on socioeconomic status, with respect to child self-oriented and socially prescribed perfectionism as well as parent self-oriented, other-oriented, and socially prescribed perfectionism and depression, anxiety, and obsessive compulsiveness. No ethnic or socioeconomic differences were found.

The first hypothesis was that older children would display higher levels of self-oriented and socially perfectionism than younger children. One-way ANOVAs were conducted across child age group (8-9 years, 10-11 years, 12-13 years, 14-15 years, 15-16 years) with child self-oriented and socially prescribed perfectionism separately as dependent variables. Post-hoc comparisons were made using the Tukey HSD test.

The second hypothesis was that parent perfectionism and parent depression, anxiety, and obsessive compulsiveness would predict child perfectionism. Analyses were conducted separately for mother and father data. Separate multiple regression analyses were conducted with (1) maternal or paternal self-oriented, other-oriented, and socially prescribed perfectionism as independent variables and (2) child self-oriented or socially prescribed perfectionism as dependent variables. Separate multiple regression analyses were also conducted with (1) maternal or paternal depression, anxiety, and obsessive compulsive symptoms as independent variables and (2) child self-oriented or socially prescribed perfectionism as dependent variables. These analyses were conducted for the entire sample and then separately for the 8-12 year and 13-17 year age groups.

The third main hypothesis was that parent psychopathology variables would mediate relationships between (1) parent perfectionism variables and (2) child perfectionism variables. Regression models from the second hypothesis were used to inform specific mediation pathways. The Baron and Kenny (1986) approach to mediation analysis was used. Mediation is said to occur if the independent variable (A) significantly predicts the mediator (B), the independent variable (A) significantly predicts the dependent variable (C), the independent variable and mediator (A and B) significantly predict the dependent variable (C) via hierarchical multiple regression analysis, and the regression coefficient for A either decreases (partial mediation) or is no longer significant (full mediation). A subsequent Sobel test must also be significant. Mediation analyses where applicable were conducted first for the entire child sample and then separately for the 8-12 year and 13-17 year age groups.

CHAPTER 4

# Results

## Hypothesis One

The first hypothesis was that older children would display higher levels of self-oriented and socially prescribed perfectionism than younger children. Child self-oriented perfectionism differed significantly across age groups, ($F(4, 155) = 2.80$, $p = .028$). Follow-up analysis revealed that children aged 16-17 years ($M = 41.13$, $SD = 10.28$) reported significantly higher self-oriented perfectionism than children aged 12-13 years ($M = 33.83$, $SD = 8.10$). Children aged 16-17 years did report the highest levels of self-oriented perfectionism but no other significant age group differences were found. No age group differences were found with respect to socially prescribed perfectionism. Analyses were conducted separately for male and female children but no differences were found.

## Hypothesis Two

The second hypothesis was that parent perfectionism and parent depression, anxiety, and obsessive compulsiveness would significantly predict child perfectionism. Significant multiple regression analyses regarding this hypothesis are reported for the total sample and then for children aged 8-12 years and 13-17 years.

**Significant regression models for the total sample.** A regression model involving (1) maternal self-oriented, other-oriented, and socially prescribed perfectionism as independent variables and (2) child self-oriented perfectionism as a dependent variable neared significance ($R^2 = .05$; $F(3, 154) = 2.52$, $p = .06$) (see age differences below). Maternal socially prescribed perfectionism ($\beta = .18$) explained the greatest amount of

variance in child self-oriented perfectionism, followed by maternal self-oriented perfectionism (β = .08), and maternal other-oriented perfectionism (β = .02). Only maternal socially prescribed perfectionism made a significant unique contribution to this model ($p$ = .05).

A regression model involving (1) maternal depression, anxiety, and obsessive compulsiveness as independent variables and (2) child self-oriented perfectionism as a dependent variable also neared significance ($R^2$ = .05; $F$(3, 154) = 2.44, $p$ = .066). Maternal obsessive compulsiveness (β = .16) explained the greatest amount of variance in child self-oriented perfectionism, followed by maternal anxiety (β = .11), and maternal depression (β = .04). None of the independent variables made significant unique contributions to this model. No models involving paternal variables were significant.

A regression model involving (1) maternal self-oriented, other-oriented, and socially prescribed perfectionism as independent variables and (2) child socially prescribed perfectionism as a dependent variable was significant ($R^2$ = .11; $F$(3, 154) = 6.35, $p$ < .001). Maternal socially prescribed perfectionism (β = .29) explained the greatest amount of variance in child socially prescribed perfectionism, followed by maternal other-oriented perfectionism (β = .17), and maternal self-oriented perfectionism (β = .14). Only maternal socially prescribed perfectionism made a significant unique contribution to this model ($p$ = .001).

**Significant regression models for children aged 8-12 and 13-17 years**. Predictive relationships were expected to be stronger for children aged 13–17 years than for children aged 8–12 years. No models involving paternal variables were significant. A regression model involving (1) maternal self-oriented, other-oriented, and socially

prescribed perfectionism as independent variables and (2) child socially prescribed perfectionism as a dependent variable was significant for children aged 8-12 years ($R^2$ = .18; $F(3, 80) = 5.45$, $p = .002$) but not for children aged 13-17 years ($p = .15$). Maternal socially prescribed perfectionism (β = .38) explained the greatest amount of variance in child socially prescribed perfectionism, followed by maternal other-oriented perfectionism (β = .14), and maternal self-oriented perfectionism (β = .07). Only maternal socially prescribed perfectionism made a significant unique contribution to this model ($p = .002$). The maternal perfectionism variables did not significantly predict child self-oriented perfectionism for either age group.

A regression model involving (1) maternal depression, anxiety, and obsessive compulsiveness as independent variables and (2) child socially prescribed perfectionism as a dependent variable was significant for children aged 8-12 years ($R^2$ = .11; $F(3, 80)$ = 3.23, $p = .027$) but not for children aged 13-17 years ($p = .93$). Maternal anxiety (β = .23) explained the greatest amount of variance in child socially prescribed perfectionism, followed by maternal depression (β = .11), and maternal obsessive compulsiveness (β = .02). None of the independent variables made significant unique contributions to this model.

A regression model involving (1) maternal depression, anxiety, and obsessive compulsiveness as independent variables and (2) child self-oriented perfectionism as a dependent variable trended toward significance for children aged 13-17 years ($R^2$ = .09; $F(3, 73) = 2.19$, $p = .097$) but not for children aged 8-12 years ($p = .11$). Maternal depression (β = .28) explained the greatest amount of variance in child self-oriented perfectionism, followed by maternal obsessive-compulsiveness (β = .04), and maternal

anxiety (β = .02). None of the independent variables made significant unique contributions to this model.

**Hypothesis Three**

The third hypothesis was that parent psychopathology variables would mediate relationships between (1) parent perfectionism variables and (2) child perfectionism variables. Mediation analyses focused on maternal variables given the above regression findings. Specifically, analyses were conducted to determine if maternal depression, anxiety, and obsessive compulsiveness mediated (1) maternal self-oriented, other-oriented, and socially prescribed perfectionism and (2) child self-oriented and socially prescribed perfectionism. Mediation analyses involved singular variables.

**Mediation analyses for the total sample.** Analyses of maternal anxiety as a mediator of maternal self-oriented perfectionism and child self-oriented perfectionism neared significance. Maternal self-oriented perfectionism (A) significantly predicted maternal anxiety (B) (β = .21, $p$ = .007), maternal self-oriented perfectionism (A) showed a trend toward predicting child self-oriented perfectionism (C) (β = .15, $p$ = .06), and maternal self-oriented perfectionism (A) and maternal anxiety (B) significantly predicted child self-oriented perfectionism (C) with the regression coefficient for (A) nonsignificant. Because mediation was so close to being met with this model and several of the above regression models varied for younger versus older children, mediation was also examined at different age levels.

**Mediation analyses for children aged 8-12 and 13-17 years**. Mediation analyses were conducted separately for children aged 8-12 years and 13-17 years. Analyses of maternal anxiety as a mediator of maternal other-oriented perfectionism and

child socially prescribed perfectionism among children aged 8-12 years revealed that criteria for full mediation were met (Figure 1). Maternal other-oriented perfectionism (A) significantly predicted maternal anxiety (B) ($\beta = .27$, $p = .017$), maternal other-oriented perfectionism (A) significantly predicted child socially prescribed perfectionism (C) ($\beta = .25$, $p = .024$), and maternal other-oriented perfectionism (A) and maternal anxiety (B) significantly predicted child socially prescribed perfectionism (C) with the regression coefficient for (A) no longer significant. The subsequent Sobel test was significant ($z = 1.76$, $p = .039$). Parent depression and obsessive compulsiveness did not mediate maternal self-oriented perfectionism or maternal socially prescribed perfectionism, and child self-oriented or socially prescribed perfectionism for children aged 8-12 years. No analyses regarding children aged 13-17 years revealed mediation.

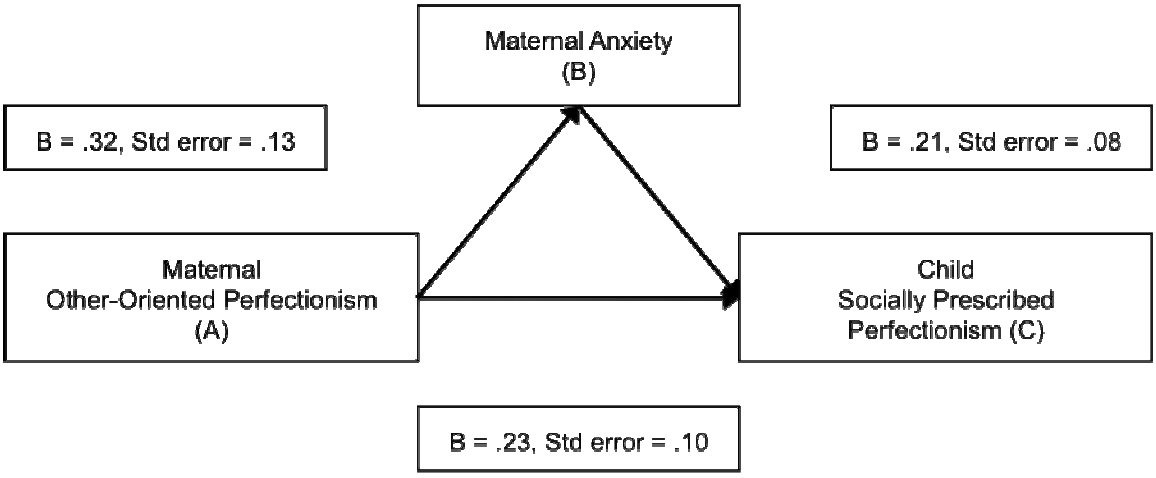


*Figure 1.* Significant mediation model in which maternal anxiety mediated maternal other-oriented perfectionism and child socially prescribed perfectionism for children aged 8-12 years.

**Post Hoc Mediation Analyses**

Post hoc mediation analyses for the total sample examined whether parent perfectionism variables mediated relationships between (1) parent psychopathology variables and (2) child perfectionism variables. Analyses were conducted to determine if maternal self-oriented, other-oriented, and socially prescribed perfectionism mediated (1) maternal depression, anxiety, and obsessive compulsiveness and (2) child self-oriented and socially prescribed perfectionism. Post hoc mediation analyses involved singular variables.

Analyses of maternal socially prescribed perfectionism as a mediator of maternal depression and child self-oriented perfectionism revealed that criteria for full mediation were met (Figure 2). Maternal depression (A) significantly predicted maternal socially prescribed perfectionism (B) ($\beta = .33$, $p < .001$), maternal depression (A) significantly predicted child self-oriented perfectionism (C) ($\beta = .16$, $p = .05$), and maternal depression (A) and maternal socially prescribed perfectionism (B) significantly predicted child self-oriented perfectionism (C) with the regression coefficient for (A) nonsignificant. The subsequent Sobel test was significant ($z = 1.88$, $p = .03$).

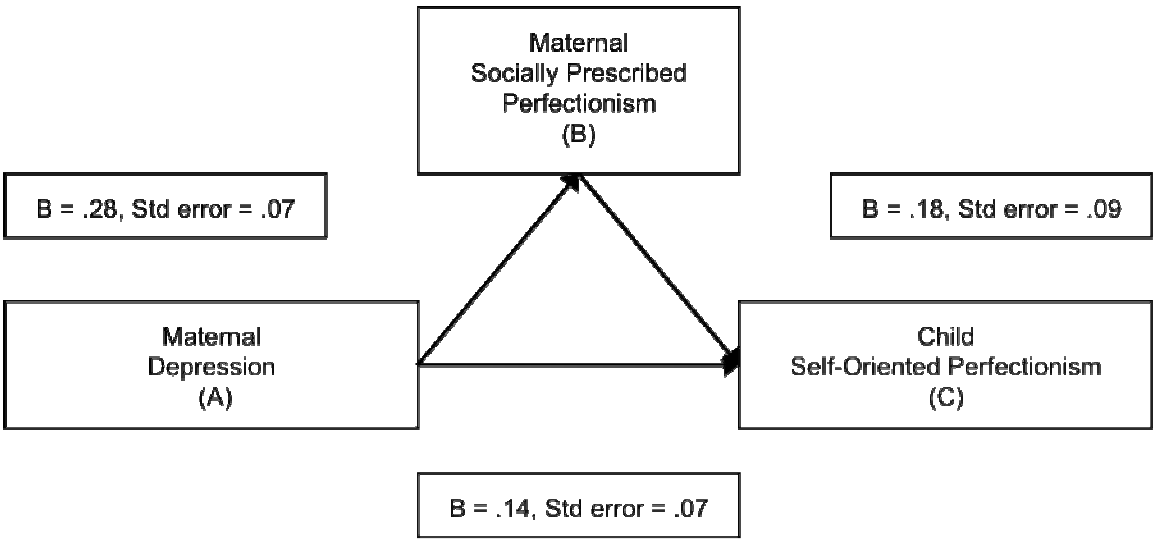


*Figure 2.* Significant post hoc mediation model in which maternal socially prescribed perfectionism mediated maternal depression and child self-oriented perfectionism for the total sample.

Analyses of maternal socially prescribed perfectionism as a mediator of maternal anxiety and child self-oriented perfectionism revealed that criteria for full mediation were met (Figure 3). Maternal anxiety (A) significantly predicted maternal socially prescribed perfectionism (B) ($\beta = .34$, $p < .001$), maternal anxiety (A) significantly predicted child self-oriented perfectionism (C) ($\beta = .19$, $p = .02$), and maternal anxiety (A) and maternal socially prescribed perfectionism (B) significantly predicted child self-oriented perfectionism (C) with the regression coefficient for (A) nonsignificant. The subsequent Sobel test was significant ($z = 1.78$, $p = .037$).

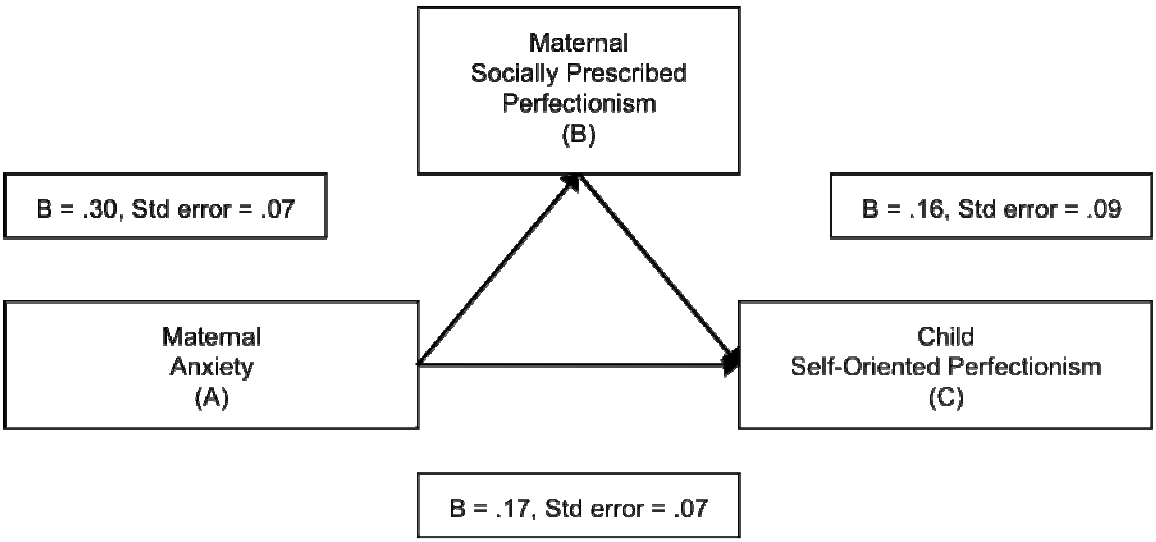


*Figure 3.* Significant post hoc mediation model in which maternal socially prescribed perfectionism mediated maternal anxiety and child self-oriented perfectionism for the total sample.

Analyses of maternal socially prescribed perfectionism as a mediator of maternal depression and child socially prescribed perfectionism revealed that criteria for full mediation were met (Figure 4). Maternal depression (A) significantly predicted maternal socially prescribed perfectionism (B) ($\beta = .33$, $p < .001$), maternal depression (A) significantly predicted child socially prescribed perfectionism (C) ($\beta = .18$, $p = .02$), and maternal depression (A) and maternal socially prescribed perfectionism (B) significantly predicted child socially prescribed perfectionism (C) with the regression coefficient for (A) nonsignificant. The subsequent Sobel test was significant ($z = 2.55$, $p = .005$).

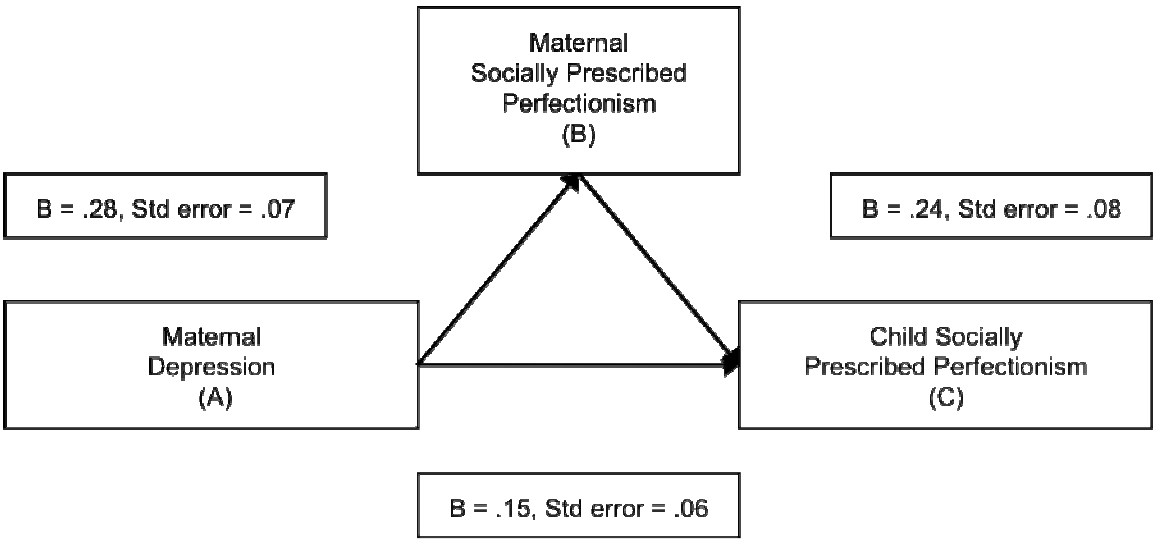


*Figure 4.* Significant post hoc mediation model in which maternal socially prescribed perfectionism mediated maternal depression and child socially prescribed perfectionism for the total sample.

Analyses of maternal socially prescribed perfectionism as a mediator of maternal anxiety and child socially prescribed perfectionism revealed that criteria for full mediation were met (Figure 5). Maternal anxiety (A) significantly predicted maternal socially prescribed perfectionism (B) ($\beta = .34$, $p < .001$), maternal anxiety (A) significantly predicted child socially prescribed perfectionism (C) ($\beta = .19$, $p = .02$), and maternal anxiety (A) and maternal socially prescribed perfectionism (B) significantly predicted child socially prescribed perfectionism (C) with the regression coefficient for (A) nonsignificant. The subsequent Sobel test was significant ($z = 2.55$, $p = .005$).

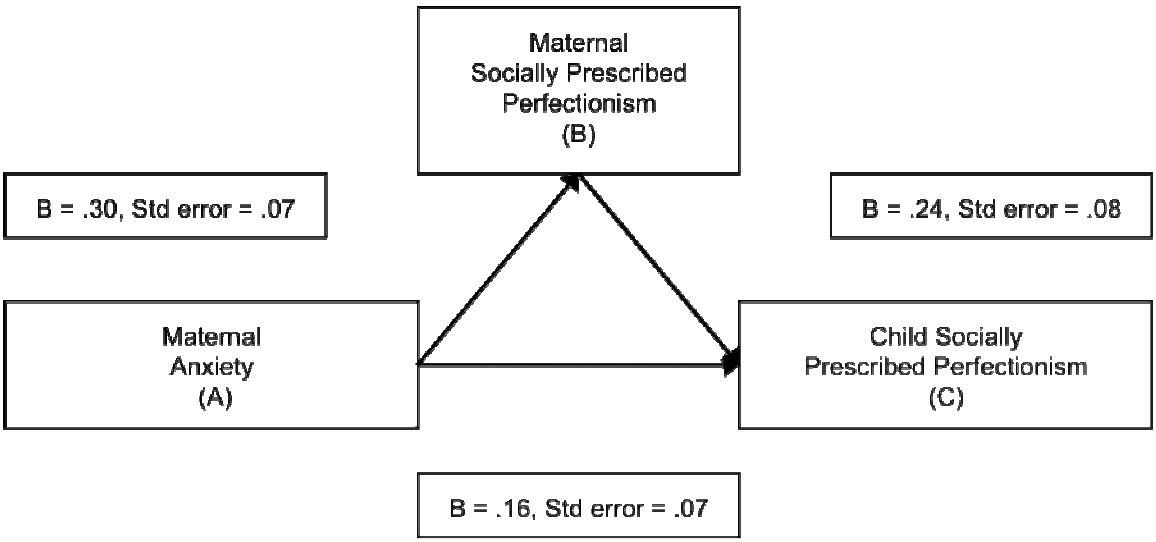


*Figure 5.* Significant post hoc mediation model in which maternal socially prescribed perfectionism mediated maternal anxiety and child socially prescribed perfectionism for the total sample.

Analyses of maternal socially prescribed perfectionism as a mediator of maternal obsessive compulsiveness and child socially prescribed perfectionism revealed that criteria for full mediation were met (Figure 6). Maternal obsessive compulsiveness (A) significantly predicted maternal socially prescribed perfectionism (B) ($\beta = .33$, $p < .001$), maternal obsessive compulsiveness (A) significantly predicted child socially prescribed perfectionism (C) ($\beta = .16$, $p = .05$), and maternal obsessive compulsiveness (A) and maternal socially prescribed perfectionism (B) significantly predicted child socially prescribed perfectionism (C) with the regression coefficient for (A) nonsignificant. The subsequent Sobel test was significant ($z = 1.70$, $p = .04$).

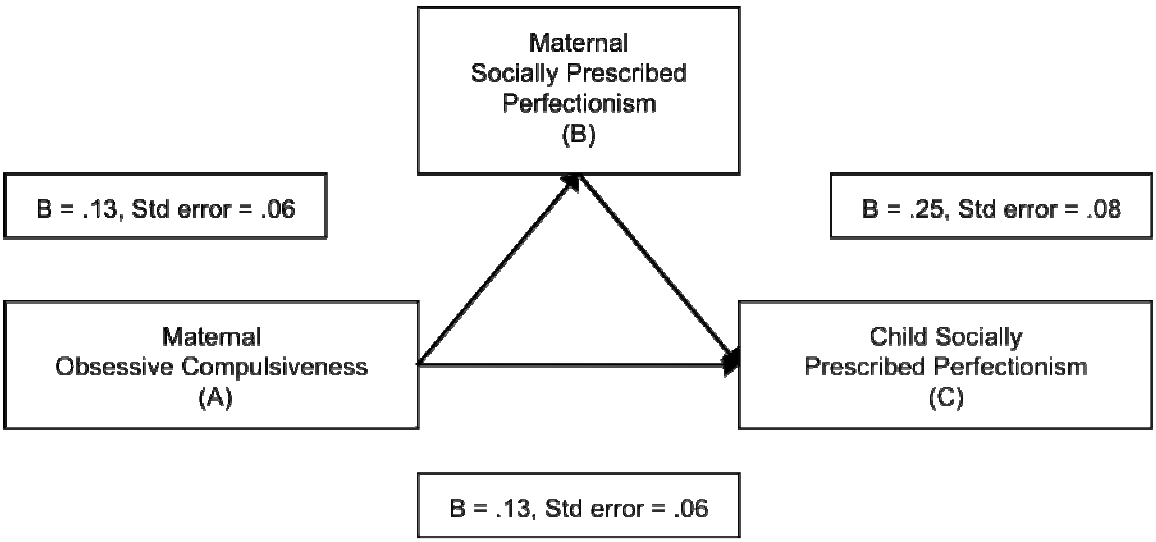


*Figure 6.* Significant post hoc mediation model in which maternal socially prescribed perfectionism mediated maternal obsessive compulsiveness and child socially prescribed perfectionism for the total sample.

# CHAPTER 5

## Conclusions and Recommendations

The present study was a cross-sectional analysis involving measures of child and parent perfectionism and symptoms of psychopathology among 160 children and/or their parents. Self-oriented perfectionism, or expecting oneself to meet exceptionally high standards, and socially prescribed perfectionism, or believing that others have unrealistically high expectations for oneself, were measured in children and parents. Other-oriented perfectionism, or holding others to exceedingly high standards, and symptoms of depression, anxiety, and obsessive compulsiveness were also evaluated in parents. No significant paternal findings were revealed and so the following sections emphasize mothers and children.

### Summary of Results

The first hypothesis was that older children would display higher levels of self-oriented and socially prescribed perfectionism than younger children. This hypothesis was partially supported. The oldest children in the study reported the highest level of self-oriented perfectionism, and children aged 16-17 years reported significantly greater self-oriented perfectionism than children aged 12-13 years. No age-related patterns were found with respect to child socially prescribed perfectionism.

The second hypothesis was that parent perfectionism and parent depression, anxiety, and obsessive compulsiveness would significantly predict child self-oriented and socially prescribed perfectionism. This hypothesis was partially supported. Higher maternal self-oriented, other-oriented, and socially prescribed perfectionism predicted

higher child self-oriented and socially prescribed perfectionism. Maternal socially prescribed perfectionism was the most important predictor. Mothers who reported perceiving others' demands as excessive had children with very high self-expectations and had children who perceived others' demands as excessive. A relationship between maternal perfectionism and child socially prescribed perfectionism was especially prominent among mothers and children aged 8-12 years.

Higher maternal depression, anxiety, and obsessive compulsiveness predicted higher self-oriented perfectionism in children. Children were more likely to hold themselves to high standards if their mothers reported symptoms of depression, anxiety, and obsessive compulsiveness. This trend was most prominent among children aged 13-17 years and maternal depression was the strongest predictor of self-oriented perfectionism for this age group. Higher maternal depression, anxiety, and obsessive compulsiveness predicted higher socially prescribed perfectionism among children aged 8-12 years. Maternal anxiety was the most important predictor of socially prescribed perfectionism for children aged 8-12 years. Children aged 8-12 years were more likely to perceive significant others' expectations as unreasonably high if their mothers reported symptoms of depression, obsessive compulsiveness, and especially anxiety.

The third hypothesis was that parent depression, anxiety, and obsessive compulsiveness would mediate relationships between parent and child perfectionism. This hypothesis was partially supported. Maternal anxiety mediated the relationship between other-oriented perfectionism in mothers and socially prescribed perfectionism in children aged 8-12 years. Mothers who endorsed holding others to high standards, and

especially mothers who reported significant anxiety, were more likely to have children who perceived others' expectations as excessive and unreasonable.

Post hoc analyses revealed several additional significant mediation models. Maternal socially prescribed perfectionism mediated relationships between (1) maternal depression and child self-oriented perfectionism, (2) maternal anxiety and child self-oriented perfectionism, (3) maternal depression and child socially prescribed perfectionism, and (4) maternal anxiety and child socially prescribed perfectionism. These models suggest that maternal depression and anxiety are involved in children's expectations for themselves and the expectations they perceive from others, particularly when maternal socially prescribed perfectionism is strong.

**Discussion of Results**

Findings from the present study reveal age-related differences in child perfectionism as well as relationships between maternal factors and child perfectionism. The findings also indicate that maternal perfectionism, particularly socially prescribed perfectionism, as well as maternal symptoms of depression, anxiety, and obsessive compulsiveness, are likely risk factors for child perfectionism. The following sections provide a detailed discussion of these findings.

**Age-related differences in child perfectionism.** Several factors may explain why higher self-expectations were found among children aged 16-17 years. Extant theory and research on the etiology of child perfectionism includes risk factors such as genetics, modeling, positive and negative reinforcement, child temperament, innate ability, and parent factors such as control, expressed expectations for self and others, contingent approval, encouragement, harshness, psychopathology, and criticism (Ablard

& Parker, 1997; Brookings & Wilson, 1994; Cook & Kearney, 2009; Clark & Coker, 2009; Craddock et al., 2009; Flett et al., 2002; Hutchinson & Yates, 2008; Kenney-Benson & Pomerantz, 2005; Kobori et al., 2005; Miller & Vaillancourt, 2007; Soenens, Vansteenkiste et al., 2005; Speirs Neumeister et al., 2009; Tozzi et al., 2004; Wang, 2010). Specific factors influencing perfectionism development are likely present from an early age and can persist (Cox & Enns, 2003; Flett et al., 2002). For example, parents who express high academic expectations for their children, reinforce academic success with gifts or praise, and/or harshly criticize imperfect work, likely display these behaviors when their children are very young and continue them over time (Areepattamannil, 2010; NICHD Early Child Care Research Network, 2004). Children who experience success in academics, athletics, music, or other areas are likely to receive ongoing external (teacher, peer, family) and internal reinforcements for their efforts (MacLellan, 2005; NICHD Early Child Care Research Network, 2004; Pruett, 2004; Sapieja et al., 2011). The impact of these reinforcements may be additive, which supports the present findings regarding age-related differences in child perfectionism.

Suggested paths of perfectionism development include: (1) a social expectations model in which children strive to earn parents' approval and love by performing in an ideal manner, (2) a social learning model in which children observe others model and receive reinforcement for perfectionism, (3) a social reaction model in which children learn to behave perfectly to cope with chaos and avoid harsh criticism and/or abuse, and (4) an anxious rearing model in which child perfectionism derives from exposure to parents' overconcern about mistakes, emphasis on avoiding the negative consequences of errors, and other anxious behaviors (Flett et al., 2002). Connections between self-

oriented perfectionism in children and parent authoritativeness, perfectionism, internalizing symptoms, contingent approval, achievement goals, and harsh and controlling behavior support these theories (Ablard & Parker, 1997; Cook & Kearney, 2009; Flett et al., 1995, Foy, 1998; Hutchinson & Yates, 2008; Kenney-Benson & Pomerantz, 2005; Paulson, 1994; Vieth & Trull, 1999). Child perfectionism should thus increase with prolonged exposure to certain parent behaviors and characteristics, leading to greater perfectionism among older children.

Other factors may also contribute to higher self-oriented perfectionism among older adolescents. The present study did not specifically examine peers, but peer influences may help explain the age-related findings. Peer groups are typically well-established for children aged 16-17 years and substantially influence the behaviors and choices of their members (Crockett, Losoff, & Peterson, 1984; Hartup & Stevens, 1997). Children who have previously demonstrated perfectionist tendencies such as pursuing academic success or athletic accomplishments are often involved in peer groups that reinforce and facilitate these pursuits (Cook, Deng, & Morgano, 2007). Children who pursue athletic success have typically practiced and played alongside teammates with similar goals and may develop relationships with coaches who demand their best efforts. Children who emphasize academic accomplishment are often in honors classes where peers also strive for high grades and academic accolades, and teachers expect and encourage excellence (Carbonaro, 2005). Indeed, Ryan (2001) found that peer groups tend to include members with similar achievement goals and successes. Similarly, Blanton, Buunk, Gibbons, and Kuyper (1999) found that comparing one's performance to that of academically successful peers was associated with higher academic performance.

Individuals with perfectionist tendencies at a young age may be more likely to associate with others who reinforce perfectionism by modeling similar strivings, providing competition, discussing the virtues of success, and offering collaboration. These influences can accumulate, contributing to greater self-expectations among older children.

Unique pressures among older adolescents include planning for and entering young adulthood. Children aged 16-17 years are typically nearing the end of high school, becoming more independent, and preparing for substantial transitions such as moving away from home, attending college, and/or finding employment (Arnett, 2000, 2004; Fromme, Corbin, & Kruse, 2008). They are faced with greater personal responsibility, and consequences of their behaviors and efforts become more apparent (Arnett, 2000). Academic grades and performance on standardized tests influence whether a student attends college, where she is admitted, and whether she receives scholarships and financial aid (Clinedinst, Hurley, & Hawkins, 2011). Strong recommendations can lead to better job prospects; hard work, leadership, and dedication may lead to athletic scholarships or other opportunities (Letawsky, Schneider, Pederson, & Palmer, 2003). Self-oriented perfectionism may be strengthened during this time because the benefits of striving for perfection are especially evident and personal.

The lowest levels of self-oriented perfectionism were found among children aged 12-13 years. This finding was somewhat unexpected. Demographic characteristics including proportions of children attending each type of school and socioeconomic status were examined by age group to help determine whether sampling issues likely contributed to age-related findings. This did not appear to be the case.

Children aged 12-13 years, or early adolescents, are in a transitional period of development (Eccles et al., 1993; Fuligni & Eccles, 1993; Seidman et al., 1994; Wigfield, Lutz, & Wagner, 2005). The lives of early adolescents are marked by individual, social, and school-related change (Chung, Elias, & Schneider, 1998; Wigfield et al., 2005). Substantial physical and hormonal transformations are ongoing, children spend more time with peers and less time with their parents, and parent-child conflict typically increases (Fuligni & Eccles, 1993; Laursen, Coy, & Collins, 1998; Paikoff & Brooks-Gunn, 1991; van den Akker, Dekovic, & Prinzie, 2010). Social demands intensify as early adolescents perceive peer relationships as increasingly important (Brown & Klute, 2003; Ellis et al., 2009; Larson & Richards, 1991; Laursen & Collins, 2004). Most children aged 12-13 years have recently entered middle school where the demands of multiple classes, teachers, and extracurricular activities increase greatly (Chung et al., 1998; Eccles et al., 1993; Seidman et al., 1994). At the same time, children in this age range are expected to function more independently than before (Ellis, Marsh, & Craven, 2009; Wigfield & Eccles, 2002). The most competent individuals may falter under these circumstances (Eccles et al., 1993; Ryan, 2011).

The extreme changes, increased expectations and independence, and decreased assistance associated with early adolescence may contribute to a sense of feeling overwhelmed and incapable of meeting perfectionist expectations. Early adolescents may sense that consistent success is very difficult to attain and that the goal of perfection has become even less achievable. This combination of challenges faced by early adolescents may explain why children aged 12-13 demonstrated the lowest levels of self-oriented perfectionism. Children in this age range may compromise their self-

expectations so they feel able to adapt and manage the wider range of demands for their time and efforts. Research on self-esteem and academic achievement of early adolescents is consistent with this idea and demonstrates that early adolescents often struggle in multiple life areas. Numerous studies indicate that self-esteem decreases during early adolescence (around 12-13 years of age) (DuBois, Felner, Brand, Phillips, & Lease, 1996; Rhodes, Roffman, Reddy, & Fredrikson, 2004; Robins, Trzesniewski, Tracy, Gosling, & Potter, 2002; Seidman, Allen, Aber, Mitchell, & Feinman, 1994). Academic achievement and motivation also commonly decline during this period (Anderman & Maehr, 1994; Eccles et al., 1993; Ryan, 2001, 2011; Wigfield et al., 2005).

Early adolescents, even those with perfectionist tendencies, may encounter evidence of the futility of perfectionist strivings with greater regularity than individuals in most other age groups. For example, children in this age range may struggle to find time to participate in sports, associate with friends, read for multiple classes, complete projects, and study for tests. As a result, early adolescents' grades may suffer, they may have to sacrifice time previously committed to one area or another, and/or the quality of their performance may decline. Meeting perfectionist standards will be impossible for many, at least until sufficient time and experience allow them to adjust to the increased and diversified challenges associated with entering adolescence.

The present study revealed age-related differences in self-oriented but not socially prescribed perfectionism. Personal demands and expectations for performance were greater among older children, but experiencing others' demands for perfection as excessive was reported equally across age groups. The source of socially prescribed perfectionism is external, which may account for its consistency. An individual who

perceives others' performance demands as unattainable may experience less change in those demands because they are not controllable. Self-oriented perfectionism, however, may increase with cumulative reinforcement, success, fear of failure, and other motivating factors. Socially prescribed perfectionism may even contribute to development of self-oriented perfectionism among older children as a sense of personal responsibility increases and they appreciate the benefits of striving for perfection that were previously espoused by others.

**Maternal and child perfectionism.** An increasing number of studies involve relationships between parent and child perfectionism. Most previous studies demonstrated significant relationships between parent and child perfectionism but included parents and their college-aged offspring (Chang, 2000; Frost et al., 1991; Soenens, Vansteenkiste et al., 2005; Speirs Neumeister, 2004; Vieth & Trull, 1999). A few additional studies that included parents and young children also demonstrated significant parent-child, and especially mother-child perfectionism relationships (Appleton et al., 2010; Cook & Kearney, 2009; Frost et al., 1991; Soenens et al., 2005; Speirs Neumeister et al., 2009; Vieth & Trull, 1999). Vieth and Trull (1999) did identify a positive relationship between paternal self-oriented perfectionism and self-oriented perfectionism in college-aged sons. Appleton and colleagues (2010) found that young athletes' perfectionism was predicted by their perceptions of both parents' perfectionism (but not by parents' self-reported perfectionism). The present study demonstrated relationships between maternal perfectionism and self-oriented and socially prescribed perfectionism in children. These findings are consistent with prior research and theory

regarding perfectionism development. In particular, maternal socially prescribed perfectionism was strongly implicated in both types of child perfectionism.

The relationship between maternal and child perfectionism likely reflects the combined influence of heredity and environment. Some studies suggest a specific genetic influence on perfectionism development (Bachner-Melman et al., 2007; Tozzi et al., 2004). A larger body of research also implicates social influences (Flett et al., 2002). The present finding that maternal, but not paternal perfectionism was related to child perfectionism suggests a relatively stronger influence for non-genetic factors. Perfectionism may develop when children believe that they must meet certain expectations to earn their parents' approval and love (Ablard & Parker, 1997; Blatt, 1995; Burns, 1980; Flett et al., 2002; Hamachek, 1978; Hollender, 1965; Hutchinson & Yates, 2008; Missildine, 1963; Pacht, 1984; Speirs Neumeister et al., 2009). Parent perfectionists can foster this belief by vocalizing their own thoughts about the importance of achievement and success, ignoring or criticizing suboptimal performance in themselves or others, directly stating their high expectations, and rewarding perfect behavior with praise, attention, or other forms of reinforcement.

Parent perfectionists may also contribute to perfectionism in their children by modeling perfectionist behaviors and attitudes (Bandura, 1986; Flett et al., 2002). Children are especially likely to imitate behaviors that produce favorable consequences and are modeled by persons they admire (Bandura, 1977, 1986). Thus, when parents strive for perfection, experience satisfaction only when completely successful, and receive rewards for their efforts (i.e., financial benefits, praise, promotions, self-pride), children may seek to emulate them. Parents may also influence perfectionism in their

children by modeling excessive anxiety about making mistakes and the associated negative consequences (Flett et al., 2002).

Children are particularly susceptible to modeling effects and are most likely to imitate the caregiver with whom they spend the most time (Bandura, 1986; Cook & Kearney, 2009; Flett et al., 2002; Fox, 2000; Welch, 1996). This may help explain the present finding that maternal (but not paternal) perfectionism predicted child perfectionism because mothers are more often primary caregivers to their children. Children may be more likely to emulate their mothers' behaviors and attitudes because mothers are typically more involved in child-rearing activities than fathers (Connell & Goodman, 2002; Lamb, Pleck, Charnov, & Levine, 1987; Pleck, 1997). The susceptibility of children to modeling effects could explain the relatively stronger relationship between maternal perfectionism and perfectionism in children aged 8-12 years versus 13-17 years. As children progress from childhood to adolescence, they also spend less time at home and with parents, and more time with peers (Collins & Russell, 1991; Larson & Richards, 1991). This transition may also help explain to the stronger relationship between maternal and child perfectionism among children in the younger age group (8-12 years). Given the previously described finding that the highest levels of self-oriented perfectionism occurred among children aged 16-17 years, younger children may strive to emulate their mothers while older adolescents may be more strongly influenced by factors such as reinforcement from parents or striving to avoid negative consequences of not performing perfectly.

Research on parent and child internalizing and externalizing symptoms is also consistent with the present findings (Connell & Goodman, 2002; Cooper, Fearn, Willetts,

Seabrook, & Parkinson, 2006; Durbin, Klein, Hayden, Buckley, & Moerk, 2005; Hughes & Gullone, 2010; McClure, Brennan, Hammen, & Le Brocque, 2001). Connell and Goodman (2002) conducted a meta-analytic study of relationships between maternal and paternal psychopathology and child internalizing and externalizing problems. The overall impact of maternal psychopathology on child internalizing symptoms was significantly larger than paternal psychopathology. Other studies of parent psychopathology and child internalizing symptoms also reveal greater concordance between mother and child variables (Cooper et al., 2006; Durbin et al., 2005; Hughes & Gullone, 2010; McClure et al., 2001). A few studies indicate significant relationships between paternal psychopathology and child internalizing symptoms, but predominantly included adolescents and not younger children (Compas, Howell, Phares, Williams, & Ledoux, 1989; Lieb, Isensee, Hofler, Pfister, & Wittchen, 2002; Reeb, Conger, & Wu, 2010; Renk et al., 2007).

Maternal self-oriented, socially prescribed, and other oriented perfectionism combined to predict child self-oriented and socially prescribed perfectionism in the present study, but maternal socially prescribed perfectionism was the strongest predictor. Mothers who perceived others as holding them to excessively high performance standards were more likely to have children who demanded perfect performance from themselves, as well as children who perceived others as having unreasonably high expectations. Socially prescribed perfectionist mothers may specifically contribute to their children's self-oriented and socially prescribed perfectionism by overtly striving to please others, emphasizing the importance of impressing others, revealing pride and pleasure when they meet or exceed others' expectations, and expressing concern about

negative evaluations from others. Socially prescribed perfectionist mothers who believe others' expectations facilitated their own success may also demand similar levels of perfection from their children. Children of socially prescribed perfectionist mothers may develop a need to excel and attain the benefits of perfectionism they perceive their mothers as receiving. Children of socially prescribed perfectionist mothers may also strive for perfection because they learn that meeting others' expectations for perfection is of the utmost importance.

**Maternal psychopathology and child perfectionism.** Perfectionism is consistently linked with depression, anxiety, obsessive compulsiveness, and other symptoms of psychopathology among children and adults (Accordino et al., 2000; Antony et al., 1998; Bell et al., 2010; Cook & Kearney, 2009; Deary & Chalder, 2010; Essau et al., 2008; Flett et al., 2011; Frost et al., 2002; Frost & Steketee, 1997; Fujimori et al., 2011; Halmi et al., 1995; Hewitt et al., 1997; Nilsson et al., 2008; O'Connor, 2007; Sassaroli et al., 2008; Soenens et al., 2008; Wu & Cortesi, 2009). Parents of perfectionists and parents with internalizing disorders have several parenting characteristics in common. These characteristics include decreased warmth and increased controllingness, criticality, harshness, and demandingness (Black et al., 1998; Clark & Coker, 2009; Craddock et al., 2009; Dadds et al, 1996; Flett et al., 1995; Hirshfeld et al., 1997; Kawamura et al., 2002; Kenney-Benson & Pomerantz, 2005; Lindhout et al., 2006; Lovejoy et al., 2000; Moore et al., 2004; Rice et al., 1996; Silverman, 1988; Soenens et al., 2006; Speirs Neumeister, 2004b; Whaley et al., 1999). To date, however, only one study has directly examined connections between parent psychopathology and child perfectionism (Cook & Kearney, 2009).

Existing theories of perfectionism development indicate that aspects of parent psychopathology may comprise risk factors for child perfectionism (Flett et al., 2002). Several researchers have suggested that perfectionism develops when children learn they must meet certain parent expectations to receive warmth, love, and acceptance (Blatt, 1995; Burns, 1980; Flett et al., 2002; Hamachek, 1978; Hollender, 1965; Hutchinson & Yates, 2008; Missildine, 1963; Speirs Neumeister et al., 2009). Depressed, anxious, and/or obsessive compulsive parents have been described as demanding, critical, dissatisfied, controlling, disengaged, and lacking in warmth (Black et al., 1998; Hirshfeld et al., 1997; Lindhout et al., 2006; Lovejoy et al., 2000; Moore et al., 2004; Silverman, 1988; Whaley et al., 1999). When parents demonstrate these characteristics, children must put forth substantial effort (perhaps even striving for perfection) to receive positive attention from their parents.

Another theory suggests that children can develop perfectionism in reaction to harsh, chaotic, or abusive environments (Flett et al., 2002). Children may try to behave in a perfect manner to satisfy their "unpleasable" parents, gain a sense of control, decrease conflict, and/or avoid drawing negative attention. Depressed, anxious, and/or obsessive compulsive mothers are sometimes unaffectionate, hostile, insensitive, critical, rejecting, restrictive, and punishing (Jaser et al., 2005; Lovejoy et al., 2000; Marchland & Hock, 1998; Weissman et al., 1972). Maternal depression, anxiety, and obsessive compulsiveness are also associated with more family conflict, chaos and dysfunction, and less family cohesiveness (Black et al., 1998, 2003; Sarigiani et al., 2003; Silverman et al., 1988; Turner et al., 2003). Maternal psychopathology may be a risk factor for child

perfectionism when children respond by striving for perfection to gain control and avoid conflict, punishment, and negativity.

Perfectionism may also develop in response to anxious parents who are overprotective, experience failure as anxiety-provoking, stress the significance of mistakes, emphasize the undesirable consequences of making mistakes, and provide frequent reminders that others will judge one harshly for erring (Flett et al., 2002). Anxious parenting behaviors may contribute to child perfectionism when children learn to associate imperfect performance with anxiety and harsh judgment from significant others. Indeed, children can learn anxious behaviors and attitudes from their parents (Fisak & Grills-Taquechel, 2007; Merckelbach et al., 1996; Moore et al., 2004; Muris et al., 1996, 2000; Muris & Merckelbach, 1998; Whaley et al., 1999).

***Maternal psychopathology and self-oriented perfectionism in children aged 13-17 years.*** The present study suggests that maternal psychopathology may be a risk factor for child perfectionism. The finding that maternal psychopathology influences child self-oriented perfectionism, particularly among children aged 13-17 years, is especially interesting. This finding suggests that the impact of maternal psychopathology may sometimes be internalized by offspring. Results of the present study support the hypothesis that maternal psychopathology contributes to child perfectionism. This impact appears to be especially complex among older children. Depressed, anxious, and/or obsessive compulsive mothers who are often unaffectionate, controlling, demanding, critical, insensitive, rejecting and/or disengaged may be perceived by their children as requiring perfection. Children may even internalize unreasonable and potentially harmful standards of their symptomatic mothers. Adolescence is associated

with increased independence, capability, and personal responsibility, which may explain the particular association between maternal symptoms and self-oriented or internally motivated perfectionism in children aged 13-17 years (Pipp, Shaver, Jennings, Lamborn, Fischer, 1985; Smetana & Asquith, 1994).

The present study indicates an important role for maternal depression in self-oriented perfectionism among children aged 13-17 years. Extant studies consistently and specifically link maternal depression to increased hostility, withdrawal, diminished responsiveness, impaired communication, and decreased positive interactions with children (Goodman, Adamson, Riniti, & Cole, 1994; Lovejoy, 1991; Lovejoy et al. 2000; Radke-Yarrow, Nottelmann, Belmont, & Welsh, 1993). Adolescents may be particularly likely to internalize a need to achieve perfection when they believe this is the only way to earn their mothers' love and positive attention. Support is also apparent for a connection between a chaotic and hostile living environment and self-oriented perfectionism among children aged 13-17 years.

Maternal symptoms of depression can be subtle and less easily identified by external observers than symptoms other disorders, which may help explain the specific link between maternal depression and self-oriented perfectionism in children aged 13-17 years. Children aged 8-12 years are certainly impacted by maternal depression. They may not, however, be able to identify or respond specifically to depression-related behaviors or symptoms in their mothers. Children aged 13-17 years may be more able to recognize symptoms of maternal depression, particularly when those symptoms directly impact their own lives. In turn, children aged 13-17 years may seek to address problems related to their mothers' depression. Striving for perfection may help decrease conflict at

home, provide a source of pride and happiness for the child's mother, and facilitate affection between mother and child. The child of a depressed and controlling mother may also learn that "perfect" behavior is the best way to earn independence. In this way, self-oriented perfectionism may develop in children aged 13-17 years, partially as a response to maternal depression.

***Maternal psychopathology and socially prescribed perfectionism in children aged 8-12 years.*** The present study indicates that maternal psychopathology has a greater impact on socially prescribed perfectionism in children aged 8-12 years than children aged 13-17 years. Maternal psychopathology (particularly anxiety) was associated with a perception of unreasonable expectations from significant others among children aged 8-12 years. Children may feel helpless when they perceive their parents as controlling, critical, demanding, and overprotective. They may also feel powerless when their parents emphasize the importance of avoiding mistakes and associated negative consequences. Each of these characteristics is ascribed to depressed, anxious, or obsessive compulsive parents (Black et al., 1998; Hirshfeld et al., 1997; Lindhout et al., 2006; Lovejoy et al., 2000; Moore et al., 2004; Silverman, 1988; Whaley et al., 1999). Children aged 8-12 years may experience these characteristics and behaviors as demands for them to meet stringent behavioral and achievement standards. A perception of parental demandingness may account for the association between maternal psychopathology and child socially prescribed, but not self-oriented perfectionism, among children aged 8-12 years.

The present findings indicate an important role for maternal anxiety in socially prescribed perfectionism among children aged 8-12 years. Maternal anxiety is consistently linked with criticism, dissatisfaction, overprotectiveness, restrictiveness, and

controlling behavior (Hirshfeld et al., 1997; Lindhout et al., 2006; Moore et al., 2004; Whaley et al., 1999). Becker and Ginsburg (2011) found that clinically anxious mothers demonstrated more anxious behaviors, reported greater nervousness, and were more controlling and critical than non-anxious mothers when their children completed a stressful task. The same maternal factors negatively influenced children's self-evaluations regarding task performance. The present study and maternal anxiety research support the idea that maternal overprotectiveness, concern with others' evaluations, and vigilance toward mistakes and their negative consequences can convince children that only excellent performance is acceptable to their mothers (Flett et al., 2002).

Anxious behaviors may be especially relevant to socially prescribed perfectionism in children aged 8-12 years because they may be more overt than symptoms of depression. Becker and Ginsburg (2011) found that maternal anxious behaviors included worried facial expressions, rocking, wringing hands, biting lips, and worried statements about the task, the child's ability to complete the task, and length of time available to prepare. Anxious mothers may also comment frequently on their fears about making mistakes, undesirable outcomes of making mistakes, and other worries (Buckley & Woodruff-Borden, 2006; Muris et al., 1996; Whaley et al., 1999). Children may thus learn to experience mistakes and their consequences as anxiety-provoking and may become hypervigilant about situations in which errors are likely (Barrett & Dadds, 1996; Muris et al., 1996; Ollendick, Vasey, & King 2001). Children aged 8-12 years are often eager to please their parents (Cheung & Pomerantz, 2011). They may interpret their mothers' observable anxious behaviors as demands for perfect behavior.

**Maternal psychopathology as a mediator of maternal and child perfectionism.** Maternal anxiety fully mediated the relationship between maternal other-oriented perfectionism and socially prescribed perfectionism in children aged 8-12 years. Other-oriented perfectionism may contribute to anxiety when mothers steadfastly believe in the importance their goals for their children and worry that their children will be unable achieve those goals. Mothers with other-oriented perfectionism may also worry that their children will experience social isolation, disparagement from others, a loss of opportunities, or other negative consequences if they fail to excel. These mothers may overtly state their expectations for perfection, reward achievements that meet their standards, punish mistakes, and convey the importance of achieving to their children (Ablard & Parker, 1997).

Mothers who harshly evaluate and have extreme expectations for their children, and then experience significant anxiety, may also contribute to perfectionism in their children. They may do so by excessively emphasizing the importance of being careful, avoiding mistakes, and preventing "dire" consequences associated with errors (Fisak & Grills-Taquechel, 2007; Flett et al., 2002). Hutchinson and Yates (2008) suggested that child socially prescribed perfectionism may be particularly likely if maternal expectations are presented in a controlling manner. Children may also observe their anxious mothers avoiding challenging or anxiety provoking situations, agonizing over errors, vocalizing fears, acting overcautious, and/or overemphasizing others' criticisms (Flett et al., 2002; Ginsburg, Siqueland, Masia Warner, & Hedtke, 2004; Muris et al., 1999, 2000). Other-oriented perfectionism and anxiety in mothers may thus contribute strongly to socially prescribed perfectionism in younger children.

**Maternal perfectionism as a mediator of maternal psychopathology and child perfectionism.** Maternal socially prescribed perfectionism mediated relationships between maternal depression and anxiety, and child self-oriented perfectionism. Maternal socially prescribed perfectionism also mediated relationships between maternal depression and anxiety, and child socially prescribed perfectionism. These findings differ from the hypothesis that maternal psychopathology would mediate maternal and child perfectionism. They also underscore the role of maternal socially prescribed perfectionism in child perfectionism. These mediation models suggest that children are likely to self-impose incredibly high standards and/or feel they must live up to extreme standards imposed by others when mothers have anxiety or depression. This may be particularly true when mothers experience others' expectations as unreasonably high.

The present findings suggest that maternal depression and/or anxiety may contribute to maternal socially prescribed perfectionism and help set the stage for child perfectionism. Maternal depression and anxiety, however, have also been associated with child issues that are dissimilar to perfectionism. These issues include conduct disorder, oppositional defiant disorder, general externalizing behaviors, and academic difficulty (Downey & Coyne, 1990; Hirshfeld-Becker et al., 2008; Marmorstein & Iacono, 2004; Nicholson, Doboeck, Farris, Boker & Borkowski, 2011). Maternal socially prescribed perfectionism may contribute to a scenario where child perfectionism is especially likely. Findings from the present study certainly indicate important roles for maternal perfectionism and internalizing psychopathology in child perfectionism. A discussion of the clinical implications for the present findings is next.

## Clinical Implications

The present study may have some implications for assessment and treatment. Indeed, perfectionism negatively impacts treatment for several disorders and is consistently linked with depression, suicidality, eating disorders, and low self-esteem in children (Accordino et al., 2000; Blatt et al., 1995; Boegers et al., 1998; Chik, Whittal, & O'Neill, 2008; Cox & Enns, 2003; Essau et al., 2008; Flett et al., 2002; Flett & Hewitt, 2008; Hewitt et al., 2008; Huggins et al., 2008; Jacobs et al., 2009 McVey et al., 2002; Shahar et al., 2004; Soenens et al., 2008; Zuroff, 2000). The present findings emphasize parent perfectionism and psychopathology as risk factors for child perfectionism. Suggestions for assessment and treatment of problematic child perfectionism are based on these findings and extant research.

**Assessment.** Mental health professionals should regularly assess for perfectionism so that treatment can address maladaptive aspects of perfectionism. Screening for perfectionism-related ideas and behaviors in children may involve interview questions and/or self-report measures such as the CAPS (Flett et al., 1997). When perfectionism is present, therapists should obtain additional information about specific thoughts, feelings, and behaviors pertaining to perfectionism. This information should include frequency and duration of perfectionist cognitions, areas of life and individuals impacted by perfectionism, sources of perfectionist expectations, and functions of perfectionist behaviors. Child perfectionists should also be screened for depression, suicidality, anxiety, obsessive-compulsiveness, and eating disorders (Clark & Coker, 2009; Jacobs et al., 2009; Libby et al., 2004; Sassaroli & Ruggiero, 2005; Soenens et al., 2008; Stöeber & Rambow, 2007).

Specific tools for assessing perfectionism in children may include self-report measures such as the CAPS to assess perfectionist demands imposed by self and others, the PCI to assess type and frequency of cognitions specially related to perfectionism, and the PSPS-Jr to assess the need to appear perfect to others and conceal imperfections (Flett et al., 1997; 1998; 2000; Hewitt et al., 2011). Self-report measures have the benefit of rapidly providing detailed information about perfectionist tendencies. Targeted interview questions with children and their parents, consultation with teachers, and observations of children can provide more individualized information.

Additional exploration will provide a better understanding of perfectionism in areas of life such as academics, sports, appearance, and social relationships. Mental health practitioners working with perfectionist children should probe for (1) perfectionist cognitions (e.g., "I'm a total failure if I don't earn A grades on every assignment"), (2) feelings associated with perfectionism (e.g., pride, anxiety, sadness, defeat), and (3) behaviors associated with perfectionism (e.g., redoing assignments until they are perfect, refusing to turn in work because it isn't "good enough," losing sleep to over-practice a skill, exercising excessively). Mental health practitioners should also assess functions of perfectionism, which may include gaining positive reinforcement via praise from significant others, earning tangible rewards, experiencing pride and satisfaction associated with success, avoiding disapproval or punishment, and avoiding disappointment and sadness associated with failure to perform perfectly. Assessment of these perfectionism details can provide targets for therapeutic interventions.

Extant research and the present study indicate that parent factors are involved in child perfectionism. Assessment of parent perfectionism, parent symptoms of

depression, anxiety, and obsessive compulsiveness, and parenting style may provide important treatment information. The present findings indicate that maternal factors deserve particular attention. Maternal socially prescribed perfectionism may have a particularly strong impact on socially prescribed perfectionism in children aged 8-12 years. Maternal depression, anxiety, and/or obsessive compulsiveness may influence child perfectionism via related characteristics and behaviors such as criticality, harshness, restrictiveness, withholding of affection, worry, and demandingness. Maternal anxiety and socially prescribed perfectionism in younger children, and maternal depression and self-oriented perfectionism in older children, thus deserve particular consideration. Measures of adult perfectionism and psychopathology such as the MPS – Hewitt and Flett version and SCL-90-R, as well as targeted interview questions and observations of parenting behaviors, may be useful (Derogatis, 1994; Hewitt & Flett, 1991b).

**Treatment.** A number of considerations for the treatment of child perfectionism are worth noting. First, prior research indicates that interventions to address child perfectionism should emphasize development of a healthy therapeutic alliance and a strong social network (Shahar et al., 2004; Zuroff et al., 2000). Perfectionists may also respond better to open-ended therapy rather than time-limited treatment (Blatt et al., 1998). Treatment of problematic perfectionism should also involve exploring possible origins of perfectionism, identifying and challenging maladaptive perfectionist beliefs, creating realistic goals, removing reinforcers of problematic perfectionism, being exposed to making mistakes, and developing coping strategies that address stress and anxiety should be incorporated into treatment of problematic perfectionism (Arpin-Cribbie et al., 2008; Ashbaugh et al., 2007; Craddock et al., 2009; Kutlesa & Arthur,

2008; Rice et al., 2011; Speirs Neumeister, 2004). Effective treatment will facilitate movement from problematic perfectionist behaviors and beliefs to more adaptive goals and cognitions, and must also address comorbid issues such as depression and anxiety (Flett & Hewitt, 2002; Kutlesa & Arthur, 2008).

The present study strongly implicates the involvement of mothers in child perfectionism. Other studies also suggest parent perfectionism, psychopathology, controlling behavior, harshness, withdrawal, and anxiety are involved in child perfectionism, and that child perfectionists often attribute their perfectionism to their parents (Ablard & Parker, 1997; Cook & Kearney, 2009; Hutchinson & Yates, 2008; Kenney-Benson & Pomerantz, 2005; Schuler, 2000; Speirs Neumeister, 2004; Speirs Neumeister et al., 2009; Yoon & Lau, 2008). A family-oriented approach to treatment of child perfectionism may involve educating parents about how their behaviors influence their children's maladaptive perfectionism. Parents can be taught that excessive emphases on avoiding mistakes, performing perfectly, and pleasing others can be detrimental and may contribute to their children adopting the same standards and experiencing negative consequences. Parents can also learn to emphasize learning goals over achievement goals, avoid controlling and critical behavior, express pride in their children, and provide love and attention without conditions. Child perfectionists may benefit from discussing their experiences of perfectionism with their parents in a therapeutic setting. Given the impact of maternal symptoms of depression, anxiety, and obsessive compulsiveness in the present study, treatment of child perfectionism may sometimes benefit from referring parents to individual therapy for their own challenges.

**Study Limitations**

Limitations of the present study should be noted. The first limitation was the use of self-report measures to assess parent and child perfectionism and parent symptoms of psychopathology. Self-report measures can be problematic because they are subjective and study participants may present themselves in a favorable light. Structured interviews and coded observations of perfectionism and psychopathology variables would provide additional detail and could be compared to self-report responses. Confirmatory information from teachers, peers, and significant others would also be useful. Several measures now exist to assess a range of perfectionism-related characteristics in adults and children. The present study used a single pair of scales to measure self-oriented and socially prescribed perfectionism in adults and children, as well as other-oriented perfectionism in adults. Use of additional measures that assess other aspects of perfectionism such as desire to appear perfect to others, motivation to conceal imperfections, automatic thoughts related to perfectionism, and discrepancy between actual and expected performance, would further enhance an understanding of child perfectionism and related parent characteristics. With respect to parent psychopathology, the SCL-90-R was used to efficiently screen symptoms. Future researchers should consider using additional, more detailed measures of depression, anxiety, and obsessive compulsiveness. Additional measures of child well-being, self-esteem, academic success, distress, and/or psychopathology would also allow researchers to differentiate between adaptive and maladaptive child perfectionism, and to better understand which parenting characteristics are risk factors for problematic child perfectionism.

The second limitation of the present study was the inability to draw causal conclusions. Use of longitudinal designs and behavior observations in future perfectionism research could help clarify the impact of parent factors on child perfectionism development. A longitudinal study of parent characteristics and child perfectionism that extends from younger childhood into adulthood could also demonstrate if and when paternal characteristics become involved in child perfectionism.

The third limitation was a lack of sample diversity. Several examined pathways neared statistical significance, so a larger sample size may have led to more substantial meditational effects. Additionally, the present sample was comprised predominantly of European Americans. Although analyses did not reveal significant ethnic differences in perfectionism, the validity of these results may be questionable due to the small numbers of participants from other ethnic groups. The present sample also comprised a large number of families (47.5%) who reported annual incomes of greater than $80,000. Although analyses did not reveal significant differences in perfectionism related to family income, future studies should strive for samples that better represent the population-at-large.

**Conclusions and Recommendations for Future Research**

The present study adds significantly to the perfectionism literature by providing new information about the involvement of parent factors in child perfectionism, as well age-related differences in child perfectionism. Additional research is needed to replicate and expand on the present findings. Research that aims to provide a broader picture of the variables involved in perfectionism development is of particular importance. The development of perfectionism in children is undoubtedly influenced by a number of

factors in addition to parent perfectionism and psychopathology. Genetics, child temperament, attachment style, intelligence, peers, teachers, coaches, and culture may contribute but have received little attention in the literature. Future studies should also investigate whether relationships between child perfectionism and some of these factors vary by age group. For example, peer groups may have a stronger impact on child perfectionism among adolescents than younger children. The present study provided evidence of age-related differences in relationships between child perfectionism and parent perfectionism and psychopathology, which bear replication.

Future researchers should also strive to identify factors that influence the development of adaptive versus maladaptive child perfectionism. The present study did not assess for cumulative effects of having two perfectionist parents, having parent(s) with high perfectionism and symptoms of psychopathology, or having two parents with anxiety, depression, and/or obsessive compulsive symptoms. It would also be useful to examine whether having one non-perfectionist parent mitigates the effects of having a parent who is a perfectionist and/or demonstrates symptoms of psychopathology. Identification of potential protective factors such as high self-esteem, internal locus of control, or strong social skills, could help treat or prevent development of maladaptive perfectionism. Studies that examine specific perfectionism cognitions, need to appear perfect to others, and other aspects of child perfectionism will also improve the present understanding of this construct. Such research may also help differentiate adaptive and maladaptive child perfectionism and should be incorporated into treatment of perfectionism.

Finally, the present findings could be used to develop effective therapeutic strategies for children who demonstrate or are at-risk for maladaptive perfectionism. Although researchers have begun to study the effectiveness of some treatment protocols with child perfectionists, therapeutic techniques that involve parents and address the particular impacts of maternal perfectionism and psychopathology are needed. Therapeutic techniques for child perfectionists should also take into consideration possible age-related differences.

# APPENDIX I

## DEMOGRAPIC QUESTIONNAIRE

This sheet is to be filled out by one or both parents/guardians. The information you provide will be coded numerically and will in no way be associated with you or your child. Please feel free to skip an item if you don't feel comfortable answering it; however it is hoped that you will respond honestly to all items.

1. Child's Birth Date: _____
2. Child's Gender: (circle one) M F
3. Child's Ethnicity: (circle one)

   Asian African-American European-American

   Hispanic Multi/Biracial Native American

   Other: _____
4. Child's grade in school: _____
5. Mother's/Guardian's Name: _____ Age: _____
6. Mother's/Guardian's Ethnicity: (circle one)

   Asian African-American European-American

   Hispanic Multi/Biracial Native American

   Other: _____
7. Father's/Guardian's Name: _____ Age: _____

8. Father's/Guardian's Ethnicity (circle one)

Asian African-American European-American

Hispanic Multi/Biracial Native American

Other: _____

9. Did mother/guardian graduate from high school? Yes No

How many years, if any, did mother/guardian attend school after high school?

_____

10. Did father/guardian graduate from high school? Yes No

How many years, if any, did father/guardian attend school after high school?

_____

11. Mother's/Guardian's Occupation: _____

12. Father's/Guardian's Occupation: _____

13. Number of hours mother/guardian works outside the home per week? _____

14. Number of hours father/guardian works outside the home per week? _____

15. Age (in years) and gender of all siblings of the child participating in the study:

Age: _____ Gender: M F Age: _____ Gender: M F

Age: _____ Gender: M F Age: _____ Gender: M F

Age: _____ Gender: M F Age: _____ Gender: M F

16. Current marital status of parents/guardians of the child participating in the study? (circle one)

Married Never Married Separated Divorced

17. Marital status 1 year ago of parents/guardians of the child participating in the study? (circle one)

Married Never Married Separated Divorced

18. If parents/guardians are separated or divorced, circle one of the following:

Joint custody Mother has custody Father has custody

19. If parents do not have joint custody, how many **hours per month** does the non-custodial parent spend with the child? _____

20. Is one or both of the custodial parents remarried? (circle one) Yes No

If yes, circle one of the following:

Both are remarried Only mother is remarried Only father is remarried

21. Is one of the parents participating in this study a step-parent to the child participant? (circle one)

Yes – a step-mother Yes – a step-father No

If yes, how many years has the step-parent lived with the child? _____

22. Is your child adopted? (circle one) Yes No

If yes, what age was your child when you adopted him/her? _____

23. Has child's mother ever been to therapy? Yes No

Age when attended therapy: _____ What reason: _____

24. Has the child's father ever been to therapy? Yes No

Age when attended therapy: _____ What reason: _____

25. Has the participating child been in therapy? Yes No

Age when attended therapy: _____ What reason: _____

26. Has/have the child's sibling(s) ever been to therapy? Yes No

Age when attended therapy: _____ What reason: _____

27. Has the child ever taken medication for any psychological concerns (e.g., ADHD, depression, anxiety)?

Age when taken: _____ What medication: _____

28. Does your family participate in religion on a regular basis? Yes No

29. Is your child religious? Yes No

30. What is your family's average annual income? _____

31. Please indicate which of the following descriptions best describes you child's school:

___ Public School ___ Religious Private School

___ Non-religious Private School ___ Home School

___ Other (please describe): _____

**In the future, the researcher may want to make brief contact with you again as a follow-up. Of course, your cooperation would, again, be entirely voluntary. Please provide the following contact information if it is all right that someone contact you later.**

Name and Mailing Address:

_____

_____

_____

_____

Telephone number:

Home: _____

Work: _____

# APPENDIX II

## MULTIDIMENSIONAL PERFECTIONSIM SCALE – HEWITT AND FLETT VERSION: SAMPLE ITEMS

Instructions: Listed below are a number of statements concerning personal characteristics and traits. Read each item and decide whether you agree or disagree and to what extent. If you strongly agree, circle 7. If you strongly disagree, circle 1. If you feel somewhere in between, circle one of the numbers between 1 and 7. If you feel neutral or undecided, the midpoint is 4.

Self-Oriented Perfectionism

1. When I am working on something, I cannot relax until it is perfect.

2. One of my goals is to be perfect in everything I do.

Socially Prescribed Perfectionism

3. I find it difficult to meet other's expectations of me.

4. The people around me expect me to succeed at everything I do.

Other-Oriented Perfectionism

5. Everything that others do must be of top-notch quality.

6. I have high expectations for the people who are important to me.

# APPENDIX III

## SYMPTOM CHECKLIST-90 – REVISED: SAMPLE ITEMS

Instructions: Below is a list of problems people sometimes have. Please read each one carefully, and blacken the circle that best describes HOW MUCH THAT PROBLEM HAS DISTRESSED OR BOTHERED YOU DURING THE PAST 7 DAYS INCLUDING TODAY. Blacken the circle for only one number for each problem and do not skip any items. If you need to change your mind, erase your first mark carefully. Read the example before beginning, and if you have any questions please ask them now.

How much were you distressed by: (Items are rated as: 0 = "not at all," 1 = "a little bit," 2 = "moderately," 3 = "quite a bit," or 4 = "extremely")

1. Headaches
2. Worried about sloppiness or carelessness
3. Hearing voices that other people do not hear.
4. Feeling blue.
5. Having to avoid certain things, places, or activities because they frighten you.
6. Overeating.
7. Awakening early in the morning.
8. Having urges to break or smash things.

9. Spells of terror or panic.

10. Having to repeat the same actions such as touching,

# APPENDIX IV

## CHILD-ADOLESCENT PERFECTIONISM SCALE

This is a chance to find out about yourself. It is not a test. There are no right answers and everyone will have different answers. Be sure that your answers show how you actually are. Please do not talk about your answers with anyone else. We will keep your answers private and not show them to anyone.

When you are ready to begin, please read each sentence below and pick your answer by circling a number from "1" to "5". The five possible answers for each sentence are listed below:

1 = False—Not at all true of me

2 = Mostly False

3 = Neither True Nor False

4 = Mostly True

5 = Very True of me

For example, if you were given the sentence "I like to read comic books," you would circle a "5" if this is very true of you. If you were given the sentence "I like to keep my room neat and tidy," you would circle a "1" if this was false and not at all true of you. You are now ready to begin. Please be sure to answer all of the sentence.

| | False | | | | True |
|---|---|---|---|---|---|
| 1. I try to be perfect in everything I do. | 1 | 2 | 3 | 4 | 5 |
| 2. I want to be the best at everything I do. | 1 | 2 | 3 | 4 | 5 |
| 3. My parents don't always expect me to be perfect in everything I do | 1 | 2 | 3 | 4 | 5 |
| 4. I feel that I have to do my best all the time | 1 | 2 | 3 | 4 | 5 |
| 5. There are people in my life who expect me to be perfect. | 1 | 2 | 3 | 4 | 5 |
| 6. I always try for the top score on a test. | 1 | 2 | 3 | 4 | 5 |
| 7. It really bothers me if I don't do my best all the time | 1 | 2 | 3 | 4 | 5 |
| 8. My family expects me to be perfect. | 1 | 2 | 3 | 4 | 5 |
| 9. I don't always try to be the best. | 1 | 2 | 3 | 4 | 5 |
| 10. People expect more from me than I am able to give | 1 | 2 | 3 | 4 | 5 |
| 11. I get mad at myself when I make a mistake. | 1 | 2 | 3 | 4 | 5 |
| 12. Other people think that I have failed if I do not do my very best all the time | 1 | 2 | 3 | 4 | 5 |
| 13. Other people always expect me to be perfect. | 1 | 2 | 3 | 4 | 5 |
| 14. I get upset if there is even one mistake in my work | 1 | 2 | 3 | 4 | 5 |
| 15. People around me expect me to be great at everything. | 1 | 2 | 3 | 4 | 5 |
| 16. When I do something, it has to be perfect. | 1 | 2 | 3 | 4 | 5 |
| 17. My teachers expect my work to be perfect. | 1 | 2 | 3 | 4 | 5 |
| 18. I do not have to be the best at everything I do. | 1 | 2 | 3 | 4 | 5 |
| 19. I am always expected to do better than others. | 1 | 2 | 3 | 4 | 5 |
| 20. Even when I pass, I feel that I have failed if I didn't get one of the highest marks in the class. | 1 | 2 | 3 | 4 | 5 |

21. I feel that people ask too much of me. .....1 2 3 4 5

22. I can’t stand to be less than perfect. .....1 2 3 4 5

APPENDIX V: IRB APPROVAL

UNLV
UNIVERSITY OF NEVADA LAS VEGAS

# Social/Behavioral IRB – Expedited Review
# Approval Notice

***NOTICE TO ALL RESEARCHERS:***

*Please be aware that a protocol violation (e.g., failure to submit a modification for any change) of an IRB approved protocol may result in mandatory remedial education, additional audits, re-consenting subjects, researcher probation suspension of any research protocol at issue, suspension of additional existing research protocols, invalidation of all research conducted under the research protocol at issue, and further appropriate consequences as determined by the IRB and the Institutional Officer.*

**DATE:** March 2, 2009

**TO:** **Dr. Christopher Kearney**, Psychology

**FROM:** Office for the Protection of Research Subjects

**RE:** Notification of IRB Action by Dr. J. Michael Stitt, Chair
Protocol Title: **Personality Characteristics of Parents and Children: A Cross-Sectional Study**
Protocol #: 0812-2957

---

This memorandum is notification that the project referenced above has been reviewed by the UNLV Social/Behavioral Institutional Review Board (IRB) as indicated in Federal regulatory statutes 45 CFR 46. The protocol has been reviewed and approved.

The protocol is approved for a period of one year from the date of IRB approval. The expiration date of this protocol is February 17, 2010. Work on the project may begin as soon as you receive written notification from the Office for the Protection of Research Subjects (OPRS).

**PLEASE NOTE:**
Attached to this approval notice is the **official Informed Consent/Assent (IC/IA) Form** for this study. The IC/IA contains an official approval stamp. Only copies of this official IC/IA form may be used when obtaining consent. Please keep the original for your records.

Should there be *any* change to the protocol, it will be necessary to submit a **Modification Form** through OPRS. No changes may be made to the existing protocol until modifications have been approved by the IRB.

Should the use of human subjects described in this protocol continue beyond February 17, 2010, it would be necessary to submit a **Continuing Review Request Form** *60 days* before the expiration date.

If you have questions or require any assistance, please contact the Office for the Protection of Research Subjects at OPRSHumanSubjects@unlv.edu or call 895-2794.

Office for the Protection of Research Subjects
4505 Maryland Parkway • Box 451047 • Las Vegas, Nevada 89154-1047
(702) 895-2794 • FAX: (702) 895-0805

Table 2

Percentage of Children Attending Each Type of School From Each Age Group

| | Age Group | | | | |
|---|---|---|---|---|---|
| Type of School | 8-9 years[a] | 10-11 years[a] | 12-13 years[b] | 14-15 years[b] | 16-17 years[b] |
| Public | 62.9 | 65.7 | 80.0 | 70.0 | 76.7 |
| Religious Private | 20.0 | 14.3 | - | 6.7 | - |
| Non-Religious Private | 8.6 | 8.6 | 3.3 | 10.0 | - |
| Home-Based | 8.6 | 11.4 | 6.7 | 10.0 | 13.3 |
| Other | - | - | 10.0 | 3.3 | 10.0 |

*Note.* [a]$n = 35$. [b]$n = 30$

Table 3

Percentage of Families with Single and Multiple Child Participants

| | Family Type | |
|---|---|---|
| Number of Child Participants from Family | Dual Parent ($n$ = 82) | Single Parent ($n$ = 34) |
| 1 | 43.1 | 19.0 |
| 2 | 27.6 | 10.3 |

*Note.* Total sample included 160 children from 116 different families. A maximum of 2 children participated from each family.

Table 4

Means and Standard Deviations for Perfectionism Scores

| | Self-Oriented Perfectionism | Socially Prescribed Perfectionism | Other-Oriented Perfectionism |
|---|---|---|---|
| Participant Group | *M (SD)* | *M (SD)* | *M (SD)* |
| Combined children [a] | 36.57 (9.20) | 26.17 (8.39) | – |
| Female children[b] | 36.28 (9.49) | 25.22 (8.42) | – |
| Male children[c] | 36.97 (8.85) | 27.51 (8.22) | – |
| Mothers[d] | 51.06 (10.09) | 51.03 (8.67) | 48.97 (8.94) |
| Fathers[e] | 49.91 (9.22) | 50.23 (10.24) | 47.98 (8.60) |

*Note.* [a]$n$ = 160. [b]$n$ = 93. [c]$n$ = 67. [d]$n$ = 155. [e]$n$ = 119

Table 5

Means and Standard Deviations for Perfectionism Scores by Age Group

| | Self-Oriented Perfectionism | Socially Prescribed Perfectionism |
|---|---|---|
| Age Group | *M (SD)* | *M (SD)* |
| 8-9 years[a] | 35.40 (7.13) | 25.51 (9.17) |
| 10-11 years[a] | 36.06 (9.69) | 24.74 (6.61) |
| 12-13 years[b] | 33.83 (8.10) | 24.47 (9.00) |
| 14-15 years[b] | 36.70 (9.60) | 28.23 (7.91) |
| 16-17 years[b] | 41.13 (10.28) | 28.27 (8.85) |

*Note.* [a]$n$ = 35. [b]$n$ = 30

Table 6

Means and Standard Deviations for SCL-90-R Subscales

| | Mean | Standard Deviation |
|---|---|---|
| Maternal Symptoms[a] | | |
| Obsessive-compulsive | 55.54 | 10.59 |
| Depression | 55.27 | 10.44 |
| Anxiety | 50.29 | 10.18 |
| Paternal Symptoms[b] | | |
| Obsessive-compulsive | 56.74 | 10.70 |
| Depression | 55.48 | 10.92 |
| Anxiety | 51.45 | 11.32 |

*Note.* [a]$n = 155$. [b]$n = 119$

Table 7

Pearson Correlation Coefficients for Primary Variables

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. CAPS self-oriented | - | .42** | .15 | .07 | .21** | .01 | -.02 | -.06 | .19* | .15 | .21* | .06 | .09 | .04 |
| 2. CAPS socially prescribed | | - | .06 | .22** | .29** | .00 | .00 | -.04 | .19* | .18* | .16 | .04 | .07 | .04 |
| 3. Mother MPS self-oriented | | | - | .41** | .45** | .23* | .18 | .19* | .21** | .12 | .14 | .08 | .04 | .22* |
| 4. Mother MPS other-oriented | | | | - | .38** | .20* | .37** | .07 | .17* | .09 | .04 | .23* | .12 | .34* |
| 5. Mother MPS socially prescribed | | | | | - | .06 | .05 | .21* | .34** | .33** | .33** | .18* | .22* | .16 |
| 6. Father MPS self-oriented | | | | | | - | .70** | .38* | -.03 | .06 | -.07 | .07 | .02 | .20* |
| 7. Father MPS other-oriented | | | | | | | - | .32** | .05 | .06 | -.05 | .12 | .07 | .26** |
| 8. Father MPS socially prescribed | | | | | | | | - | .11 | .20* | .12 | .04 | .10 | .10 |
| 9. Mother SCL-90-R anxiety | | | | | | | | | - | .79** | .69** | .28** | .25** | .20* |
| 10. Mother SCL-90-R depression | | | | | | | | | | - | .71** | .28* | .24* | .14 |
| 11. Mother SCL-90-R obsessive-compulsive | | | | | | | | | | | - | .33** | .43** | .31** |
| 12. Father SCL-90-R anxiety | | | | | | | | | | | | - | .75** | .72** |
| 13. Father SCL-90-R depression | | | | | | | | | | | | | - | .84** |
| 14. Father SCL-90-R obsessive-compulsive | | | | | | | | | | | | | | - |

Note: CAPS: Child-Adolescent Perfectionism Scale; MPS: Multidimensional Perfectionism Scale; SCL-90-R: Symptom Checklist 90 – Revised

*$p < .05$, two-tailed. **$p < .01$, two-tailed.

References

Ablard, K. E., & Parker, W. D. (1997). Parents' achievement goals and perfectionism in their academically talented children. *Journal of Youth and Adolescence, 26*, 651-667. doi: 10.1023/A:1022392524554

Abramson, L., Metalsky, G., & Alloy, L. (1989). Hopelessness depression: A theory-based subtype of depression. *Psychological Review, 96*, 358-372. doi: 10.1037/0033-295X.96.2.358

Accordino, D. B., Accordino, M. P., & Slaney, R. (2000). An investigation of perfectionism, mental health, achievement, and achievement motivation in adolescents. *Psychology in the Schools, 37*, 535-545. doi:10.1002/1520-6807(200011)37:6<535::AID-PITS6>3.0.CO;2-O

Adler, A. (1956). The neurotic disposition. In L. Ansbacher & R. R. Ansbacher (Eds.), *The individual psychology of Alfred Adler* (pp. 239-262). New York: Harper.

Aldea, M., Rice, K., Gormley, B., & Rojas, A. (2010). Telling perfectionists about their perfectionism: Effects of providing feedback on emotional reactivity and psychological symptoms. *Behaviour Research and Therapy, 48*, 1194-1203. doi:10.1016/j.brat.2010.09.003

Aldea, M. A., & Rice, K. (2006). The role of emotional dysregulation in perfectionism and psychological distress. *Journal of Counseling Psychology, 53*, 498-510. doi:10.1037/0022-0167.53.4.498

Alden, L. E., Ryder, A. G., & Mellings, T. M. (2002). Perfectionism in the context of social fears: Toward a two-component model. In G. L. Flett & P. L. Hewitt (Eds.),

*Perfectionism: Theory, research, and treatment* (pp. 373-391). Washington, DC: American Psychological Association.

Alnaes, R., & Torgersen, S. (1990). Parental representation in patients with major depression, anxiety disorder, and mixed conditions. *Acta Psychiatrica Scandinavica, 81*, 518-522. doi:10.1111/j.1600-0447.1990.tb05491.x

American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text revision). Washington, DC: Author.

Anderman, E., & Maehr, M. (1994). Motivation and schooling in the middle grades. *Review of Educational Research, 64*, 287-309. doi:10.3102/00346543064002287

Andrews, G., Stewart, G., Allen, R., & Henderson, A. S. (1990). The genetics of six anxiety disorders: A twin study. *Journal of Affective Disorders, 19*, 23-29. doi:10.1016/0165-0327(90)90005-S

Antony, M., Purdon, C., Huta, V., & Swinson, R. (1998). Dimensions of perfectionism across anxiety disorders. *Behaviour Research and Therapy, 36*, 1143-1154. doi: 10.1016/S0005-7967(98)00083-7

Archer, R. P. (2005). *MMPI-A: Assessing adolescent psychopathology* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.

Areepattamannil, S. (2010). Parenting practices, parenting style, and children's school achievement. *Psychological Studies, 55*, 283-289. doi:10.1007/s12646-010-0043-0

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*, 469–480. doi:10.1037/0003-066X.55.5.469

Arnett, J. J. (2004). The road to college: Twists and turns. In J. J. Arnett (Ed.), *Emerging adulthood: The winding road from the late teens through the twenties* (pp. 119–141). New York: Oxford University Press.

Arpin-Cribbie, C., Irvine, J., Ritvo, P., Cribbie, R., Flett, G., & Hewitt, P. (2008). Perfectionism and psychological distress: A modeling approach to understanding their therapeutic relationship. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 26*, 151-167. doi:10.1007/s10942-007-0065-2

Ashbaugh, A., Antony, M. M., Liss, A., Summerfeldt, L. J., McCabe, R. E., & Swinson, R. P. (2007). Changes in perfectionism following cognitive behavioral treatment for social phobia. *Depression and Anxiety, 24*, 169-177. doi:10.1002/da.20219

Ashby, J., Dickinson, W., Gnilka, P., & Noble, C. (2011). Hope as a mediator and moderator of multidimensional perfectionism and depression in middle school students. *Journal of Counseling & Development, 89*, 131-139. Retrieved from: http://www.counseling.org/publications

Ashby, J., & Kottman, T. (1996). Inferiority as a distinction between normal and neurotic perfectionism. *Journal of Individual Psychology, 52*, 237-245. Retrieved from: http://www.utexas.edu/utpress/journals/jip.html

Ashby, J., Mangine, J. D., & Slaney, R. (1995). An investigation of perfectionism in a university sample of adult children of alcoholics. *Journal of College Student Development, 36*, 452-455. Retrieved from: http://www.jcsdonline.org

Ashby, J., Rice, K., & Martin, J. L. (2006). Perfectionism, shame, and depressive symptoms. *Journal of Counseling and Development, 84*, 148-156. Retrieved from: http://www.counseling.org/publications

Aunola, K., Stattin, H., & Nurmi, J. (2000). Parenting styles and adolescents' achievement strategies. *Journal of Adolescence, 23,* 205-222. doi:10.1006/jado.2000.0308

Bachner-Melman, R., Lerer, E., Zohar, A. H., Kremer, I., Elizur, Y., Nemanov, L., . . . Ebstein, R. (2007). Anorexia nervosa, perfectionism, and dopamine D4 receptor (DRD4). *American Journal of Genetics Part B: Neuropsychiatric Genetics, 144,* 748-756. doi:10.1002/ajmg.b.30505

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A., Grusec, J. E., & Menlove, F. L. (1966). Observational learning as a function of symbolization and incentive set. *Child Development, 37,* 499-506. doi:10.2307/1126674

Bandura, A., & Kupers, C. J. (1964). Transmission of patterns of self-reinforcement through modeling. *Journal of Abnormal and Social Psychology, 69,* 1-9. doi:10.1037/h0041187

Bardone-Cone, A., Joiner, T., Jr., Crosby, R., Crow, S., Klein, M., le Grange, D., . . . Wonderlich, S. (2008). Examining a psychosocial interactive model of binge eating and vomiting in women with bulimia nervosa and subthreshold bulimia nervosa. *Behaviour Research and Therapy, 4*6, 887-894. doi:10.1016/j.brat.2008.04.003

Bardone-Cone, A., Weishuhn, A., & Boyd, C. (2009). Perfectionism and bulimic symptoms in African American college women: Dimensions of perfectionism and their interactions with perceived weight status. *Journal of Counseling Psychology, 56,* 266-275. doi:10.1037/a0015003

Barker-Collo, S. L. (2003). Culture and validity of the Symptom Checklist-90-Revised and profile of mood states in a New Zealand student sample. *Cultural Diversity and Ethnic Minority Psychology, 9*, 185-196. doi:10.1037/1099-9809.9.2.185

Barrett, P.M. & Dadds, M.M. (1996). Family processes in child and adolescent anxiety and depression. *Behaviour Change, 13*, 231-239. Retrieved from: https://www .australianacademicpress.com.au/journals/details/12/Behaviour_Change

Barrett, P. M., Fox, T., & Farrell, L. (2005). Parent-child interactions with anxious children and their siblings: An observational study. *Behaviour Change, 22*, 220-235. doi:10.1375/bech.22.4.220

Barrett, P. M., Rapee, R. M., Dadds, M. R., & Ryan, S. M. (1996). Family enhancement of cognitive style in anxious and aggressive children: Treat bias and the FEAR effect. *Journal of Abnormal Child Psychology, 24*, 187-203. doi: 10.1007/BF01441484

Barrow, J. C., & Moore, C. A. (1983). Group interventions with perfectionist thinking. *The Personnel and Guidance Journal, 61*, 612-615. Retrieved from: http://www.counseling.org/publications

Bastiani, A. M., Rao, R., Weltzin, T., & Kaye, W. H. (1995). Perfectionism in anorexia nervosa. *International Journal of Eating Disorders, 17*, 147-152. doi:10.1002/1098-108X(199503)17:2<147::AID-EAT2260170207>3.0.CO;2-X

Baumrind, D. H. (1971). Current patterns of paternal authority. *Developmental Psychology Monographs, 4* (No. 1, Pt. 2). doi:10.1037/h0030372

Bayer, J. K., Sanson, A. V., & Hemphill, S. A. (2006). Parent influences on early childhood internalizing difficulties. *Journal of Applied Developmental Psychology, 27*, 542-559. doi:10.1016/j.appdev.2006.08.002

Beardslee, W. R., Versage, E. M., & Gladstone, T. R. (1998). Children of affectively ill parents: A review of the past 10 years. *Journal of the American Academy of Child Psychiatry, 37*, 1134-1141. doi:10.1097/00004583-199811000-00012

Beck, A. (1993). Cognitive therapy: Past, present and future. Journal of Consulting and Clinical Psychology, 61, 194-169. doi:10.1037/0022-006X.61.2.194

Beck, A. , Rush, A., Shaw, B., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford.

Becker, K., & Ginsburg, G. (2011). Maternal anxiety, behaviors, and expectations during a behavioral task: Relation to children's self-evaluations. *Child Psychiatry and Human Development, 42,* 320-333. doi:10.1007/s10578-011-0216-7

Beevers, C. G., & Miller, I. W. (2004). Perfectionism, cognitive bias, and hopelessness as prospective predictors of suicidal ideation. *Suicide and Life-Threatening Behavior, 34,* 126-137. doi:10.1521/suli.34.2.126.32791

Beidel, D. C., & Turner, S. M. (1997). At risk for anxiety: I. Psychopathology in the offspring of anxious parents. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*, 918-924. doi:10.1097/00004583-199707000-00013

Bell, J., Stanley, N., Mallon, S., & Manthorpe, J. (2010). The role of perfectionism in student suicide: Three case studies from the UK. *OMEGA: Journal of Death & Dying, 61*, 251-267. doi:10.2190/OM.61.3.e

Besharat, M. A. (2003). Parental perfectionism and children's test anxiety. *Psychological Reports, 93,* 1049-1055. doi:10.2466/PR0.93.8.1049-1055

Besser, A., Flett, G., & Hewitt, P. (2010). Perfectionistic self-presentation and trait perfectionism in social problem-solving ability and depressive symptoms. *Journal of Applied Social Psychology, 40*, 2121-2154. doi:10.1111/j.1559-1816.2010.00653.x

Besser, A., Flett, G., Hewitt, P., & Guez, J. (2008). Perfectionism and cognitions, affect, self-esteem, and physiological reactions in a performance situation. *Journal of Rational-Emotive and Cognitive-Behavior Therapy, 26*, 206-228. doi:10.1007/s10942-007-0067-0

Biederman, J., Hirshfeld-Becker, D. R., Rosenbaum, J. F., Herot, C., Friedman, D., Snidman, N., . . . Faraone, S. (2001). Further evidence of association between behavioral inhibition of social anxiety in children. *American Journal of Psychiatry, 158*, 1673-1679. doi:10.1176/appi.ajp.158.10.1673

Biederman, J., Rosenbaum, J. F., Bolduc-Murphy, E. A., Faraone, S. V., Chaloff, J., Hirschfeld, D. R., et al. (1993). A 3-year follow-up of children with and without behavioural inhibition. *Journal of the American Academy of Child and Adolescent Psychiatry, 32*, 814-821. doi:10.1097/00004583-199307000-00016

Bieling, P. J., Israeli, A. L., & Antony, M. M. (2003). Is perfectionism good, bad, or both? Examining models of the perfectionism construct. *Personality and Individual Differences, 36*, 1373-1385. doi:10.1016/S0191-8869(03)00235-6

Bieling, P. J., Israeli, A. L., Smith, J., & Antony, M. M. (2003). Making the grade: The behavioral consequences of perfectionism in the classroom. *Personality and Individual Differences, 35*, 163-178. doi:10.1016/S0191-8869(03)00235-6

Bieling, P. J., Summerfeldt, L. J., Israeli, A. L., & Antony, M. M. (2004). Perfectionism as an explanatory construct in comorbidity of axis I disorders. *Journal of Psychopathology*

*and Behavioral Assessment, 26,* 193-201. doi:10.1023/B:JOBA.0000022112.27186.98

Biran, M. W., & Reese, C. (2007). Parental influences on social anxiety: The sources of perfectionism. *American Psychoanalytic Association, 55,* 282-285. doi: 10.1177/00030651070550010108

Black, D. W., Gaffney, G., Schlosser, S., & Gabel, J. (1998). The impact of obsessive-compulsive disorder on the family: Preliminary findings. *Journal of Nervous and Mental Disease, 186,* 440-442. doi:10.1097/00005053-199807000-00010

Black, D. W., Gaffney, G., Schlosser, S., & Gabel, J. (2003). Children of parents with obsessive-compulsive disorder: A 2-year follow-up study. *Acta Psychiatrica Scandinavica, 107,* 305-313. doi:10.1034/j.1600-0447.2003.02182.x

Blankstein, K. R., & Dunkley, D. M., (2002). Evaluative concerns, self-critical, and personal standards perfectionism: A structural equation modeling strategy. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 285-316). Washington, DC: American Psychological Association. doi:10.1037/10458-012

Blankstein, K. R., Flett, G., Hewitt, P., & Eng, A. (1993). Dimensions of perfectionism and irrational fears: An examination with the Fear Survey Schedule. *Personality and Individual Differences, 15,* 323-328. doi:10.1016/0191-8869(93)90223-P

Blankstein, K. R., & Gray, L. (1998). Psychological distress and the frequency of perfectionistic thinking. *Journal of Personality and Social Psychology, 75,*1363-1381. doi:10.1037/0022-3514.75.5.1363

Blankstein, K., & Lumley, C. (2008). Multidimensional perfectionism and ruminative brooding in current dysphoria, anxiety, worry, and anger. *Journal of Rational-*

*Emotive & Cognitive-Behavior Therapy, 26*, 168-193. doi:10.1007/s10942-007-0068-z

Blanton, H., Buunk, B., Gibbons, F., & Kyuper, H. (1999). When better-than-others compare upward: Choice of comparison and comparative evaluation as independent predictors of academic performance. *Journal of Personality and Social Psychology, 76*, 420-430. doi:10.1037/0022-3514.76.3.420

Blatt, S. J. (1995). The destructiveness of perfectionism: Implications for the treatment of depression. *American Psychologist, 50*, 1003-1020. doi:10.1037//0003-066X.50.12.1003

Blatt, S. J., Quinlan, D. M., Pilkonis, P. A., & Shea, T. (1995). Impact of perfectionism and need for approval on the brief treatment of depression: The National Institute of Mental Health Treatment of Depression Collaborative Research Program revisited. *Journal of Clinical and Consulting Psychology, 63*, 125-132. doi:10.1037//0022-006X.63.1.125

Blatt, S. J., & Zuroff, D. C. (2002). Perfectionism in the therapeutic process. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 5-29). Washington, DC: American Psychological Association. doi:10.1037/10458-016

Blatt, S. J., Zuroff, D. C., Bondi, C. M., Sanislow, C. A., & Pilkonis, P. A. (1998). When and how perfectionism impedes the brief treatment of depression: Further analysis of the National Institute of Mental Health treatment of depression collaborative research program. *Journal of Consulting and Clinical Psychology, 66*, 423-428. doi:10.1037//0022-006X.66.2.423

Boegers, J., Spirito, A., & Donaldson, D. (1998). Reasons for adolescent suicide attempts: Associations with psychological functioning. *Journal of the American Academy of Child and Adolescent Psychiatry, 37*, 1287-1293. doi:10.1097/00004583-199812000-00012

Bögels, S. M., & Brechman-Toussaint, M. L. (2006). Family issues in child anxiety: Attachment, family functioning, parental rearing and beliefs. *Clinical Psychology Review, 26*, 834-856. doi:10.1016/j.cpr.2005.08.001

Bögels, S. M., van Oostern, A., Muris, P., & Smulders, D. (2001). Familial correlates of social anxiety in children and adolescents. *Behaviour Research and Therapy, 39*, 273-287. doi:10.1016/S0005-7967(00)00005-X

Bouchard, T. J., Jr., & Loehlin, J. C. (2001). Genes, evolution, and personality. *Behavior Genetics, 31*, 243-273. doi:10.1023/A:1012294324713

Bouchard, C., Rheaume, J., & Ladouceur, R. (1999). Responsibility and perfectionism in OCD: An experimental study. *Behaviour Research and Therapy, 37*, 239-248. doi:10.1016/S0005-7967(98)00141-7

Bouma, E. M., Ormel, J., Verulst, F. C., & Oldehinkel, A. J. (2008). Stressful life events and depressive problems in early adolescent boys and girls: The influence of parental depression, temperament, and family environment. *Journal of Affective Disorders, 105*, 185-193. doi:10.1016/j.jad.2007.05.007

Brannan, M., & Petrie, T. (2008). Moderators of the body dissatisfaction-eating disorder symptomatology relationship: Replication and extension. *Journal of Counseling Psychology, 55*, 263-275. doi:10.1037/0022-0167.55.2.263

Braver, M. L. (1996). *Distinguishing normal and pathological perfectionism in college students: Dimensions of the Almost Perfect Scale – Revised and patterns of relationship with academic performance and psychological functioning*. (Unpublished doctoral dissertation). The Pennsylvania State University, University Park, PA.

Brookings, J. B., & Wilson, J. F. (1994). Personality and the family – environmental predictors of self-reported eating attitudes and behaviors. *Journal of Personality Assessment, 63*, 313-326. doi: 10.1207/s15327752jpa6302_10

Brown, G. P., & Beck, A. T. (2002). Dysfunctional attitudes, perfectionism, and models of vulnerability to depression. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 231-252). Washington, DC: American Psychological Association. doi:10.1037/10458-010

Brown, G. W., & Harris, T. O. (1978). *Social origins of depression: A study of psychiatric disorder in women*. New York: Free Press.

Brown, B. B., & Klute, C. (2003). Friends, cliques, and crowds. In G. R. Adams & M. D. Berzonsky (Eds.), *Blackwell handbook of adolescence* (pp. 330–348). Malden, MA: Blackwell.

Bruch, M. A., & Heimberg, R. G. (1994). Differences in perceptions of parental and personal characteristics between generalized and nongeneralized social phobics. *Journal of Anxiety Disorders, 8*, 155-168. doi:10.1016/0887-6185(94)90013-2

Bruch, M. A., & Heimberg, R. G., Berger, P., & Collins, T. M. (1989). Social phobia and perceptions of early parental and personal characteristics. *Anxiety Research, 2*, 57-65. doi:10.1080/08917778908249326

Buckley, A. F., & Woodruff-Borden, J. (2006). Maternal modeling of coping: Relation to child anxiety. *Child and Family Behavior Therapy, 28,* 59-80. doi:10.1300/J019v28n04_04

Bulik, C. M., Tozzi, F., Anderson, C., Mazzeo, S. E., Aggen, S., & Sullivan, P. F. (2003). The relation between eating disorders and components of perfectionism. *American Journal of Psychiatry, 160,* 366-368. doi:10.1176/appi.ajp.160.2.366

Burhans, K. K., & Dweck, C. S. (1995). Helplessness in early childhood: The role of contingent worth. *Child Development, 66,* 1719-1738. doi:10.2307/1131906

Burns, D. D. (1980, November). The perfectionist's script for self-defeat. *Psychology Today*, 34-51. Retrieved from: http://www.ucdenver.edu/life/services/counseling-center/Documents/The-Perfectionists-Script-for-Self-Defeat.pdf

Burns, L. R., & Fedewa, B. A. (2005). Cognitive styles: Links with perfectionistic thinking. *Personality and Individual Differences, 38,* 103-113. doi:10.1016/j.paid.2004.03.012

Burstein, M., Ginsburg, G., & Tein, J. (2010). Parental anxiety and child symptomatology: An examination of addictive and interactive effects of parent psychopathology. *Journal of Abnormal Child Psychology, 38,* 897-909. doi:10.1007/s10802-010-94150

Burt, K. B., VanDulmen, M. H., Carlivati, J., Egeland, B., Sroufe, L. A., Forman, D. R., . . . Carlson, A. (2005). Mediating links between maternal depression and offspring psychopathology: The importance of independent data. *Journal of Child Psychology and Psychiatry, 46,* 490-499. doi:10.1111/j.1469-7610.2004.00367.x

Campbell, J. D., & Di Paula, A. (2002). Perfectionistic self-beliefs: Their relation to personality and goal pursuit. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism:*

*Theory, research, and treatment* (pp. 181-198). Washington, DC: American Psychological Association. doi:10.1037/10458-007

Canals, J., Sancho, C., & Arija, M. (2009). Influence of parent's eating attitudes on eating disorders in school adolescents. *European Journal of Child and Adolescent Psychiatry, 18*, 353-359. doi:10.1007/s00787-009-0737-9

Carbonaro, W. (2005). Tracking, students' effort, and academic achievement. *Sociology of Education, 78*, 27-49. doi:10.1177/003804070507800102

Caster, J. B., Inderbitzen, M., & Hope, D. (1999). Relationship between youth and parent perceptions of family environment and social anxiety. *Journal of Anxiety Disorders, 13*, 237-251. doi:10.1016/S0887-6185(99)00002-X

Castro, J., Gila, A., Gual, P., Lahortiga, F., Saura, B., & Toro, J. (2004). Perfectionism dimensions in children and adolescents with anorexia nervosa. *Journal of Adolescent Health, 35*, 392-398. doi:10.1016/S1054-139X(04)00052-7

Castro, J. R., & Rice, K. (2003). Perfectionism and ethnicity: Implications for depressive symptoms and self-reported academic achievement. *Cultural Diversity and Ethnic Minority Psychology, 9*, 64-78. doi:10.1037//1099-9809.9.1.64

Castro-Fornieles, J., Gual, P., Lahortiga, F., Gila, A., Casula, V., Fuhrmann, C., . . . Toro, J. (2007). Self-oriented perfectionism in eating disorders. *International Journal of Eating Disorders, 40*, 562-568. doi:10.1002/eat.20393

Catipovic-Veselica, K., Amidzic, V., Buric, D., Ilakovac, V., Skrinjaric-Cincar, S., Caripovic, B., . . . Lauc, A. (1995). Type A/B behavior and eight basic emotions in 1,084 employees. *Psychological Reports, 76*, 1019-1024. doi: 10.2466/pr0.1995.76.3.1019

Chan, D. (2000). Dimensionality and typology of perfectionism: The use of the Frost Multidimensional Perfectionism Scale with Chinese gifted students in Hong Kong. *Gifted Child Quarterly, 53*, 174-187. doi:10.1177/0016986209334963

Chang, E. (1998). Cultural differences, perfectionism, and suicidal risk in a college population: Does social problem solving still matter? *Cognitive Therapy and Research, 22*, 237-254. doi:10.1023/A:1018792709351

Chang, E. (2000). Perfectionism as a predictor of positive and negative psychological outcomes: Examining a mediational model in younger and older adults. *Journal of Counseling Psychology, 47*, 18-26. doi:10.1037//0022-0167.47.1.18

Chang, E., Ivezaj, V., Downey, C. A., Kashima, Y., & Morady, A. R. (2008). Complexities of measuring perfectionism: Three popular perfectionism measures and their relations with eating disturbances and health behaviors in a female college student sample. *Eating Behaviors, 9*, 102-110. doi:10.1016/j.eatbeh.2007.06.003

Chang, E., & Rand, K. L. (2000). Perfectionism as a predictor of subsequent adjustment: Evidence for a specific diathesis-stress mechanism among college students. *Journal of Counseling Psychology*, *47*, 129-137. doi:10.1037//0022-0167.47.1.129

Chang, E., & Sanna, L. J. (2001). Negative attributional style as a moderator of the link between perfectionism and depressive symptoms: Preliminary evidence for an integrative model. *Journal of Counseling Psychology, 48*, 490-495. doi:10.1037//0022-0167.48.4.490

Chang, E., Watkins, A. F., & Banks, K. H. (2004). How adaptive and maladaptive perfectionism relate to positive and negative psychological functioning: Testing a

stress-mediation model in Black and White female college students. *Journal of Counseling Psychology, 51,* 93-102. doi:10.1037/0022-0167.51.1.93

Chang, R., & Chang, E. (2009). Effects of socially prescribed expectations on emotions and cognitions in Asian and European Americans. *Cognitive Therapy Research, 33,* 272-282. doi:10.1007/s10608-008-9187-9

Cheung, S., & Pomerantz, E. M. (2011). Parents' involvement in children's learning in the United States and China: A longitudinal investigation. *Child Development, 82,* 932-950. doi:10.1111/j.1467-8624.2011.01582.x

Chik, H., Whittal, M., & O'Neill. (2008). Perfectionism and treatment outcome in obsessive-compulsive disorder. *Cognitive Therapy Resources, 32,* 676-688. doi:10.1007/s10608-007-9133-2

Chorpita, B. F., & Barlow, D. H. (1998). The development of anxiety: The role of control in the early environment. *Psychological Bulletin, 124,* 3-21. doi:10.1037//0033-2909.124.1.3

Choy, G. & McInerney, V. (2005). *Perfectionism, self-concepts, and self-evaluative emotions in Australian primary school students.* Proceedings of the 2005 Australian Association of Research in Education Annual Conference. Melbourne: AARE.

Christensen, B. J., Danko, G. P., & Johnson, R. (1993). Neuroticism and the belief that one is being scrutinized and evaluated by others. *Personality and Individual Differences, 15,* 349-350. doi:10.1016/0191-8869(93)90228-U

Chung, H., Elias, M., & Schneider, K. (1998). Patterns of individual adjustment changes during middle school transition. *Journal of School Psychology,* 36, 83–101. doi:10.1016/S0022-4405(97)00051-4

Cicchetti, D., & Toth, S. L. (1998). The development of depression in children and adolescents. *American Psychologist, 53,* 221-241. doi:10.1037//0003-066X.53.2.221

Clark, S., & Coker, S. (2009). Perfectionism, self-criticism and maternal criticism: A study of mothers and their children. *Personality and Individual Differences, 47*, 321-325. doi:10.1016/j.paid.2009.03.020

Clark, M., Lelchook, A., & Taylor, M. (2010). Beyond the Big Five: How narcissism, perfectionism, and dispositional affect relate to workaholism. *Personality and Individual Differences, 48*, 786-791. doi:10.1016/j.paid.2010.01.013

Clavin, S. L., Clavin, R. H., Gayton, W. F., & Broida, J. (1996). Continued validation of the Multidimensional Perfectionism Scale. *Psychological Reports, 78,* 732-734. doi:10.2466/pr0.1996.78.3.732

Clinedinst, M. Hurley, S., & Hawkins, D. (2011). *State of college admission 2011*. Retrieved from National Association for College Admission Counseling website: http://www .nacacnet.org/PublicationsResources/Research/Documents/2011SOCA.pdf

Cloninger, C. R. (1987). A systematic method for clinical description and classification of personality variants. *Archives of General Psychiatry*, *44*, 573-588. Retrieved from: http://archpsyc.ama-assn.org/

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.

Collins, W., & Russell, G. (1991). Mother-child and father-child relationships in middle childhood and adolescence: A developmental analysis. *Developmental Review, 11,* 99-136. doi:10.1016/0273-2297(91)90004-8

Compas, B., Howell, D., Phares, V., Williams, R., & Ledoux, N. (1989). Parent and child stress and symptoms: An integrative analysis. *Developmental Psychology, 25*, 550-559. doi:10.1037/0012-1649.25.4.550

Connell, A., & Goodman, S. (2002). The association between psychopathology in fathers versus mothers and children's internalizing and externalizing behavior problems: A meta-analysis. *Psychological Bulletin, 128*, 746-773. doi: 10.1037//0033-2909.128 .5.746

Cook, L. C., & Kearney, C. A. (2009). Parent and youth perfectionism and internalizing psychopathology. *Personality and Individual Differences, 46*, 325-330. doi:10.1016 /j.paid.2008.10.029

Cook, T., Deng, Y., & Morgano, E. (2007). Friendship influences during early adolescence: The special role of friends' grade point average. *Journal of Research on Adolescence, 17*, 325-356. doi:10.1111/j.1532-7795.2007.00525.x

Cooper, Z., Cooper, P. J., & Fairburn, C. G. (1985). The specificity of the Eating Disorder Inventory. *British Journal of Clinical Psychology, 24*, 129-130. doi:10.1111/j.2044-8260.1985.tb01324.x

Cooper, P., Fearn, V., Willets, L., Seabrook, H., & Parkinson, M. (2006). Affective disorder in the parents of a clinic sample of children with anxiety disorders. *Journal of Affective Disorders, 93*, 205-212. doi:10.1016/j.jad.2006.03.017

Costa, P. T., & McCrae, R. R. (1990b). Personality disorders and the five-factor model of personality. *Journal of Personality Disorders, 4*, 362-371. doi:10.1037/10140-000

Costa, P. T., & McCrae, R. R. (1992). Four ways five factors are basic. *Personality and Individual Differences, 13*, 653-665. doi:10.1016/0191-8869(92)90236-I

Costa, P. T., & McCrae, R. R. (1997). Stability and change in personality assessment: The revised NEO Personality Inventory in the year 2000. *Journal of Personality Assessment, 68*, 86-94. doi:10.1207/s15327752jpa6801_7

Cox, B. J., & Enns, M. W. (2003). Relative stability of dimensions of perfectionism in depression. *Canadian Journal of Behavioural Science, 35*, 124-132. doi:10.1037/h0087194

Cox, B. J., Enns, M. W., & Clara, I. P. (2002). The multidimensional structure of perfectionism in clinically distressed and college student samples. *Psychological Assessment, 14*, 365-373. doi:10.1037//1040-3590.14.3.365

Craddock, A. E., Church, W., & Sands, A. (2009). Family of origin characteristics as predictors of perfectionism. *Australian Journal of Psychology, 61, 136-144.* doi:10.1080/00049530802239326

Crockett, L., Losoff, M., & Petersen, A. (1984). Perceptions of the peer group and friendship in early adolescence. *Journal of Early Adolescence*, 4, 155-181. doi: 10.1177 /0272431684042004

Cummings, E. M., Goeke-Morey, M. C., & Papp, L. M. (2003). Children's responses to everyday marital conflict tactics in the home. *Child Development, 74*, 1918-1929. doi:10.1046/j.1467-8624.2003.00646.x

Cummings, E. M., Keller, P. S., & Davies, P. T. (2005). Towards a family process model of maternal and paternal depressive symptoms: Exploring multiple relations with child and family functioning. *Journal of Child Psychology and Psychiatry, 46*, 479-489. doi:10.1111/j.1469-7610.2004.00368.x

Dadds, M. R., Barrert, P. M., Rapee, R. M., & Ryan, S. M. (1996). Family process and child anxiety and aggression: An observational analysis. *Journal of Abnormal Child Psychology, 24*, 715-734. doi:10.1007/BF01664736

Davis, C. (1997). Normal and neurotic perfectionism in eating disorders: An interactive model. *International Journal of Eating Disorders, 22*, 421-426. doi:10.1002/(SICI)1098-108X(199712)22:4<421::AID-EAT7>3.3.CO;2-L

Dean, P. J., & Range, L. M. (1996). The escape theory of suicide and perfectionism in college students. *Death Studies, 20*, 415-424. doi:10.1080/07481189608252790

Deary, V., & Chalder, T. (2010). Personality and perfectionism in chronic fatigue syndrome: A closer look. *Psychology and Health, 25*, 465-475. doi:10.1080 /08870440802403863

Deffenbacher, J., Zwemer, W., Whisman, M. A., Hill, R. W., & Sloan, R. (1986). Irrational beliefs and anxiety. *Cognitive Therapy and Research, 10*, 281-292. doi:10.1007 /BF01173466

de Man, A. F., Gutierrez, B. I., & Sterk, N. (2001). Stability of self-esteem as moderator of the relationship between level of self-esteem and depression. *North American Journal of Psychology, 3*, 303-308. Retrieved from: http://www.najp.8m.com

Derogatis, L. R. (1994). *SCL-90-R: Administration, scoring, and procedures manual.* Minneapolis, MN: National Computer Systems.

Derogatis, L. R., & Savitz, K. L. (1999). The SCL-90-R, Brief Symptom Inventory, and matching clinical rating scales. In M. E. Maruish (Ed.), *The use of psychological testing for treatment planning and outcomes assessment* (pp. 697-724). Mahwah, NJ: Erlbaum.

DiBartolo, P. M. & Barlow, D. H. (1996). Perfectionism, marital satisfaction and contributory factors to sexual dysfunction in men with erectile disorder and their spouses. *Archives of Sexual Behavior, 25,* 581-588. doi: 10.1007/BF02437840

DiBartolo, P. M., Frost, R. O., Dixon, A., & Almodovar, S. (2001). Can cognitive restructuring reduce the disruption associated with perfectionistic concerns? *Behavior Therapy, 32,* 167-184. doi:10.1016/S0005-7894(01)80051-4

DiBartolo, P. M., & Helt, M. (2007). Theoretical models of affectionate versus affectionless control in anxious families: A critical examination based on observations of parent-child interactions. *Clinical Child and Family Psychology, 10,* 253-274. doi:10.1007 /s10567-007-0017-5

Dittner, A., Rimes, K, & Thorpe, S. (2011). Negative perfectionism increases the risk of fatigue following a period of stress. *Psychology and Health, 26,* 253-268. doi:10.1080 /08870440903225892

Dixon, F. A., Lapsley, D. K., & Anchon, T. A. (2004). An empirical typology of perfectionism in gifted students. *Gifted Child Quarterly, 48,* 95-106. doi:10.1177 /001698620404800203

Donaldson, D., Spirito, A., & Farnett, E. (2000). The role of perfectionism and depressive cognitions in understanding the hopelessness experienced by adolescent suicide attempters. *Child Psychiatry and Human Development, 31,* 99-111. doi:10.1023/A: 1001978625339

Dornbusch, S. M., Ritter, P. L., Leiderman, P. H., & Roberts, D. F. (1987). The relation of parenting style to adolescent school performance. *Child Development, 58,* 1244-1257. doi:10.2307/1130618

Downey, G., & Coyne, J. C. (1990). Children of depressed parents: An integrative review. *Psychological Bulletin, 108,* 50–76. doi:10.1037/ 0033-2909.108.1.50

DuBois, D., Felner, R., Brand, S., Phillips, R., & Lease, M. (1996). Early adolescent self-esteem: A developmental-ecological framework and assessment strategy. *Journal of Research on Adolescence, 6,* 543-579. Retrieved from: http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1532-7795

Dumas, J. E., & LaFreniere, P. J. (1993). Mother-child relationships as a source of support or stress: A comparison of competent, average, aggressive and anxious dyads. *Child Development, 64,* 1732-1754. doi:10.2307/1131466

Dumas, J. E., LaFreniere, P., J., & Serketich, W. J. (1995). "Balance of power": A transactional analysis of control in mother-child dyads involving socially competent, aggressive, and anxious children. *Journal of Abnormal Psychology, 104*, 104-113. doi:10.1037/0021-843X.104.1.104

Dunkley, D. M., Blankstein, K. R., Halsall, J., Williams, M., & Winkworth, G. (2000). The relation between perfectionism and distress: Hassles, coping and perceived social support as mediators and moderators. *Journal of Counseling Psychology, 47,* 437-453. doi:10.1037//0022-0167.47.4.437

Dunn, J. G. H., Dunn, J. C. L., Gotwals, J. K., Vallance, J. K. H., Craft, J. M., & Syrotuik, D. G. (2006). Establishing construct validity evidence for the Sport Multidimensional Perfectionism Scale. *Psychology of Sport and Exercise,* 7, 57-79. doi:10.1016/ j.psychsport.2005.04.003

Durbin, C., Klein, D., Hayden, E., Buckley, M., Moerk, K. (2005). Temperamental emotionality in preschoolers and parental mood disorders. *Journal of Abnormal Psychology, 114*, 28-37. doi:10.1037/0021-843X.114.1.28

Du Rocher Schudlich, T. D., & Cummings, E. M. (2003). Parental dysphoria and children's internalizing symptoms: Marital conflict styles as mediators of risk. *Child Development, 74*, 1663-1681. doi:10.1046/j.1467-8624.2003.00630.x

Eccles, J., Midgley, C., Wigfield, A., Buchanan, C., Reuman, D., . . . Mac Iver, D. (1993). Development during adolescence: The impact of stage-environment fit on young adolescents' experience in schools and families. *American Psychologist, 48*, 90-101. doi:10.1037/0003-066X.48.2.90

Ehlers, A. (1993). Somatic symptoms and panic attacks: A retrospective study of learning experiences. *Behaviour Research and Therapy, 31*, 269-278. doi:10.1016/0005-7967(93)90025-P

Ehntholt, K., Salkovskis, P., & Rimes, K. (1999). Obesessive-compulsive disorder, anxiety disorders, and self-esteem: An exploratory study. *Behaviour Research and Therapy, 37*, 771-781. doi:10.1016/S0005-7967(98)00177-6

Eisenberg, N., Fabes, R. A., Shepart, S. A., Guthrie, I. K., Murphy, B. C., & Reiser, M. (1999). Parental reactions to children's negative emotions: Longitudinal relations to quality of children's social functioning. *Child Development, 70*, 513-534. doi:10.1111/1467-8624.00037

Eley, T. C. (2001). Contributions of behavioral genetics research: Qualifying genetic, shared environmental and nonshared environmental influences. In M. W. Vasey & M. R.

Dadds (Eds.), *The developmental psychopathology of anxiety* (pp. 45-59). New York: Oxford University Press.

Eley, T. C., Bolton, D., O'Connor, T. G., Perrin, S., Smith, P., & Plomin, R. (2003). A twin study of anxiety-related behaviours in pre-school children. *Journal of Child Psychology and Psychiatry, 44*, 945-960. doi:10.1111/1469-7610.00179

Eley, T. C., Gregory, A. M., Clark, D. M., & Ehlers, A. (2007). Feeling anxious: A twin study of panic/somatic ratings, anxiety sensitivity and heartbeat perception in children. *Journal of Child Psychopathology and Psychiatry, 48*, 1184-1191. doi:10.1111/j.1469-7610.2007.01838.x

Elgar, F. J., Curtis, L. J., McGrath, P. J., Waschbusch, D. A., & Stewart, S. H. (2003). Antecedent-consequence conditions in maternal mood and child adjustment: A four-year cross-lagged study. *Journal of Clinical Child and Adolescent Psychology, 32*, 362-374. doi:10.1207/S15374424JCCP3203_05

Elgar, F. J., Mills, R. S., McGRath, P. J., Waschbusch, D. A., & Brownridge, D. A. (2007). Maternal and paternal depressive symptoms and child maladjustment: The mediating role of parental behavior. *Journal of Abnormal Child Psychology, 35*, 943-955. doi:10.1007/s10802-007-9145-0

Ellis, A. (2002). The role of irrational beliefs in perfectionism. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 217-230). Washington, DC: American Psychological Association. doi:10.1037/10458-009

Ellis, L., Marsh, H., & Craven, R. (2009). Addressing the challenges faced by early adolescents: A mixed-method evaluation of the benefits of peer support. *American Journal of Community Psychology, 44*, 54-75. doi:10.1007/s10464-009-9251-y

Enns, M. W., & Cox, B. J. (2002). The nature and assessment of perfectionism: A critical analysis. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 33-62). Washington, DC: American Psychological Association. doi:10.1037/10458-002

Enns, M. W., & Cox, B. J. (2005). Perfectionism, stressful life events, and the 1-year outcome of depression. *Cognitive Therapy and Research, 29,* 541-553. doi:10.1007/s10608-005-2414-8

Enns, M. W., Cox, B. J., & Clara, I. (2002). Adaptive and maladaptive perfectionism: Developmental origins and association with depressive proneness. *Personality and Individual Differences, 33,* 921-935. doi:10.1016/S0191-8869(01)00202-1

Enns, M. W., Cox, B. J., & Clara, I. P. (2005). Perfectionism and neuroticism: A longitudinal study of specific vulnerability and diathesis-stress models. *Cognitive Therapy and Research, 29,* 463-478. doi:10.1007/s10608-005-2843-04

Enns, M. W., Cox, B. J., & Inayatulla, M. (2003). Personality predictors of outcome for adolescents hospitalized for suicidal ideation. *Journal of American Academy of Child and Adolescent Psychiatry, 42,* 720-727. doi:10.1097/01.CHI.0000046847.56865.B0

Enns, M. W., Cox, B. J., & Larson, D. K. (2000). Perceptions of parental bonding and symptom severity in adults with depression: Mediation by personality dimensions. *Canadian Journal of Psychiatry, 45,* 263-269. Retrieved from: http://publications.cpa-apc.org/browse/sections/0

Enns, M. W., Cox, B. J., Sareen, J., & Freeman, P. (2001). Adaptive and maladaptive perfectionism in medical students: A longitudinal investigation. *Medical Education, 35,* 1034-1042. doi:10.1046/j.1365-2923.2001.01044.x

Essau, C., Leung, P., Conradt, J., Cheng H., & Wong, T. (2008). Anxiety symptoms in Chinese and German adolescents: Their relationship with early learning experiences, perfectionism, and learning motivation. *Depression and Anxiety, 25*, 801-810. doi:10.1002/da.20334

Evans, E., Bowes, H., & Drewett, R. F. (2008). How does perfectionism relate to body dissatisfaction in late childhood? *Appetite, 50,* 567. doi:10.1016/j.appet.2007.09.026

Faul, F., & Erdfelder, E. (1992). *GPOWER: A priori, post-hoc, and compromise power analyses for MS-DOS* [Computer program]. Bonn, FRG: Bonn University, Dep. of Psychology.

Ferguson, K. L., & Rodway, M. R. (1994). Cognitive behavioral treatment of perfectionism: Initial evaluation studies. *Research on Social Work Practice, 4,* 283-308. doi:10.1177/104973159400400302

Ferrari, J. R., & Mautz, W. T. (1997). Predicting perfectionism: Applying tests of rigidity. *Journal of Clinical Psychology, 53,* 1-6. doi:10.1002/(SICI)1097-4679(199701)53:1<1::AID-JCLP1>3.3.CO;2-J

Ferrier-Auerbach, A., & Martens, M. (2009). Perceived incompetence moderates the relationship between maladaptive perfectionism and disordered eating. *Eating Disorders, 17,* 333-344. doi:10.1080/10640260902991244

Field, A. P., Argyrus, N. G., & Knowles, K. A. (2001). Who's afraid of the big bad wolf: A prospective-paradigm to test Rachman's indirect pathways in children. *Behaviour Research and Therapy, 39,* 1259-1276. doi:10.1016/S0005-7967(00)00080-2

Field, A. P., Hamilton, S. J., Knowles, K. A., & Plews, E. L. (2003). Fear information and social phobic beliefs in children: A prospective paradigm and preliminary results. *Behaviour Research and Therapy, 41*, 113-123. doi:10.1016/S0005-7967(02)00050-5

Field, A. P., & Lawson, S. J. (2003). Fear information and the development of fears during childhood: Effects on implicit fear responses and behavioral avoidance. *Behaviour Research and Therapy, 41*, 1277-1293. doi:10.1016/S0005-7967(03)00034-2

Findlay, B., & Watts, S. (1998). Psychological correlates of perfectionism [Abstract]. *Australian Journal of Psychology, 50*, 67. doi: 10.1080/00049539808258786

Fisak, B., & Grills-Taquechel, A. E. (2007). Parental modeling, reinforcement, and information transfer: Risk factors in the development of child anxiety. *Clinical Child and Family Psychology, 10*, 213-231. doi:10.1007/s10567-007-0020-x

Flett, G., Blankstein, K., & Hewitt, P. (2009). Perfectionism, performance, and state positive affect and negative affect after a classroom test. *Canadian Journal of School Psychology, 24*, 4-18. doi:10.1177/0829573509332457

Flett, G., Blankstein, K., Hewitt, P., & Koledin, S. (1992). Components of perfectionism and procrastination in college students. *Social Behavior and Personality, 20*, 85-94. doi:10.2224/sbp.1992.20.2.85

Flett, G., & Hewitt, P. (1995). Perfectionism, life events, and depressive symptoms: A test of a diathesis-stress model. *Current Psychology*, 14, 112-138. doi:10.1007/BF02686885

Flett, G., & Hewitt, P. (2002). Perfectionism and maladjustment: An overview of theoretical, definitional, and treatment issues. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 5-29). Washington, DC: American Psychological Association. doi:10.1037/10458-001

Flett, G., & Hewitt, P. (Eds.). (2002). *Perfectionism: Theory, research, and treatment*. Washington, DC: American Psychological Association.

Flett, G., & Hewitt, P. (2004a). The cognitive and treatment aspects of perfectionism: Introduction to the special issue. *Journal of Rational-Emotive and Cognitive-Behavior Therapy, 22*, 233-240. doi:10.1023/B:JORE.0000047309.82574.fa

Flett, G., & Hewitt, P. (2004b). *Dimensions of perfectionism in behavioral activation and inhibition*. Manuscript in preparation.

Flett, G., & Hewitt, P. (2006). Positive versus negative perfectionism in psychopathology: A comment on Slade and Owens's dual process model. *Behavior Modification, 30*, 472-495. doi:10.1177/0145445506288026

Flett, G., & Hewitt, P. (2008). Treatmetn interventions for perfectionism – A cognitive perspective: Introduction to the special issue. *Journal of Rational-Emotive Behaviour Therapy, 26*, 127-133. doi:10.1007/s10942-007-0063-4

Flett, G., Hewitt, P., Blankstein, K. R., & Dynin, C. B. (1994). Dimensions of perfectionism and type A behavior. *Personality and Individual Differences, 16*, 477-485. doi:10.1016/0191-8869(94)90073-6

Flett, G., Hewitt, P., Blankstein, K. R., & Gray, L. (1998). Psychological distress and the frequency of perfectionistic thinking. *Journal of Personality and Social Psychology, 75*, 1363-1381. doi:10.1037//0022-3514.75.5.1363

Flett, G., Hewitt, P., Blankstein, K., & Koledin, S. (1991). Dimensions of perfectionism and irrational thinking. *Journal of Rational-Emotive and Cognitive-Behavior Therapy, 9*, 185-201. doi:10.1007/BF01061229

Flett, G., Hewitt, P., Blankstein, K., & Mosher, S. W. (1995). Perfectionism, life events, and depressive symptoms: A test of a diathesis-stress model. *Current Psychology, 14*, 112-137. doi:10.1007/BF02686885

Flett, G., Hewitt, P., Blankstein, K., & O'Brien, S. (1991). Perfectionism and learned resourcefulness in depression and self-esteem. *Personality and Individual Differences, 12*, 61-68. doi:10.1016/0191-8869(91)90132-U

Flett, G., Hewitt, P., Boucher, D. J., Davidson, L. A., & Munro, Y. (1997). *The Child-Adolescent Perfectionism Scale: Development, validation and association with adjustment.* Unpublished manuscript, York University, Toronto, Ontario, Canada.

Flett, G., Hewitt, P., & Cheng, W. (2008). Perfectionism, distress, and irrational beliefs in high school students: Analyses with an abbreviated Survey of Personal Beliefs for adolescents. *Journal of Rational-Emotive and Cognitive-Behavior Therapy, 26*, 194-205. doi:10.1007/s10942-007-0066-1

Flett, G., Hewitt, P., & Dyck, D. G. (1989). Self-oriented perfectionism, neuroticism and anxiety. *Personality and Individual Differences, 10*, 731-735. doi:10.1016/0191-8869(89)90119-0

Flett, G., Hewitt, P., Endler, N. S., & Tassone, C. (1994-1995). Perfectionism and components of state and trait anxiety. *Current Psychology, 13*, 326-350. doi:10.1007/BF02686891

Flett, G., Hewitt, P., Garshowitz, M., & Martin, T. R. (1997). Personality, negative social interactions, and depressive symptoms. *Canadian Journal of Behavioral Science, 29*, 28-37. doi:10.1037/0008-400X.29.1.28

Flett, G., Hewitt, P., Oliver, J. M., & Macdonald, S. (2002). Perfectionism in children and their parents: A developmental analysis. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 89-132). Washington, DC: American Psychological Association. doi:10.1037/10458-004

Flett, G., Hewitt, P., & Singer, A. (1995). Perfectionism and parental authority styles. *Individual Psychology, 51,* 50-60. Retrieved from: http://hewittlab.psych.ubc.ca /pdfs/1995fhs.pdf

Flett, G., Madorsky, D., Hewitt, P., & Heisel, M. J. (2002). Perfectionism cognitions, ruminations, and psychological distress. *Journal of Rational-Emotive and Cognitive-Behavior Therapy, 20,* 33-47. doi:10.1023/A:1015128904007

Flett, G., Panico, T., & Hewitt, P. (2011). Perfectionism, type A behavior and self-efficacy in depression and health symptoms among adolescents. *Current Psychology, 30,* 105-116. doi:10.1007/s12144-011-9103-4

Flett, G., Sherry, S. B., & Hewitt, P. (2001). *Perfectionism, parental punitiveness, and anxious parental rearing*. Unpublished manuscript.

Flynn, C. A., Hewitt, P., Flett, G., & Caelian, C. (2001). *The development of perfectionism: Parental behavior and cultural influences*. Unpublished manuscript.

Fox, J. M. (2000). Parent-offspring similarity on five personality dimensions: Moderating effects of family dynamics. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 60,* 4221. Retrieved from: http://search.proquest.com /docview/304523503?accountid=3611

Foy, S. N. (1998). Multidimensional perfectionism and perceived parental psychological control and behavioral control [Abstract]. *Australian Journal of Psychology,* 50, 84.

Fromme, K., Corbin, w., & Kruse, M. (2008). Behavioral risks during the transition from high school to college. *Developmental Psychology, 44,* 1497-1504. doi:10.1037 /a0012614

Frost, R. O., & DiBartolo, P. M. (2002). Perfectionism, anxiety, and obsessive-compulsive disorder. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 341-372). Washington, DC: American Psychological Association. doi:10.1037/10458-014

Frost, R. O., Heimberg, R. G., Holt, C. S., Mattia, J. I., & Neubauer, A. L. (1993). A comparison of two measures of perfectionism. *Personality and Individual Differences, 14,* 119-126. doi:10.1016/0191-8869(93)90181-2

Frost, R. O., & Henderson, K. J. (1991). Perfectionism and reactions to athletic competition. *Journal of Sport and Exercise Psychology, 13*, 323-335. Retrieved from: http://journals.humankinetics.com/jsep

Frost, R. O., Lahart, C. M., & Rosenblate, R. (1991). The development of perfectionism: A study of daughters and their parents. *Cognitive Therapy and Research, 15,* 469-489. doi:10.1007/BF01175730

Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research, 14,* 449-468. doi:10.1007/ BF01172967

Frost, R. O., & Steketee, G. (1997). Perfectionism in obsessive-compulsive disorder patients. *Behaviour Research and Therapy, 35,* 291-296. doi:10.1016/S0005-7967(96)00108-8

Frost, R. O., Trepanier, K. L., Brown, E. J., Heimberg, R. G., Juster, H. R., Makris, G. S., Leung, A. (1997). Self-monitoring of mistakes among subjects high and low in

perfectionistic concern over mistakes. *Cognitive Therapy and Research, 21*, 209-222. doi:10.1023/A:1021884713550

Frost, R. O., Turcotte, T. A., Heimberg, R. G., Mattia, J. I., Holt, C. S., & Hope, D. A. (1995). Reactions to mistakes among subjects high and low in perfectionistic concern over mistakes. *Cognitive Therapy and Research, 19*, 195-206. doi:10.1007/BF02229694

Fuligni, A., & Eccles, J. (1993). Perceived parent-child relationships and early adolescents' orientation toward peers. *Developmental Psychology, 29*, 622-632. doi:10.1037/0012-1649.29.4.622

Fujimori, A., Wada, Y., Yamashita, T., Choi, H., Nishizawa, S., Yamamoto, H., & Fukui, K. (2011). Parental bonding in patients with eating disorders and self-injurious behavior. *Psychiatry and Clinical Neurosciences, 65*, 272-279. doi:10.1111/j.1440-1819.2011.02192.x

Gallagher, K. C. (2002). Does child temperament moderate the influence of parenting on adjustment? *Developmental Review, 22*, 623-643. doi:10.1016/S0273-2297(02)00503-8

Garner, D. M., Olmsted, M. P., & Polivy, J. (1983). The development and validation of a multidimensional eating disorder inventory for anorexia and bulimia. *International Journal of Eating Disorders, 1*, 15-34. doi:10.1002/1098-108X(198321)2:2<15::AID-EAT2260020203>3.0.CO;2-6

Garner, D. M., Olmsted, M. P., Polivy, J., & Garfinkel, P. E. (1984). Comparison between weight-preoccupied women and anorexia nervosa. *Psychosomatic Medicine, 46*, 255-266. Retrieved from: http://www.psychosomaticmedicine.org/

Gest, S. D. (1997). Behavioral inhibition: Stability and associations with adaptation from childhood to early adulthood. *Journal of Personality and Social Psychology, 72*, 467-475. doi:10.1037//0022-3514.72.2.467

Gilman, R., & Ashby, J. (2003a). A first study of perfectionism and multidimensional life satisfaction among adolescents. *Journal of Early Adolescence, 23*, 218-235. doi:10.1177/0272431603023002005

Gilman, R., & Ashby, J. (2003b). Multidimensional perfectionism in a sample of middle school students: An exploratory investigation. *Psychology in the Schools, 40*, 677-689. doi:10.1002/pits.10125

Gilman, R., Ashby, J., Sverko, D., Florell, D., & Varjas, K. (2005). The relationship between perfectionism and multidimensional life satisfaction among Croatian and American youth. *Personality and Individual Differences, 39*, 155-166. doi:10.1016/j.paid.2004.12.014

Ginsburg, G. S., Siqueland, L., Masia-Warner, C., & Hedtke, K. A. (2004). Anxiety disorders in children: Family matters. *Cognitive and Behavioral Practice, 11*, 28-43. doi:10.1016/S1077-7229(04)80005-1

Goldner, E. M., Cockell, S. J., & Srikameswaran, S. (2002). Perfectionism and eating disorders. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 319-340). Washington, DC: American Psychological Association. doi:10.1037/10458-013

Goldsmith, H. H., Buss, A. H., Plomin, R., & Rothbart, M. K. (1987). What is infant temperament? Four approaches. *Child Development, 58*, 505-529. doi:10.1111/1467-8624.ep7253747

Goodman, S. H., Adamson, L. B., Riniti, J., & Cole, S. (1994). Mothers' expressed attitudes: Associations with maternal depression and children's self-esteem and psychopathology. *Journal of the American Academy of Child and Adolescent Psychiatry, 33,* 1265–1274. doi: 10.1097/00004583-199411000-00007

Goodman, S. H., & Gotlib, I. H. (1999). Risk for psychopathology in the children of depressed mothers: A developmental model for understanding mechanisms of transmission. *Psychological Review, 106,* 458-490. doi:10.1037//0033-295X. 106.3.458

Graber, J. A., Brooks-Gunn, J., Paikoff, R. L., & Warren, M. P. (1994). Prediction of eating problems: An 8-year study of adolescent girls. *Developmental Psychology, 30,* 823-834. doi:10.1037//0012-1649.30.6.823

Grillon, C., Dierker, L., & Merikangas, K. R. (1997). Startle modulation in children at risk for anxiety disorders and/or alcoholism. *Journal of the American Academy of Child and Adolescent Psychiatry, 36,* 925-932. doi:10.1097/00004583-199707000-00014

Grillon, C., Dierker, L., & Merikangas, K. R. (1998). Fear-potentiated startle in adolescent offspring of parents with anxiety disorders. *Biological Psychiatry, 44,* 990-997. doi:10.1016/S0006-3223(98)00188-7

Groth-Marnat, G. (Ed.). (2003). *Handbook of Psychological Assessment (4th ed.).* Hoboken, NJ: Wiley.

Grüner, K., Muris, P., & Merckelbach, H. (1999). The relationship between anxious rearing behaviors and anxiety disorders symptomatology in normal children. *Journal of Behavior Therapy and Experimental Psychiatry, 30,* 27-35. doi:10.1016/S0005-7916(99)00004-X

Grzegorek, J. L., Slaney, R., Franze, S., & Rice, K. (2004). Self-criticism, dependency, self-esteem, and grade point average satisfaction among clusters of perfectionists and nonperfectionists. *Journal of Counseling Psychology, 51*, 192-200. doi:10.1037/0022-0167.51.2.192

Habke, A. M., & Flynn, C. A. (2002). Interpersonal aspects of trait perfectionism. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 151-180). Washington, DC: American Psychological Association. doi:10.1037/10458-006

Habke, A. M., Hewitt, P., & Flett, G., (1999). Perfectionism and sexual satisfaction in intimate relationships. *Journal of Psychopathology and Behavioral Assessment, 21*, 307-322. doi:10.1023/A:1022168715349

Halmi, K. A., Tozzi, F., Thornton, L. M., Crow, S., Fichter, M. M., Kaplan, A. S., . . . Bulik, C. (2005). The relation among perfectionism, obsessive-compulsive personality disorder, and obsessive-compulsive disorder in individuals with eating disorders. *International Journal of Eating Disorders, 38*, 371-374. doi:10.1002/eat.20190

Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology : A Journal of Human Behavior, 15*, 27-33.

Hane, A. A., Fox, N. A., Polak-Toste, C., Ghera, M. M., & Guner, B. M. (2006). Contextual basis of maternal perceptions of infant development. *Developmental Psychology, 42*, 1077-1088. doi:10.1037/0012-1649.42.6.1077

Hankin, B. L., Roberts, J., & Gotlib, I. H. (1997). Elevated self-standards and emotional distress during adolescence: Emotional specificity and gender differences. *Cognitive Therapy and Research, 21*, 663-680. doi:10.1023/A:1021808308041

Harris, J. R. (1995). Where is the child's environment? A group socialization theory of development. *Psychological Review, 102,* 458-489. doi:10.1037/0033-295X.102.3.458

Harris, P., Pepper, C., & Maack, D. (2008). The relationship between maladaptive perfectionism and depressive symptoms: The mediating role of rumination. *Personality and Individual Differences, 44,* 150-160. doi:10.1016/j.paid.2007.07.011

Harvey, B., Pallant, J., & Harvey, D. (2004). An evaluation of the factor structure of the Frost Multidimensional Perfectionism Scale. *Educational and Psychological Measurement, 64,* 1007-1018. doi:10.1177/0013164404264842

Hawkins, C. C., Watt, H. M., & Sinclair, K. E. (2006). Psychometric properties of the Frost Multidimensional Perfectionism Scale with Australian adolescent girls: Clarification of multidimensionality and perfectionist typology. *Educational and Psychological Measurement, 66,* 1001-1022. doi:10.1177/0013164405285909

Hawley, L. L., Ho, M. R., Zuroff, D. C., & Blatt, S. J. (2006). The relationship of perfectionism, depression, and therapeutic alliance during treatment for depression: Latent difference score analysis. *Journal of Consulting and Clinical Psychology, 74,* 930-942. doi:10.1037/0022-006X.74.5.930

Hayward, C., Killen, J. D., Kraemer, H. C., & Taylor, B. (1998). Linking self-reported childhood behavioral inhibition to adolescent social phobia. *Journal of the American Academy of Child and Adolescent Psychiatry, 37,* 1308-1316. doi:10.1097/00004583-199812000-00015

Head, S. B., & Williamson, D. A. (1990). Association of family environment and personality disturbances in bulimia nervosa. *International Journal of Eating Disorders, 9*, 667-674. doi:10.1002/1098-108X(199011)9:6<667::AID-EAT2260090609>3.0.CO;2-1

Heimberg, R. G., Juster, H. R., Hope, D. A., & Mattia, J. I. (1995). Cognitive-behavioral group treatment for social phobia: Description, case presentation, and empirical support. In M. Stein (Ed.), *Social phobia: Clinical and research perspectives* (pp. 293-321). Washington, DC: American Psychiatric Press.

Hein, C., & Lewko, J. H. (1994). Gender differences in factors related to parenting style: A study of high performing science students. *Journal of Adolescent Research, 9*, 262-281. doi:10.1177/074355489492008

Herman, K., Trotter, R., Reinke, W., & Ialongo, N. (2011). Developmental origins of perfectionism among African American youth. *Journal of Counseling Psychology, 58*, 321-334. doi:10.1037/a0023108

Hewitt, P., Blasberg, J., Flett, G., Besser, A., Sherry, S., Caelian, C., . . . Birch, S. (2011). Perfectionistic Self-Presentation in children and adolescents: Development and validation of the Perfectionistic Self-Presentation Scale – Junior Form. *Psychological Assessment, 23*, 125-142. doi:10.1037/a0021147

Hewitt, P., Caelian, C. F., Flett, G., Sherry, S. B., Collins, L., & Flynn, C. A. (2002). Perfectionism in children: Associations with depression, anxiety, and anger. *Personality and Individual Differences, 32*, 1049-1061. doi:10.1016/S0191-8869(01)00109-X

Hewitt, P., & Dyck, D. G. (1986). Perfectionism, stress, and vulnerability to depression. *Cognitive Therapy and Research, 10*, 137-142. doi:10.1007/BF01173389

Hewitt, P., & Flett, G. (1990). Perfectionism and depression: A multidimensional analysis. *Journal of Social Behavior and Personality, 5,* 423-438. Retrieved from: http://www.sbp-journal.com

Hewitt, P., & Flett, G. (1991a). Dimensions of perfectionism in unipolar depression. *Journal of Abnormal Psychology, 100,* 98-101. doi:10.1037//0021-843X.100.1.98

Hewitt, P., & Flett, G. (1991b). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology, 60,* 456-470. doi:10.1037//0022-3514.60.3.456

Hewitt, P., & Flett, G. (1993). Dimensions of perfectionism, daily stress, and depression: A test of specific vulnerability hypothesis. *Journal of Abnormal Psychology, 102,* 58-65. doi:10.1037//0021-843X.102.1.58

Hewitt, P., & Flett, G. (2002). Perfectionism and stress processes in psychopathology. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 255-284). Washington, DC: American Psychological Association. doi:10.1037/ 10458-011

Hewitt, P., Flett, G., Besser, A., Sherry, S. B., & McGee, B. (2003). Perfectionism is multidimensional: A reply to Shafran, Cooper, and Fairburn (2002). *Behaviour Research and Therapy, 41,* 1221-1236. doi:10.1016/S0005-7967(03)00021-4

Hewitt, P., Flett, G., & Ediger, E. (1995). Perfectionism traits and perfectionistic self-presentation in eating disorder attitudes, characteristics, and symptoms. *International Journal of Eating Disorders, 18,* 317-326. doi:10.1002/1098-108X(199512)18:4< 317::AID-EAT2260180404>3.0.CO;2-2

Hewitt, P., Flett, G., & Ediger, E. (1996). Perfectionism and depression: Longitudinal assessment of a specific vulnerability hypothesis. *Journal of Abnormal Psychology, 105*, 276-280. doi:10.1037//0021-843X.105.2.276

Hewitt, P., Flett, G., Ediger, E., Norton, G. R., & Flynn, C. A. (1998). Perfectionism in chronic and state symptoms of depression. *Canadian Journal of Behavioural Sciences, 30,* 234-242. doi:10.1037/h0087066

Hewitt, P., Flett, G., Sherry, S. B., Habke, M., Parkin, M., Lam, R. W., . . . Stein, M. (2003). The interpersonal expression of perfection: Perfectionistic self-presentation and psychological distress. *Journal of Personality and Social Psychology, 84,* 1303-1325. doi:10.1037/0022-3514.84.6.1303

Hewitt, P., Flett, G., & Singer, A. (1995). Perfectionism and parental authority styles. *Individual Psychology: Journal of Adlerian Theory, Research and Practice, 51*, 50-60. Retrieved from: http://hewittlab.psych.ubc.ca/pdfs/1995fhs.pdf

Hewitt, P., Flett, G., & Turnbull, W. (1992). Perfectionism and Multiphasic Personality Inventory (MMPI) indices of personality disorder. *Journal of Psychopathology and Behavioral Assessment, 14,* 323-342. doi:10.1007/BF00960777

Hewitt, P., Flett, G., & Turnbull-Donovan, W. (1992). Perfectionism and suicide potential. *British Journal of Clinical Psychology, 31,* 181-190. doi:10.1111/j.2044-8260.1992.tb00982.x

Hewitt, P., Flett, G., Turnbull-Donovan, W., & Mikail, S. F. (1991). The Multidimensional Perfectionism Scale: Reliability, validity, and psychometric properties in psychiatric samples. *Psychological Assessment, 3,* 464-468. doi:10.1037//1040-3590.3.3.464

Hewitt, P., Flett, G., & Weber, C. (1994). Dimensions of perfectionism and suicide ideation. *Cognitive Therapy and Research, 18*, 439-460. doi:10.1007/BF02357753

Hewitt, P., Habke, M., Lee-Baggley, D., Sherry, S., & Flett, G. (2008). The impact of perfectionistic self-presentation on the cognitive, affective, and physiological experience of a clinical interview. *Psychiatry, 71*, 93-122. doi:10.1521/psyc. 2008.71.2.93

Hewitt, P., Mittelstaedt, W. M., & Wollert, R. (1989). Validation of a measure of perfectionism. *Journal of Personality Assessment, 53*, 133-144. doi:10.1207/ s15327752jpa5301_14

Hewitt, P., Newton, J., Flett, G., & Callander, L. (1997). Perfectionism and suicide ideation in adolescent psychiatric patients. *Journal of Abnormal Child Psychology, 25*, 95-101. doi:10.1023/A:1025723327188

Hewitt, P., Norton, G. R., Flett, G., Callander, L., & Cowan, T. (1998). Dimensions of perfectionism, hopelessness, and attempted suicide in a sample of alcoholics. *Suicide and Life-Threatening Behaviour, 28*, 395-406. doi:10.1111/j.1943-278X.1998.tb00975.x

Hibbard, D. & Davies, K. (2011). Perfectionism and psychological adjustment among college students: Does educational context matter? *North American Journal of Psychology, 13*, 187-200. Retrieved from: http://www.najp.8m.com

Hill, R., Huelsman, T., & Araujo, G. (2010). Perfectionistic concerns suppress associations between perfectionistic strivings and positive life outcomes. *Personality and Individual Differences, 48,* 584-589. doi:10.1016/j.paid.2009.12.011

Hill, R. W., Huelsman, T. J., Furr, R. M., Kibler, J., Vicente, B. B., & Kennedy, C. (2004). A new measure of perfectionism: The Perfectionism Inventory. *Journal of Personality Assessment, 82*, 80-91. doi:10.1207/s15327752jpa8201_13

Hill, R. W., & McIntire, K., & Bacharach, V. R. (1997). Perfectionism and the big five factors. *Journal of Social Behavior and Personality, 12*, 257-270. Retrieved from: http://www.psych.appstate.edu/faculty/hill/Hill%20-%20Big%205.pdf

Hill, R. W., Zrull, M. C., & Turlington, S. (1997). Perfectionism and interpersonal problems. *Journal of Personality Assessment, 69*, 81-103. doi:10.1207/s15327752jpa6901_5

Hines, P. M., & Boyd-Franklin, N. (1996). African American families. In M. McGoldrick, J. Giordano, & J. K. Pearce (Eds.), *Ethnicity and family therapy* (2nd ed., pp. 66-84). New York: Guilford Press. doi:10.1007/s10826-006-9085-2

Hirsch, B. J., Moos, R. H., & Reischl, T. M. (1985). Psychosocial adjustment of adolescent children of a depressed, arthritic, or normal parent. *Journal of Abnormal Psychology, 94*, 154-164. doi:10.1037//0021-843X.94.2.154

Hirshfeld, D., Petty, C., Micco, J., Henin, A., Park, J., . . . Biederman, J. (2008). Disruptive behavior disorders I offspring of parents with major depression: Associations with parental behavior disorders. *Journal of Affective Disorders, 111*, 176-184. doi:10.1016/j.jad.2008.02.019

Hirshfeld, D. R., Biederman, J., Brody, L., Faraone, S. V., & Rosenbaum, J. F. (1997). Expressed emotion toward children with behavioral inhibition: Associations with maternal anxiety disorder. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*, 910-917. doi:10.1097/00004583-199707000-00012

Hirshfeld, D. R., Rosenbaum, J. F., Biederman, J., Bolduc, E. A., Faraone, S. V., Snidman, N., . . . Kagan, J. (1992). Stable behavioral inhibition and its association with anxiety disorder. *Journal of the American Academy of Child and Adolescent Psychiatry, 31*, 103-111. doi:10.1097/00004583-199201000-00016

Hobden, K., & Pliner, P. (1995). Self-handicapping and dimensions of perfectionism: Self-presentation vs. self-protection. *Journal of Research in Personality, 29*, 461-474. doi:10.1006/jrpe.1995.1027

Hollender, M. H. (1965). Perfectionism. *Comprehensive Psychiatry, 6*, 94-103. doi:10.1016/S0010-440X(65)80016-5

Howes, P., & Markman, H. J. (1989). Marital quality and child functioning: A longitudinal investigation. *Child Development, 60*, 1044-1051. doi:10.2307/1130778

Hudson, J. L., & Rapee, R. M. (2001). Parent–child interactions and anxiety disorders: An observational study. *Behaviour Research and Therapy, 39*, 1411-1427. doi:10.1016/S0005-7967(00)00107-8

Hudson, J. L., & Rapee, R. M. (2002). Parent-child interactions in clinically anxious children and their siblings. *Journal of Clinical Child and Adolescent Psychology, 31*, 548-555. doi:10.1207/153744202320802214

Huggins, L., Davis, M., Rooney, R., & Kane, R. (2008). Socially prescribed and self-oriented perfectionism as predictors of depressive diagnosis in preadolescents. *Australian Journal of Guidance and Counseling, 18*, 182-194. doi:10.1375/ajgc.18.2.182

Hughes, E., & Gullone, E. (2010). Reciprocal relationships between parent and adolescent internalizing symptoms. *Journal of Family Psychology, 24*, 115-124. doi:10.1037/a0018788

Hummel, R., & Gross, A. (2001). Socially anxious children: An observational study of parent-child interaction. *Child and Family Behavior Therapy, 23,* 19-41. doi:10.1300/J019v23n03_02

Hunter, E. C., & O'Connor, R. C. (2003). Hopelessness and future thinking in parasuicide: The role of perfectionism. *British Journal of Clinical Psychology, 42*, 355-365. doi:10.1348/014466503322528900

Hutchinson, A., & Yates, G. (2008). Maternal goal factors in adaptive and maladaptive childhood perfectionism. *Educational Psychology, 28*, 795-808. doi:10.1080/01443410802320402

Jacobs, R., Silva, S., Reinecke, M., Curry, J., Ginsburg, G., Kratochvil, C., & March, J. (2009). Dysfunctional Attitudes Scale perfectionism: A predictor and partial mediator of acute treatment outcome among clinically depressed adolescents. *Journal of Clinical Child & Adolescent Psychology, 38*, 803-813. doi:10.1080/15374410903259031

Jang, K. L. (2005). *The behavioral genetics of psychopathology: A clinical guide*. Mahwah, NJ: Erlbaum.

Jaser, S. S., Champion, J. E., Reeslund, K. L., Keller, G., Merchant, M. J., Benson, M., . . . Compas, B. (2007). Cross-situational coping with peer and family stressors in adolescent offspring of depressed parents. *Journal of Adolescence, 30*, 917-932. doi:10.1016/j.adolescence.2006.11.010

Jaser, S. S., Langrock, A. M., Keller, G., Merchant, M. J., Benson, M. A., Reeslund, K., . . . Compas, B. (2005). Coping with the stress of parental depression II: Adolescent and

parent reports of coping and adjustment. *Journal of Clinical Child and Adolescent Psychology, 34*, 193-205. doi:10.1207/s15374424jccp3401_18

Jekielek, S. M. (1998). Parental conflict, marital disruption and children's emotional well-being. *Social Forces, 76*, 905-936. doi:10.2307/3005698

Johnson, W., McGue, M., Gaist, D., Vaupel., N. W., & Christensen, K. (2002). Frequency and heritability of depression symptomatology in the second half of life: Evidence from Danish twins over 45. *Psychological Medicine, 32*, 1175-1185. doi:10.1017/S0033291702006207

Johnson, D. P., & Slaney, R. (1994). *Perfectionism: Construct measurement and a study of perfectionists in counseling.* Unpublished manuscript.

Johnson, D. P., & Slaney, R. (1996). Perfectionism: Scale development and a study of perfectionistic clients in counseling. *Journal of College Student Development, 37*, 29-41. Retrieved from: http://www.jcsdonline.org/

Juster, H. R., Heimberg, R. G., Frost, R. O., Holt, C. S., Mattia, J. I., & Faccenda, K. (1996). Social phobia and perfectionism. *Personality and Individual Differences, 21*, 403-410. doi:10.1016/0191-8869(96)00075-X

Kagan, J., Reznick, J. S., & Snidman, N. (1987). The physiology and psychology of behavioral inhibition in children. *Child Development, 58*, 1459-1473. doi:10.2307/1130685

Kagan, J., Reznick, J. S., Snidman, N., Gibbons, J., & Johnson, M. O. (1988). Childhood derivatives of inhibition and lack of inhibition to the unfamiliar. *Child Development, 59*, 1580-1589. doi:10.2307/1130672

Kagan, J., Reznick, J. S., Snidman, N., Johnson, M. O., Gibbons, J., & Gersetn, M. (1990). Origins of panic disorder. In J. C. Ballenger (Ed.), *Neurobiology of panic disorder* (pp. 71-87). New York: Alan R. Liss.

Kagan, J., & Snidman, N. (1999). Early childhood predictors of adult anxiety disorders. *Biological Psychiatry, 46*, 536-544. doi:10.1016/S0006-3223(99)00137-7

Kandel, D. B., & Lesser, G. S. (1969). Parental and peer influences on educational plans of adolescents. *American Sociological Review, 34*, 213-223. doi:10.2307/2092178

Kaner, A., Bulik, C. M., & Sullivan, P. F. (1993). Abuse in adult relationships of bulimic women. *Journal of Interpersonal Violence, 8*, 52-63. doi:10.1177/088626093008001004

Kawamura, K. Y., & Frost, R. O. (2004). Self-concealment as a mediator in the relationship between perfectionism and psychological distress. *Cognitive Therapy and Research, 28*, 183-191. doi:10.1023/B:COTR.0000021539.48926.c1

Kawamura, K. Y., Frost, R. O., & Harmatz, M. G. (2002). The relationship of perceived parenting styles to perfectionism. *Personality and Individual Differences, 32*, 317-327. doi:10.1016/S0191-8869(01)00026-5

Kawamura, K. Y., Hunt, S. L., Frost, R. O., & DiBartolo, P. M. (2001). Perfectionism, anxiety, and depression: Are the relationships independent? *Cognitive Therapy and Research, 25*, 291-301. doi:10.1023/A:1010736529013

Kempke, S., Van Houdenhove, B., Luyten, P., Goossens, L., Bekaert, P. & Van Wambeke, P. (2011). Unraveling the role of perfectionism in chronic fatigue syndrome: Is there a distinction between adaptive and maladaptive perfectionism? *Psychiatry Research, 186*, 373-377. doi:10.1016/j.psychres.2010.09.016

Kendler, K. S., Gatz, M., Gardner, C. O., & Pederson, N. L. (2006). A Swedish national twin study of lifetime major depression. *American Journal of Psychiatry, 163,* 109-114. doi:10.1176/appi.ajp.163.1.109

Kendler, K. S., Neale, M., & Kessler, R. (1993). Panic disorder in women: A population-based twin study. *Psychological Medicine, 23*, 397-406. doi:10.1017/S003329170002849X

Kendler, K. S., Neale, M., Kessler, R., Heath, A., & Eaves, L. (1992). A population-based twin study of major depression in women: The impact of varying definitions of illness. *Archives of General Psychiatry, 49,* 257-266. Retrieved from: http://archpsyc.ama-assn.org

Kendler, K. S., & Prescott, C. A., (1999). A population-based twin study of lifetime major depression in men and women. *Archives of General Psychiatry, 50,* 789-796. doi:10.1001/archpsyc.56.1.39

Kenney-Benson, G. A., & Pomerantz, E. M. (2005). The role of mothers' use of control in children's perfectionism: Implications for the development of children's depressive symptoms. *Journal of Personality, 73,* 23-46. doi:10.1111/j.1467-6494.2004.00303.x

Kessler, R. C., Berglund, P., Demler, O., Jin, R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62,* 593-602. doi:10.1001/archpsyc.62.6.593

Kessler, R. C., McGonagle, K. A., Swartz, M., Blazer, D. G., & Nelson, C. B. (1993). Sex and depression in the National Comorbidity Survey I: Lifetime prevalence, chronicity

and recurrence. *Journal of Affective Disorders, 29*, 85-96. doi:10.1016/0165-0327(93)90026-G

Klibert, J. J., Laginricsen-Rohling, J., & Saito, M. (2005). Adaptive and maladaptive aspects of self-oriented versus socially prescribed perfectionism. *Journal of College Student Development, 46*, 141-156. doi:10.1353/csd.2005.0017

Kliewer, W., & Wiedner, G. (1987). Type A behaviour and aspirations: A study of parents' and children's goal setting. *Developmental Psychology*, 23, 204-209. doi:10.1037/0012-1649.23.2.204

Kobori, O., Hayakawa, M., & Tanno, Y. (2009). Do perfectionists raise their standards after success? An experimental examination of the revaluation of standard setting in perfectionism. *Journal of Behavior Therapy and Experimental Psychiatry, 40*, 515-521. doi:10.1016/j.jbtep.2009.07.003

Kobori, O., Yamagata, S., & Kijima, N. (2005). The relationship of temperament to multidimensional perfectionism trait. *Personality and Individual Differences, 38*, 203-211. doi:10.1016/j.paid.2004.04.003

Kramer, R. A., Warner, V., Olfson, M., Ebanks, C. M., Chaput, F., & Weissman, M. M. (1998). General medical problems among the offspring of depressed parents: A 10-year follow-up. *Journal of the American Academy of Child and Adolescent Psychiatry, 37*, 602-611. doi:10.1097/00004583-199806000-00010

Krohne, H. W., & Gutenberg, J. (1990). Parental childrearing and anxiety development. In K. Hurrelmann and F. Lovel (Eds.), *Health hazards in adolescence* (pp. 115-130). Berlin: Walter de Gruyter.

Kutlesa, N., & Arthur, N. (2008). Overcoming negative aspects of perfectionism through group treatment. *Journal of Rational-Emotive Cognitive Behavior Therapy, 26*, 134-150. doi:10.1007/s10942-007-0064-3

Lamb, M., Pleck, J., Charnov, E., & Levine, J. (1987). A biosocial perspective on paternal behavior and involvement. In J. Lancaster, J. Altman, A. Rossi, & L. Sherrod (Eds.), *Parenting across the lifespan: Biosocial perspectives* (pp. 111-142). NewYork: Academic.

Langrock, A. M., Compas, B. E., Keller, G., Merchant, M. J., & Copeland, M. E. (2002). Coping with the stress of parental depression: Parents' reports of children's coping, emotional, and behavioral problems. *Journal of Clinical Child and Adolescent Psychology, 31*, 312-324. doi:10.1207/153744202760082577

Laraia, M. T., Stuart, G. W., Frye, L. H., & Ballenger, J. C. (1994). Childhood environment of women having panic disorder with agoraphobia. *Journal of Anxiety Disorders, 8*, 1-17. doi:10.1016/0887-6185(94)90019-1

Larson, R., & Richards, M. (1991). Daily companionship in late childhood and early adolescence: Changing developmental contexts. *Child Development, 62*, 284–300. doi: 10.1111/j.1467-8624.1991.tb01531.x

Laurson, B., & Collins, A. (2004). Changing relationships, changing youth: Interpersonal contexts of adolescent development. *Journal of Early Adolescence, 24*, 55-62. doi: 10.1177/0272431603260882

Laurson, B., Coy, K., & Collins, W. (1998). Reconsidering changes in parent-child conflict across adolescence: A meta-analysis. *Child Development, 69*, 47-66. doi:10.1111 /j.1467-8624.1998.00817.x

Lee, D., & Park, H. (2011). Cross-cultural validity of the Frost Multidimensional Perfectionism Scale in Korea. *The Counseling Psychologist, 39*, 320-345. doi:10.1177/0011000010365910

Leenaars, L., & Lester, D. (2006). Perfectionism, depression, and academic performance. *Psychological Reports, 99*, 941-942. doi:10.2466/PR0.99.7.941-942

Legrand, L. N., McGue, M., & Iacono, W. G. (1999). A twin study of state and trait anxiety in childhood and adolescence. *Journal of Child Psychology and Psychiatry, 40*, 953-958. doi:10.1111/1469-7610.00512

Leon, C. A., & Leon, A. (1990). Panic disorder and parental bonding. *Psychiatric Annals, 20*, 503-508. Retrieved from: www.psychiatricannalsonline.com/

Letawsky, N., Schneider, R., Pederson, P., & Palmer, C. (2003). Factors influencing the college selection process of student athletes: Are their factors similar to non-athletes? *College Student Journal, 37*, 604-610.

Libby, S., Reynolds, S., Derisley, J., & Clark, S. (2004). Cognitive appraisals in young people with obsessive-compulsive disorder. *Journal of Child Psychology and Psychiatry, 45*, 1076-1084. doi:10.1111/j.1469-7610.2004.t01-1-00300.x

Lieb, R., Isensee, B., Hofler, M., Pfister, H., & Wittchen, H-U. (2002). Parental major depression and the risk of depression and other mental disorders in offspring: A prospective-longitudinal community study. *Archives of General Psychiatry, 59*, 365-374. doi:10.1001/archpsyc.59.4.365

Lieb, R., Wittchen, H., Hofler, M., Fuetsch, M., Stein, M., & Merikangas, K. (2000). Parental psychopathology, parenting styles, and the risk of social phobia in offspring: A

prospective, longitudinal community study. *Archives of General Psychiatry, 57,* 859-866. doi:10.1001/archpsyc.57.9.859

Lindberg, F. H., & Distad, L. J. (1985). Survival responses to incest: Adolescents in crisis. *Child Abuse and Neglect, 9,* 521-526. doi:10.1016/0145-2134(85)90061-4

Lindhout, I., Markus, M., Hoogendijk, T., Borst, S., Maingay, R., . . . Boer, F. (2006). Childrearing style of anxiety-disordered parents. *Child Psychiatry and Human Development, 37,* 89-102. doi:10.1007/s10578-006-0022-9

LoCicero, K. A., & Ashby, J. (2000). Multidimensional perfectionism in middle school age gifted students: A comparison to peers from the general cohort. *Roeper Review, 22,* 182-186. doi:10.1080/02783190009554030

LoCicero, K. A., Ashby, J., & Kern, R. M. (2000). Multidimensional perfectionism and lifestyle approaches in middle school students. *Journal of Individual Psychology, 56,* 449-461. Retrieved from: http://www.utexas.edu/utpress/journals/jip.html

Lombardi, D. N., Florentino, M. C., & Lombardi, A. J. (1998). Perfectionism and abnormal behavior. *Journal of Individual Psychology, 54,* 61-71. Retrieved from: http://www.utexas.edu/utpress/journals/jip.html

Lovejoy, M. C., Graczyk, P. A., O'Hare, E., & Neuman, G. (2000). Maternal depression and parenting behavior: A meta-analytic review. *Clinical Psychology Review, 20,* 561-592. doi:10.1016/S0272-7358(98)00100-7

Lovejoy, M. (1991). Maternal depression: Effects on social cognition and behavior in parent-child interactions. *Journal of Abnormal Child Psychology, 19,* 693-706. doi: 10.1007 /BF00918907

Lundh, L. G., & Ost, L. G. (1996). Stroop interference, self-focus and perfectionism in social phobics. *Personality and Individual Differences, 20,* 725-731. doi:10.1016/0191-8869 (96)00008-6

Lundh, L., Saboonchi, F., & Wangby, M. (2008). The role of personal standards in clinically significant perfectionism. A person-oriented approach to the study of patterns of perfectionism. *Cognitive Therapy and Research, 32,* 333-350. doi:10.1007/s10608-006-9109-7

Luxton, D. D., & Wenzlaff, R. M. (2005). Self-esteem uncertainty and depression vulnerability. *Cognition and Emotion, 19*, 611-622. doi:10.1080/02699930441000355

Luyten, P., Kempke, S., Van Wambeke, P., Claes, S., Blatt, S., & Van Houdenhove, B. (2011). Self-critical perfectionism, stress generation, and stress sensitivity in patients with chronic fatigue syndrome: Relationship with severity of depression. *Psychiatry, 74*, 21-30. doi:10.1521/psyc.2011.74.1.21

Lynd-Stevenson, R. M., & Hearne, C. M. (1999). Perfectionism and depressive affect: The pros and cons of being a perfectionist. *Personality and Individual Differences, 26,* 549-562. doi:10.1016/S0191-8869(98)00170-6

MacLellan, E. (2005). Academic achievement: The role of praise in motivating students. *Active Learning in Higher Education, 6,* 194-206. doi: 10.1177/1469787405057750

Mallinger, A. E. (1984). The obsessive's myth of control. *Journal of the American Academy of Psychoanalysis, 12*, 147-165. Retrieved from: http://aapdp.org/index.php /publications/journal/

Manassis, K., & Bradley, S. J. (1994). The development of childhood anxiety disorders: Toward an integrated model. *Journal of Applied Developmental Psychology, 15*, 345-366. doi:10.1016/0193-3973(94)90037-X

Marchand, J. F, & Hock, E. (1998). The relation of problem behaviors in preschool children to depressive symptoms in mothers and fathers. *The Journal of Genetic Psychology, 159*, 353-366. doi:10.1080/00221329809596157

Marmorstein, N., & Iacono, W. (2004). Major depression and conduct disorder in youth: Associations with parental psychopathology and parent-child conflict. *Journal of Child Psychology and Psychiatry, 45*, 377-386. doi:10.1111/j.1469-7610.2004.00228.x

Matthews, K. A., Stoney, C. M., Rakaczky, C. J., & Jamison, W. (1986). Family characteristics and school achievements of Type A children. *Health Psychology, 5*, 453-467. doi:10.1037//0278-6133.5.5.453

McArdle, S. (2010). Exploring domain-specific perfectionism. *Journal of Personality, 78*, 493-508. doi:10.1111/j.1467-6494.2010.00624.x

McArdle, S., & Duda, J. (2004). Exploring social-contextual correlates of perfectionism in adolescents: A multivariate perspective. *Cognitive Therapy and Research, 28*, 765-788. doi:10.1007/s10608-004-0665-4

McArdle, S. & Duda, J. (2008). Exploring the etiology of perfectionism and perceptions of self-worth in young athletes. *Social Development, 17*, 980-997. doi:10.1111/j.1467-9507.2007.00456.x

McClure, E. B., Brennan, P., Hammen, C., & LeBrocque, R. M. (2001). Parental anxiety disorders, child anxiety disorders, and the perceived parent-child relationship in an

Australian high-risk sample. *Journal of Abnormal Child Psychology, 29*, 1-10. doi:10.1023/A:1005260311313

McCrae, R. R., & Costa, P. (1997). Personality trait structure as a human universal. *American Psychologist, 52*, 509-516. doi:10.1037//0003-066X.52.5.509

McCreary, T., Joiner, T. E., Schmidt, N. B., & Ialongo, N. S. (2004). The structure and correlates of perfectionism in African American children. *Journal of Clinical Child and Adolescent Psychology, 33*, 313-324. doi:10.1207/s15374424jccp3302_13

McFall, M., & Wollersheim, J. (1979). Obsessive-compulsive neurosis: A cognitive-behavioral formulation and approach to treatment. *Cognitive Therapy and Research, 3*, 333-348. doi:10.1007/BF01184447

McLeod, B. D., Wood, J. J., & Weisz, J. R. (2007). Examining the association between parenting and childhood anxiety: A meta-analysis. *Clinical Psychology Review, 27*, 155-172. doi:10.1016/j.cpr.2006.09.002

McClure, E., Brennan, P., Hammen, C., & Le Brocque, R. (2001). Parental anxiety disorders, child anxiety disorders, and the perceived parent-child relationship in an Australian high-risk sample. *Journal of Abnormal Child Psychology, 29*, 1-10. doi:10.1023/A:1005260311313

McVey, G. L., Pepler, D., Davis, R., Flett, G., & Abdolell, M. (2002). Risk and protective factors associated with disordered eating during early adolescence. *Journal of Early Adolescence, 22*, 75-95. doi:10.1177/0272431602022001004

McWhinnie, C., Abela, J., Knauper, B., & Zhang, C. (2009). Development and validation of the revised Children's Dysfunctional Attitudes Scale. *British Journal of Clinical Psychology, 48*, 287-308. doi:10.1348/014466508X398952

Meadows, S. O., McLanahan, S. S., & Brooks-Gunn, J. (2007). Parental depression and anxiety in early childhood behavior problems across family types. *Journal of Marriage and Family, 69*, 1162-1177. doi:10.1111/j.1741-3737.2007.00439.x

Mechanic, D., & Hansell, S. (1989). Divorce, family conflict, and adolescent's well-being. *Journal of Health and Social Behavior, 30*, 105-116. Retrieved from: http://www.jstor.org/stable/2136916

Mendaglio, S., & Pyryt, M. C. (1996, September). *The emotional drama of giftedness: Self concept, perfectionism, and sensitivity*. Paper presented at the 7th Annual SAGE Conference, Calgary, Alberta.

Menzies, R. G., & Clarke, J. C. (1995). The etiology of phobias: A nonassociative account. *Clinical Psychology Review, 15*, 23-48. doi:10.1016/0272-7358(94)00039-5

Merckelbach, H., de Jong, P., Muris, P. & van den Hout, M. A., (1996). The etiology of specific phobias: A review. *Clinical Psychology Review, 16*, 337-361. doi:10.1016/0272-7358(96)00014-1

Merikangas, K. R. (2005). Vulnerability factors for anxiety disorders in children and adolescents. *Child and Adolescent Psychiatric Clinics of North America, 14*, 649-679. doi:10.1016/j.chc.2005.06.005

Merikangas, K. R., Avenenoli, S., Dierker, L., & Grillon, C. (1999). Vulnerability factors among children at risk for anxiety disorders. *Biological Psychiatry, 46*, 1523-1535. doi:10.1016/S0006-3223(99)00172-9

Merikangas, K. R., Dierker, L. C., & Szatmari, P. (1998). Psychopathology among offspring of parents with substance abuse and/or anxiety disorders: A high-risk study. *Journal of Child Psychology and Psychiatry, 39*, 711-720. doi:10.1111/1469-7610.00370

Mick, M. A., & Telch, M. J. (1998). Social anxiety and history of behavioral inhibition in young adults. *Journal of Anxiety Disorders, 12*, 1-20. doi:10.1016/S0887-6185(97)00046-7

Midlarksy, E., & Nitzburg, G. (2008). Eating disorders in middle-aged women. *The Journal of General Psychology, 135*, 393-407. doi:10.3200/GENP.135.4.393-408

Miller, J. L., & Vaillancourt, T. (2007). Relation between childhood peer victimization and adult perfectionism: Are victims of indirect aggression more perfectionistic? *Aggressive Behavior, 22*, 230-241. doi:10.1002/ab.20183

Minuchin, S., Rosman, B. L., & Baker, L. (1978). *Psychosomatic families: Anorexia nervosa in context*. Cambridge, MA: Harvard University Press.

Missildine, W. H. (1963). Perfectionism – If you must strive to "do better." In W. Missildine (Ed.), *Your inner child of the past* (pp. 75-90). New York: Pocket Books.

Mitzman, S. F., Slade, P., & Dewey, M. E. (1994). Preliminary development of a questionnaire designed to measure the neurotic perfectionism in the eating disorders. *Journal of Clinical Psychology, 50*, 516-522. doi:10.1002/1097-4679(199407)50:4<516::AID-JCLP2270500406>3.0.CO;2-0

Mobley, M., Slaney, R., & Rice, K. (2005). Cultural validity of the Almost Perfect Scale – Revised for African American college students. *Journal of Counseling Psychology, 52*, 629-639. doi:10.1037/0022-0167.52.4.629

Moore, P. S., Whaley, S. E., & Sigman, M. (2004). Interactions between mothers and children: Impacts of maternal and child anxiety. *Journal of Abnormal Psychology, 3*, 471-476. doi:10.1037/0021-843X.113.3.471

Muris, P. (2006). The pathogenesis of childhood anxiety disorders: Considerations from a developmental psychopathology perspective. *International Journal of Behavioral Development, 30,* 5–11. doi:10.1177/0165025406059967

Muris, P., Bodden, D., Merckelbach, H., Ollendick, T. H., & King, N. J. (2003). Fear of the beast: A prospective study on the effects of negative information on childhood fear. *Behaviour Research and Therapy, 41,* 195-208. doi:10.1016/S0005-7967(01)00137-1

Muris, P., Meesters, C., Merckelbach, H., & Hulsenbeck, P. (2000). Worry in children is related to perceived parental rearing and attachment. *Behaviour Research and Therapy, 38,* 487-497. doi:10.1016/S0005-7967(99)00072-8

Muris, P., Meesters, C., & Van Brakel, A. (2003). Assessment of anxious rearing behaviors with a modified version of the 'Egna Minnen Betraffande Uppfostran' (EMBU) questionnaire for children. *Journal of Psychopathology and Behavioral Assessment, 25,* 229-237. doi:10.1023/A:1025894928131

Muris, P. & Merckelbach, H. (1998). Perceived parental rearing behaviour and anxiety disorders symptoms in normal children. *Personality and Individual Differences, 25,* 1199-1206. doi:10.1016/S0191-8869(98)00153-6

Muris, P. Steerneman, P., Merckelbach, H., & Meesters, C. (1996). The role of parental fearfulness and modeling in children's fear. *Behaviour Research and Therapy, 34,* 265-268. doi:10.1016/0005-7967(95)00067-4

Neal, J. A., & Edelmann, R. J. (2003). The etiology of social phobia: Toward a developmental profile. *Clinical Psychology Review, 23,* 761-786. doi:10.1016/S0272-7358(03)00076-X

NICHD Early Child Care Research Network. (2004). Multiple pathways to early academic achievement. *Harvard Educational Review, 74*, 1-29. Retrieved from: http://www.hepg.org/her

Nicholson, J., Doboeck, P., Farris, J., Boker S., & Borkowski, J. (2011). Maternal depressive symptomatology and child behavior : Transactional relationship with simultaneous bidirectional coupling. *Developmental Psychology, 47*, 1312-1323. doi:10.1037/a0023912

Nilsson, J. E., Paul, B. D., Lupini, L. N., & Tatem, B. (1999). Cultural differences in perfectionism: A comparison of African American and White college students. *Journal of College Student Development, 40*, 141-150. Retrieved from: http://www.jcsdonline.org

Nilsson, K., Sundbom, E. & Häagglöf, B. (2008). A longitudinal study of perfectionism in adolescent onset anorexia nervosa-restricting type. *European Eating Disorders Review, 16*, 386-394. doi:10.1002/erv.850

Nisbet Wallis, D. (2002). Depression, anxiety and self-esteem: A clinical field study. *Behaviour Change, 19*, 112-120. doi:10.1375/bech.19.2.112

Nounopoulos, A., Ashby, J., & Gilman, R. (2006). Coping resources, perfectionism, and academic performance among adolescents. *Psychology in the Schools, 43*, 613-619. doi:10.1002/pits.20167

Obsessive Compulsive Cognitions Working Group. (1997). Cognitive assessment of obsessive compulsive disorder. *Behaviour Research and Therapy, 35*, 667-681. doi:10.1016/S0005-7967(97)00017-X

O'Connor, R. (2007). The relations between perfectionism and suicidality: A systematic review. *Suicide and Life-Threatening Behaviour, 37*, 698-714. doi:10.1521/suli.2007.37.6.698

O'Connor, R., Dixon, D., & Rasmussen, S. (2009). The structure and temporal stability of the Child and Adolescent Perfectionism Scale. *Psychological Assessment, 21*, 437-443. doi:10.1037/a0016264

O'Connor, R., & Forgan, G. (2007). Suicidal thinking and perfectionism: The role of goal adjustment and behavioral inhibition/activation systems (BIS/BAS). *Journal of Rational-Emotive and Cognitive-Behavior Therapy, 25*, 321-341. doi:10.1007/s10942-007-0057-2

O'Connor, R., & O'Connor, D. (2003). Predicting helplessness and psychological distress: The role of perfectionism and coping. *Journal of Counseling Psychology, 50*, 362-372. doi:10.1037/0022-0167.50.3.362

O'Connor, R., O'Connor, D. B., O'Connor, S. M., Smallwood, J., & Miles, J. (2004). Hopelessness, stress, and perfectionism: The moderating effects of future thinking. *Cognition and Emotion, 18*, 1099-1120. doi:10.1080/02699930441000067

O'Connor, R., Rasmussen, S., & Hawton, K. (2010). Predicting depression, anxiety and self-harm in adolescents: The role of perfectionism and acute life stress. *Behaviour Research and Therapy, 48*, 52-59. doi:10.1016/j.brat.2009.09.008

O'Keefe, J. L., & Smith, T. W. (1988). Self-regulation and Type A behavior. *Journal of Research in Personality, 22*, 232-251. doi:10.1016/0092-6566(88)90017-7

Ollendick, T.H., Vasey, M.W., & King, N.J. (2001). Operant conditioning influence in childhood anxiety. In M.W. Vasey & M.R. Dadds (Eds.), *The developmental psychopathology of anxiety*. New York, NY: Oxford University Press.

Olson, M., & Kwon, P. (2008). Brooding perfectionism: Refining the roles of rumination and perfectionism in the etiology of depression. *Cognitive Therapy Research, 32*, 788-802. doi:10.1007/s10608-007-9173-7

Orvaschel, H., Weissman, M. M., & Kidd, K. K. (1980). Children and depression: The children of depressed parents; the childhood of depressed patients; depression in children. *Journal of Affective Disorders, 2*, 1-16. doi:10.1016/0165-0327(80)90017-8

Ost, L. G., & Hugdal, K. (1981). Acquisition of phobias and anxiety response patterns in clinical patients. *Behaviour Research and Therapy, 16*, 439-447. doi:10.1016/0005-7967(81)90134-0

Pacht, A. R. (1984). Reflections on perfection. *American Psychologist, 39*, 386-390. doi:10.1037//0003-066X.39.4.386

Paikoff, R., & Brooks-Gunn, J. (1991). Do parent-child relationships change during puberty? *Psychological Bulletin, 110*, 47-66. doi:10.1037/0033-2909.110.1.47

Parke, R. D. (2004). Development in the family. *Annual Review of Psychology, 55*, 365-399. doi:10.1146/annurev.psych.55.090902.141528

Parker, G. (1981). Parental representations of patients with anxiety neurosis. *Acta Psychiatrica Scandinavica, 63*, 33-36. doi:10.1111/j.1600-0447.1981.tb00647.x

Parker, W. D. (1997). An empirical typology of perfectionism in academically talented children. *American Educational Research Journal, 34*, 545-562. doi:10.2307/1163249

Parker, W. D. (2000). Healthy perfectionism in the gifted. *Journal of Secondary Gifted Education, 11*(4), 173-182. doi:10.4219/jsge-2000-632

Parker, W. D. (2002). Perfectionism and adjustment in gifted children. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 133-148). Washington, DC: American Psychological Association. doi:10.1037/10458-005

Parker, W. D., & Mills, C. J. (1996). The incidence of perfectionism in gifted students. *Gifted Child Quarterly, 40*, 194-199. doi:10.1177/001698629604000404

Parker, W. D., & Stumpf, H. (1995). An examination of the Multidimensional Perfectionism Scale with a sample of academically talented children. *Journal of Psychoeducational Assessment, 13*, 372-383. doi:10.1177/073428299501300404

Paulson, S. E. (1994). Relations of parenting style and parental involvement with ninth-grade students' achievement. *Journal of Early Adolescence, 14*, 250-267. doi:10.1177 /027243169401400208

Pearson, C. A., & Gleaves, D. H. (2006). The multiple dimensions of perfectionism and their relation with eating disorder features. *Personality and Individual Differences, 41*, 225-235. doi:10.1016/j.paid.2006.01.013

Peck, L., & Lightsey, O., Jr. (2008). The eating disorders continuum, self-esteem, and perfectionism. *Journal of Counseling & Development, 86*, 184-192. Retrieved from: http://www.counseling.org/publications

Peisah, C., Brodaty, H., Luscombe, G., & Anstey, K. J. (2005). Children of a cohort of depressed patients 25 years on: Identifying those at risk. *Australian and New Zealand Journal of Psychiatry, 39*, 907-914. doi:10.1111/j.1440-1614.2005.01663.x

Peleg-Popko, O. (2002). Children's test anxiety and family interaction patterns. *Anxiety, Stress, and Coping: An International Journal, 15*, 45-59. doi:10.1080/10615800290007281

Phelps, K. D. (2008). Partners, parents, and peers' effects on African American youths' school achievement. *Dissertation Abstracts International: Section A: Humanities and Social Sciences, 68*, 4495.

Pieters, G. L., de Bruijn, E. R., Maas, Y., Hulstijn, W., Vandereycken, W., Peuskens, J., . . . Sabbe, B. (2007). Action monitoring and perfectionism in anorexia nervosa. *Brain and Cognition, 63*, 42-50. doi:10.1016/j.bandc.2006.07.009

Pipp, S., Shaver, P., Jennings, S., Lamborn, S., and Fischer, I. (1985). Adolescents' theories about the development of their relationships with parents. *Journal of Personality and Social Psychology, 48,* 991–1001. doi: 10.1037/0022-3514.48.4.991

Pleck, J. (1997). Paternal involvement: Levels, sources, and consequences. In M. E. Lamb (Ed.), *The role of the father in child development* (3rd ed., pp. 66-103). New York: Wiley.

Pleva, J., & Wade, T. D. (2006). The mediating effects of misinterpretation of intrusive thoughts on obsessive-compulsive symptoms. *Behaviour Research and Therapy, 44*, 1471-1479. doi:10.1016/j.brat.2005.11.003

Powers, T. A., Zuroff, D. C., & Topciu, R. A. (2004). Covert and overt expressions of self-criticism and perfectionism and their relation to depression. *European Journal of Personality, 18*, 61-72. doi:10.1002/per.499

Preusser, K. J., Rice, K., & Ashby, J. (1994). The role of self-esteem in mediating the perfectionism-depression connection. *Journal of College Student Development, 35*, 88-93. Retrieved from: http://www.press.jhu.edu

Pruett, K. (2004). First patrons: Parenting the musician. *Medical Problems of Performing Artists, 19*, 154-159. Retrieved from: http://www.sciandmed.com/mppa

Pruett, G. P. (2004). Intellectually gifted students' perceptions of personal goals and work habits. *Gifted Child Today, 27*, 54-57. doi:10.4219/gct-2004-149

Purdon, C. Antony, M. M., & Swinson, R. P. (1999). Psychometric properties of the Frost Multidimensional Perfectionism Scale in a clinical anxiety disorders sample. *Journal of Clinical Psychology, 55*, 1271-1286. doi:10.1002/(SICI)1097-4679(199910)55:10<1271::AID-JCLP8>3.0.CO;2-A

Pyryt, M. C. (September, 1994). *Perfectionism and giftedness: Examining the connection*. Paper presented at the 5th Annual SAGE Conference, Calgary, Alberta.

Rachman, S. (1977). The conditioning theory of fear-acquisition: A critical examination. *Behaviour Research and Therapy, 15*, 375-387. doi:10.1016/0005-7967(77)90041-9

Rachman, S. (1993). Obsessions, responsibility, and guilt. *Behaviour Research and Therapy, 31*, 149-154. doi:10.1016/0005-7967(93)90066-4

Radke-Yarrow, M., Nottelmann, E., Belmont, B., & Welsh, J. (1993). Affective interactions of depressed and nondepressed mothers and their children. *Journal of Abnormal Child Psychology, 21*, 683-695. doi:10.1007/BF00916450

Randolph, J. J., & Dykman, B. M. (1998). Perceptions of parenting and depression-proneness in the offspring: Dysfunctional attitudes as a mediating mechanism. *Cognitive Therapy and Research, 22*, 377-400. doi:10.1023/A:1018761229824

Rapee, R. M. (1997). Potential role of childrearing practices in the development of anxiety and depression. *Clinical Psychology Review, 17*, 47-67. doi:10.1016/S0272-7358 (96)00040-2

Rapee, R. M. (2002). The development and modification of temperamental risk for anxiety disorders: Prevention of a lifetime of anxiety? *Biological Psychiatry, 52*, 947-957. doi:10.1016/S0006-3223(02)01572-X

Rasmussen, S., O'Connor, R., & Brodie, D. (2008). The role of perfectionism and autobiographical memory in a sample of parasuicide patients: An exploratory study. *Crisis, 29*, 64-72. doi:10.1027/0227-5910.29.2.64

Reeb, B., Conger, K., & Wu, E. (2010). Paternal depressive symptoms and adolescent functioning: The moderating effect of gender and father hostility. *Fathering, 8*, 131-142. doi:10.3149/fth.0801.131

Rende, R., Plomin, R., Reiss, D., & Hetherington, M. (1993). Genetic and environmental influences on depressive symptomatology in adolescence: Individual differences and extreme scores. *Journal of Child Psychology and Psychiatry, 34*, 1387-1398. doi:10.1111/j.1469-7610.1993.tb02097.x

Renk, K., Oliveros, A., Roddenberry, A., Klein, J., Sieger, K., Roberts, R., & Phares, V. (2007). The relationship between maternal and paternal psychological symptoms and ratings of adolescent functioning. *Journal of Adolescence, 30*, 467-485. doi:10.1016 /j.adolescence.2006.05.001

Reynolds, C. R., & Kamphaus, R. W. (2002). *The clinician's guide to the Behavior Assessment System for Children: BASC*. New York: Guilford Press.

Reynolds, C. R., & Richmond, B. O. (1985). *Revised Children's Manifest Anxiety Scale manual*. Los Angeles, CA: Western Psychological Services.

Rheaume, R., Freeston, M. H., Dugas, M. J., Letarte, H., & LaDouceur, R. (1995). Perfectionism, responsibility and obsessive-compulsive symptoms. *Behaviour Research and Therapy, 33*, 785-794. doi:10.1016/0005-7967(95)00017-R

Rhodes, J., Roffman, J., Reddy, R., & Fredriksen, K. (2004). Changes in self-esteem during the middle school years: A latent growth curve study of individual and contextual influences. *Journal of School Psychology, 42*, 243-261. doi: 10.1016/j.jsp. 2004.04.001

Rice, K., & Aldea, M. (2006). State dependence and trait stability of perfectionism: A short-term longitudinal study. *Journal of Counseling Psychology, 53*, 205-212. doi:10. 1037/0022-0167.53.2.205

Rice, K., & Ashby, J. (2007). An efficient method for classifying perfectionists. *Journal of Counseling Psychology, 54*, 72-85. doi:10.1037/0022-0167.54.1.72

Rice, K., Ashby, J., & Preusser, K. (1996). Perfectionism, relationships with parents, and self-esteem. *Journal of Individual Psychology, 52*, 246-260. doi:10.1002/pits.10160

Rice, K., Ashby, J., & Slaney, R. (1998). Self-esteem as a mediator between perfectionism and depression: A structural equations analysis. *Journal of Counseling Psychology, 45*, 304-314. doi:10.1037//0022-0167.45.3.304

Rice, K., Ashby, J., & Slaney, R. (2007). Perfectionism and the five-factor model of personality. *Assessment, 14*, 385-398. doi:10.1177/1073191107303217

Rice, K., Kubal, A. E., & Preusser, K. J. (2004). Perfectionism and children's self-concept: Further validation of the Adaptive/Maladaptive Perfectionism Scale. *Psychology in the Schools, 41,* 279-290. doi:10.1002/pits.10160

Rice, K., Leever, B. A., Christopher, J., & Porter, J. D. (2006). Perfectionism, stress, and social (dis)connection: A short-term study of hopelessness, depression, and academic adjustment among honors students. *Journal of Counseling Psychology, 53,* 524-534. doi:10.1037/0022-0167.53.4.524

Rice, K., & Mirzadeh, S. A. (2000). Perfectionism, attachment, and adjustment. *Journal of Counseling Psychology, 47,* 238-250. doi:10.1037//0022-0167.47.2.238

Rice, K., Neimeyer, g., & Taylor, J. (2011). Efficacy of coherence therapy in the treatment of procrastination and perfectionism. *Counseling Outcome Research and Evaluation, 2,* 126-136. Doi:10.1177/2150137811417975

Rice, K., & Pence, S. L. (2006). Perfectionism and obsessive-compulsive symptoms. *Journal of Psychopathology and Behavioral Assessment, 28,* 103-111. doi:10.1007/s10862-006-7488-4

Rice, K., & Preusser, K. J. (2002). The Adaptive/Maladaptive Perfectionism Scale. *Measurement and Evaluation in Counseling and Development, 34,* 210-222. doi:10.1002/pits.10160

Rice, K., & Slaney, R. (2002). Clusters of perfectionists: Two studies of emotional adjustment and academic achievement. *Measurement and Evaluation in Counseling and Development, 35,* 35-48. doi:10.1007/s10880-008-9119-6

Rice, K. & Stuart, J. (2010). Differentiating adaptive and maladaptive perfectionism on the MMPI-2 and MIPS Revised. *Journal of Personality Assessment, 92*, 158-167. doi:10.1080/00223890903510407

Rice, K., Tucker, C., & Desmond, F. (2008). Perfectionism and depression among low-income chronically ill African American and White adolescents and their maternal parent. *Journal of Clinical Psychology in Medical Settings, 15*, 171-181. doi: 10.1007/s10880-008-9119-6

Richter, J., Eisemann, M., & Perris, C. (1994). The relation between perceived parental rearing and dysfunctional attitudes in unipolar depressive inpatients. *Clinical Psychology and Psychotherapy, 1*, 82-86. doi: 10.1002/cpp.5640010204

Rickner, R. G., & Tan, S. (1994). Psychopathology, guilt, perfectionism, and family of origin functioning among Protestant clergy. *Journal of Psychology and Theology, 22*, 29-38. Retrieved from: http://journals.biola.edu/jpt

Rimes, K., & Chalder, T. (2010). The Beliefs About Emotions Scale: Validity, reliability and sensitivity to change. *Journal of Psychosomatic Research, 68*, 285-292. doi:10.1016/j.jpsychores.2009.09.014

Roberts, S. M., & Lovett, S. B. (1994). Examining the "F" in gifted: Academically gifted adolescents' physiological and affective responses to scholastic failure. *Journal for the Education of the Gifted, 17*, 241-259. Retrieved from: http://journals.prufrock.com/IJP/b/journal-for-the-education-of-the-gifted

Robins, R., Trzesniewski, K., Tracy, J., Gosling, S., & Potter, J. (2002). Global self-esteem across the life span. *Psychology and Aging, 17*, 423-434. doi:10.1037///0882-7974.17.3.423

Rogers, C. (1951). *Client-centered counseling*, Boston: Houghton-Mifflin.

Rosenbaum, J. F., Biederman, J., Bolduc-Murphy, B. A., Faraone, S. V., Chaloff, J., Hirshfeld, D. R., & Kagan, J. (1993). Behavioral inhibition in childhood: A risk factor for anxiety disorders. *Harvard Review of Psychiatry, 1*, 2-16. doi:10.3109/10673229309017052

Rosser, S., Issakidis, C., & Peters, L. (2003). Perfectionism and social phobia: Relationship between the constructs and impact on cognitive behavior therapy. *Cognitive Therapy and Research, 27*, 143-151. doi:10.1023/A:1023505108426

Roth, J., & Dadds, M. R. (1999). Prevention and early intervention strategies for anxiety disorders. *Current Opinion in Psychiatry, 12*, 169-174. doi:10.1097/00001504-199903000-00005

Rudolph, S. G., Flett, G., & Hewitt, P. (2007). Perfectionism and deficits in cognitive emotion regulation. *Journal of Rational-Emotive and Cognitive-Behavior Therapy, 25*, 343-357. doi:10.1007/s10942-007-0056-3

Ryan, A. (2001). The peer group as a context for the development of young adolescent motivation and achievement. *Child Development, 72*, 1135-1150. doi:10.1111/1467-8624.00338

Ryan, A. (2011). Peer relationships and academic adjustment during early adolescence. *Journal of Early Adolescence, 31*, 5-12. doi:10.1177/0272431610387605

Saboonchi, F., Lundh, L., & Ost, L. (1999). Perfectionism and self-consciousness in social phobia and panic disorder with agoraphobia. *Behaviour Research and Therapy, 37*, 799-808. doi:10.1016/S0005-7967(98)00183-1

Salkovskis, P. M. (1985). Obsessional-compulsive problems: A cognitive-behavioural analysis. *Behaviour Research and Therapy, 23*, 571-583. doi:10.1016/0005-7967 (85)90105-6

Salkovskis, P. M. (1989). Cognitive-behavioural factors and the persistence of intrusive thoughts in obsessional problems. *Behaviour Research and Therapy, 27*, 677-682. doi:10.1016/0005-7967(89)90152-6

Salzman, L. (1979). Psychotherapy of the obsessional. *American Journal of Psychotherapy, 33*, 32-40. Retrieved from: http://www.ajp.org/

Sapieja, K., Dunn, J., & Holt, N. (2011). Perfectionism and perceptions of parenting styles in male youth soccer. *Journal of Sport & Exercise Psychology, 33*, 20-39. doi:10. 1177/0272431603254292

Sarigiani, P. A., Heath, P. A., & Camarena, P. M. (2003). The significance of parental depressed mood for young adolescents' emotional and family experiences. *Journal of Early Adolescence, 23*, 241-267. doi:10.1177/0272431603254292

Sassaroli, S., Gallucci, M., & Ruggiero, G. (2008). Low perception of control as a cognitive factor of eating disorders. Its independent effects on measures of eating disorders and its interactive effects with perfectionism and self-esteem. *Journal of Behavior Therapy and Experimental Psychiatry, 39*, 467-488. doi:10.1016/j.jbtep.2007.11.005

Sassaroli, S., Romero Lauro, L., Ruggiero, G. M., Mauri, M. C., Vinai, P., & Frost, R. (2008). Perfectionism in depression, obsessive-compulsive disorder, and eating disorders. *Behavior Research and Therapy, 46*, 757-765. doi:10.1016/j.brat.2008. 02.007

Sassaroli, S., & Ruggiero, G. M. (2005). The role of stress in the association between low self-esteem, perfectionism, and worry, and eating disorders. *International Journal of Eating Disorders, 37*, 135-141. doi:10.1002/eat.20079

Schaaf, K. K., & McCanne, T. R. (1994). Childhood abuse, body image disturbance, and eating disorders. *Child Abuse and Neglect, 18*, 607-615. doi:10.1016/0145-2134(94)90011-6

Schaubroeck, J., & Williams, S. (1993). Type A behavior pattern and escalating commitment. *Journal of Applied Psychology, 78*, 862-867. doi:10.1037//0021-9010.78.5.862

Schmitz, N., Kruse, J., Heckrath, L., Alberti, L., & Tress, W. (1999). Diagnosing mental disorders in primary care: The General Health Questionnaire (GHQ) and the Symptom Check List (SCL-90-R) as screening instruments. *Social Psychiatry and Psychiatric Epidemiology, 34*, 360-366. doi:10.1007/s001270050156

Schuler, P. A. (2000). Perfectionism and gifted adolescents. *Journal of Secondary Gifted Education, 11*, 183-197. doi:10.4219/jsge-2000-629

Schwartz, C. E., Snidman, N., & Kagan, J. (1999). Adolescent social anxiety as an outcome of inhibited temperament in childhood. *Journal of the American Academy of Child and Adolescent Psychiatry, 38*, 1008-1015. doi:10.1097/00004583-199908000-00017

Seidman, E., Allen, L., Aber, J., Mitchell, C. & Feinman, J. (1994). The impact of school transitions in early adolescence on the self-system and perceived social context of poor urban youth. *Child Development, 65*, 502-522. doi:10.1111/j.1467-8624.1994.tb00766.x

Serretti, A., Olgiati, P., & Colombo, C. (2005). Components of self-esteem in affective patients and non-psychiatric controls. *Journal of Affective Disorders, 88*, 93-98. doi:10.1016/j.jad.2005.05.008

Shafran, R., & Mansell, W. (2001). Perfectionism and psychopathology: A review of research and treatment. *Clinical Psychology Review, 21*, 879-906. doi:10.1016/S0272-7358(00)00072-6

Shahar, G., Blatt, S. J., Zuroff, D. C., Krupnick, J. L., & Sotsky, S. M. (2004). Perfectionism impedes social relations and response to brief treatment for depression. *Journal of Social and Clinical Psychology, 23*, 140-154. doi:10.1521/jscp.23.2.140.31017

Shahar, G., Blatt, S. J., Zuroff, D. C., & Pilkonis, P. A. (2003). Role of perfectionism and personality disorder features in response to brief treatment for depression. *Journal of Consulting and Clinical Psychology, 71*, 629-633. doi:10.1037/0022-006X.71.3.629

Sherry, S., & Hall, P. (2009). The perfectionism model of binge eating: Tests of an integrative model. *Journal of Personality and Social Psychology, 96*, 690-709. doi:10.1037/a0014528

Sherry, S., Hewitt, P., Flett, G., & Harvey, M. (2003). Perfectionism dimensions, perfectionistic attitudes, dependent attitudes, and depression in psychiatric patients and university students. *Journal of Counseling Psychology, 50*, 373-386. doi:10.1037/0022-0167.50.3.373

Sherry, S., Hewitt, P., Flett, G., Lee-Baggley, D. L., & Hall, P. L. (2007). Trait perfectionism and perfectionist self-presentation in personality pathology. *Personality and Individual Differences, 42*, 477-490. doi:10.1016/j.paid.2006.07.026

Sherry, S., Hewitt, P., Sherry, D., Flett, G., & Graham, A. (2010). Perfectionism dimensions and research productivity in psychology professors: Implications for understanding the (mal)adaptiveness of perfectionism. *Canadian Journal of Behavioural Science, 42*, 273-283. doi:10.1037/a0020466

Sherry, S., Law, A., Hewitt, P., Flett, G., & Besser, A. (2008). Social support as a mediator of the relationship between perfectionism and depression: A preliminary test of the social disconnection model. *Personality and Individual Differences, 45*, 339-344. doi:10.1016/j.paid.2008.05.001

Sherry, S., Vriend, J., Hewitt, P., Sherry, D., Flett, G., & Wardrop, A. (2009). Perfectionism dimensions, appearance schemas, and body image disturbance in community members and university students. *Body Image, 6*, 83-89. doi:10.1016/j.bodyim. 2008.12.002

Shroff, H., Reba, L., Thornton, L. M., Tozzi, F., Klump, K. L., Berrettini, W. H., . . . Bulik, C. (2006). Features associated with excessive exercise in women with eating disorders. *International Journal of Eating Disorders, 39*, 454-461. doi:10.1002/ eat.20247

Siegler, R. S. (1988). Individual differences in strategy choices: Good students, not-so-good students, and perfectionists. *Child Development, 59*, 833-851. doi:10.2307/1130252

Siegman, A. W. (1994). From Type A to hostility to anger: Reflections on the history of coronary-prone behavior. In A. W. Siegman & T. W. Smith (Eds.). *Anger, hostility, and the heart* (pp. 1-21). Hillsdale, NJ: Erlbaum.

Silberg, J. L., & Bulike, C. M. (2005). The developmental association between eating disorders symptoms and symptoms of depression and anxiety in juvenile twin girls. *Journal of*

*Child Psychology and Psychiatry, 46*, 1317-1326. doi:10.1111/j.1469-7610.2005.01427.x

Silverman, W. K., & Albano, A.M. (1996). *The Anxiety Disorders Interview Schedule for Children for DSM-IV, child and parent versions*. San Antonio, TX: Psychological Corporation.

Silverman, W. K., Cerny, J. A., & Nelles, W. B. (1988). The familial influence in anxiety disorders: Studies on the offspring of patients with anxiety disorders. In B. B. Lahey & A. E. Kazdin (Eds.), *Advances in clinical child psychology* (pp. 223-247). New York: Plenum.

Siqueland, L., Kendall, P. C., & Steinberg, L. (1996). Anxiety in children: Perceived family environments and observed family interaction. *Journal of Clinical Child Psychology, 25*, 225-237. doi:10.1207/s15374424jccp2502_12

Slade, P. D. (1982). Towards a functional analysis of anorexia nervosa and bulimia nervosa. *British Journal of Clinical Psychology, 21*, 167-179. doi:10.1111/j.2044-8260.1982.tb00549.x

Slade, P. D., Phil, M., & Dewey, M. E. (1986). Development and preliminary validation of SCANS: A screening instrument for identifying individuals at risk of developing anorexia and bulimia nervosa. *International Journal of Eating Disorders, 5*, 517-538. doi:10.1002/1098-108X(198603)5:3<517::AID-EAT2260050309>3.0.CO;2-6

Slade, P. D., Dewey, M. E., Kiemle, G., & Newton, T. L. (1990). Update on SCANS: A screening instrument for identifying individuals at risk of developing an eating disorder. *International Journal of Eating Disorders, 9*, 583-584. doi:10.1002/1098-108X(199009)9:5<583::AID-EAT2260090515>3.0.CO;2-A

Slade, P. D., & Owens, R. G. (1998). A dual process model of perfectionism based on reinforcement theory. *Behavior Modification, 22,* 372-390. doi:10.1177/01454455980223010

Slaney, R., & Ashby, J. (1996). Perfectionists: Study of a criterion group. *Journal of Counseling and Development, 74,* 393-398. Retrieved from: http://www.counseling.org/publications

Slaney, R., Ashby, J., & Trippi, J. (1995). Perfectionism: Its measurement and career relevance. *Journal of Career Assessment, 3,* 279-297. doi:10.1177/106907279500300403

Slaney, R., & Johnson, D. G. (1992). *The Almost Perfect Scale*. Unpublished manuscript, Pennsylvania State University.

Slaney, R., Rice, K., & Ashby, J. (2002). A programmatic approach to measuring perfectionism: The Almost Perfect Scales. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 63-88). Washington, DC: American Psychological Association. doi:10.1037/10458-003

Slaney, R., Rice, K, G., Mobley, M., Trippi, J., & Ashby, J. (2001). The Revised Almost Perfect Scale. *Measurement and Evaluation in Counseling and Development, 34,* 130-145. Retrieved from: mec.sagepub.com

Smetana, J., & Asquity, P. (1994). Adolescents' and parents' conceptions of parental authority and personal autonomy. *Child Development, 65,* 1147-1162. doi: 10.1111/j.1467-8624.1994.tb00809.x

Snell, W. E., Overbey, G. A., & Brewer, A. L. (2005). Parenting perfectionism and the parenting role. *Personality and Individual Differences, 39*, 613-624. doi:10.1016/j.paid.2005.02.006

Soares, M., Macedo, A., Bos, S., Marques, M., Maia, B., Periera, A., . . . Azevedo, M. (2009). Perfectionism and eating attitudes in Portuguese students: A longitudinal study. *European Eating Disorders Review, 17*, 390-398. doi:10.1002/erv.926

Soenens, B., Elliot, A., Goossens, L., Vansteenkiste, M., Luyten, P., & Duriez, B. (2005). The intergenerational transmissions of perfectionism: Parents' psychological control as an intervening variable. *Journal of Family Psychology, 19*, 358-366. doi:10.1037/0893-3200.19.3.358

Soenens, B., Luyckx, K., Vansteenkiste, M., Luyten, P., Duriez, B., & Goossens, L. (2008). Maladaptive perfectionism as an intervening variable between psychological control and adolescent depressive symptoms: A three-wave longitudinal study. *Journal of Family Psychology, 22*, 465-474. doi:10.1037/0893-3200.22.3.465

Soenens, B., Vansteenkiste, M., Duriez, B., & Goossens, L. (2006). In search of the sources of psychologically controlling parenting: The role of parental separation anxiety and parental maladaptive perfectionism. *Journal of Research on Adolescence, 16*, 539-559. doi:10.1111/j.1532-7795.2006.00507.x

Soenens, B., Vansteenkiste, M., Luyten, P., Duriez, B., & Goossens, L. (2005). Maladaptive perfectionistic self-representations: The mediational link between psychological control and adjustment. *Personality and Individual Differences, 38*, 487-498. doi:10.1016/j.paid.2004.05.008

Soenens, B., Vansteenkiste, M., Vandereycken, W., Luyten, P., Sierens, E., & Goossens, L. (2008). Perceived parental psychological control and eating-disordered symptoms. *The Journal of Nervous and Mental Disease, 19*6, 144-152. doi:10.1097/NMD.0b013e318162aabf

Solomon, M. (2000). The fruits of their labors: A longitudinal exploration of parent personality and adjustment in their adult children. *Journal of Personality, 68*, 281-308. doi:10.1111/1467-6494.00098

Sorotzkin, B. (1985). The quest for perfection: Avoiding guilt or avoiding shame? *Psychotherapy, 22*, 564-571. doi:10.1037/h0085541

Sorotzkin, B. (1998). Understanding and treating perfectionism in religious adolescents. *Psychotherapy, 35*, 78-95. doi:10.1037/h0087792

Southall, D., & Roberts, J. E. (2002). Attributional style and self-esteem in vulnerability to adolescent depressive symptoms following life stress: A 14-week prospective study. *Cognitive Therapy and Research, 26*, 563-579. doi:10.1023/A:1020457508320

Spielberger, C. D. (1973). *Manual for the State-Trait Anxiety Inventory for Children*. Palo Alto, CA: Consulting Psychologists Press.

Speirs Neumeister, K. (2004a). Factors influencing the development of perfectionism in gifted college students. *Gifted Child Quarterly, 48*, 259-274. doi:10.1177/001698620404800402

Speirs Neumeister, K. (2004b). Understanding the relationship between perfectionism and achievement motivation in gifted college students. *Gifted Child Quarterly, 48*, 219-231. doi:10.1177/001698620404800306

Speirs Neumeister, K., Williams, K., & Cross, T. (2009). Gifted high-school students' perspectives on the development of perfectionism. *Roeper Review, 31*, 198-206. doi:10.1080/02783190903177564

Steele, A., & Wade, T. (2008). A randomized trial investigating guided self-help to reduce perfectionism and its impact on bulimia nervosa: A pilot study. *Behaviour Research and Therapy, 46*, 1316-1323. doi:10.1016/j.brat.2008.09.006

Steiger, H., Leung, F. Y., Puentes-Neuman, G., & Gotthell, N. (1992). Psychosocial profiles of adolescent girls with varying degrees of eating and mood disturbances. *International Journal of Eating Disorders, 11*, 121-131. doi:10.1002/1098-108X (199203)11:2<121::AID-EAT2260110204>3.0.CO;2-D

Stöeber, J. (1998). The Frost Multidimensional Perfectionism Scale revisited: More perfect with four (instead of six) dimensions. *Personality and Individual Differences, 24*, 481-491. doi:10.1016/S0191-8869(97)00207-9

Stöeber, J., & Childs, J. (2010). The assessment of self-oriented and socially prescribed perfectionism: Subscales make a difference. *Journal of Personality Assessment, 92*, 577-585. doi:10.1080/00223891.2010.513306

Stöeber, J., Feast, A., & Hayward, J. (2009). Self-oriented and socially prescribed perfectionism: Differential relationships with intrinsic and extrinsic motivation and test anxiety. *Personality and Individual Differences, 47*, 423-428. doi:10.1016/ j.paid.2009.04.014

Stöeber, J., & Kersting, M. (2007). Perfectionism and aptitude test performance: Testees who strive for perfection achieve better test results. *Personality and Individual Differences, 42*, 1093-1103. doi:10.1016/j.paid.2006.09.012

Stöeber, J., Kempe, T., & Keogh, E. (2008). Facets of self-oriented and socially prescribed perfectionism and feelings of pride, shame, and guilt following success and failure. *Personality and Individual Differences, 44*, 1506-1516. doi:10.1016/j.paid.2008.01.007

Stöeber, J., Otto, K., & Dalbert, C. (2009). Perfectionism and the Big Five: Conscientiousness predicts longitudinal increases in self-oriented perfectionism. *Personality and Individual Differences, 47*, 363-368. doi:10.1016/j.paid.2009.04.004

Stöeber, J., Otto, K., & Stoll, O. (2004). Mehrdimensionales Inventar zu Perfektionismus im Sport (MIPS) [Multidimensional Inventory of Perfectionism in Sport (MIPS)]. In J. Stöeber, K. Otto, E. Pesceck, & O. Stoll (Eds.), *Skalendokumentation "Perfektionismus im Sport" (Hallesche Berichte zur Pädagogischen Psychologie No. 7*, pp. 4-13). Halle/Saale, Germany: Martin Luther University of Halle, Department of Educational Psychology.

Stöeber, J., & Rambow, A. (2007). Perfectionism in adolescent school students: Relations with motivation, achievement, and well-being. *Personality and Individual Differences, 42*, 1379-1389. doi:10.1016/j.paid.2006.10.015

Stöeber, J., & Stöeber, F. (2009). Domains of perfectionism: Prevalence and relationships with perfectionism, gender, age, and satisfaction with life. *Personality and Individual Differences, 46*, 530-535. doi:10.1016/j.paid.2008.12.006

Stöeber, J., & Yang, H. (2010). Perfectionism and emotional reactions to perfect and flawed achievements: Satisfaction and pride only when perfect. *Personality and Individual Differences, 49*, 246-251. doi:10.1016/j.paid.2010.03.044

Stornelli, D., Flett, G., & Hewitt, P. (2009). Perfectionism, achievement, and affect in children: A comparison of students from gifted, arts, and regular programs. *Canadian Journal of School Psychology, 24*, 267-283. doi:10.1177/0829573509342392

Striegel-Moore, R. H., Schreiber, G. B., Lo, A., Crawford, P., Obarzanek, E., & Rodin, J. (2000). Eating disorder symptoms in a cohort of 11 to 16-year-old Black and White girls: The NHLBI Growth and Health Study. *International Journal of Eating Disorders, 27*, 49-66. doi:10.1002/(SICI)1098-108X(200001)27:1<49::AID-EAT6>3.0.CO;2-E

Stumpf, H., & Parker, W. D. (2000). A hierarchical structural analysis of perfectionism and its relation to other personality characteristics. *Personality and Individual Differences, 28*, 837-852. doi:10.1016/S0191-8869(99)00141-5

Sturman, E. D., & Mongrain, M. (2005). Self-criticism and major depression: An evolutionary perspective. *British Journal of Clinical Psychology, 44,* 502-519. doi: 10.1348/014466505X35722

Sue, S. & Okazaki, S. (1990). Asian-American educational achievements: A phenomenon in search of an explanation. *American Psychologist, 45*, 913-920. doi:10.1037//0003-066X.45.8.913

Suls, J., & Wan, C. K. (1989). The relation between Type A behavior and chronic emotional distress: A meta-analysis. *Journal of Personality and Social Psychology, 57*, 503-512. doi:10.1037//0022-3514.57.3.503

Suzuki, T. (2005). Relationship between two aspects of perfectionism and obsessive-compulsive symptoms. *Psychological Reports, 96*, 299-305. doi:10.2466 /pr0.96.2.299-305

Tangney, J. P. (2002). Perfectionism and the self-conscious emotions: Shame, guilt, embarrassment, and pride. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 199-216). Washington, DC: American Psychological Association. doi:10.1037/10458-008

Tearnan, B. H., & Telch, M. J. (1988). Etiology of agoraphobia: An investigation of perceived childhood and parental factors. *Phobia Practice and Research Journal, 1*, 13-24.

Terry-Short, L. A., Owens, R. G., Slade, P. D., & Dewey, M. E. (1995). Positive and negative perfectionism. *Personality and Individual Differences, 18*, 663-668. doi: 10.1016/0191-8869(94)00192-U

Thompson, D. A., Berg, K. M., & Shatford, L. A. (1987). The heterogeneity of bulimic symptomatology: Cognitive and behavioral dimensions. *International Journal of Eating Disorders, 6*, 215-234. doi:10.1002/1098-108X(198703)6:2<215::AID-EAT2260060206>3.0.CO;2-J

Timko, C., Cronkite, R. C., Berg, E. A., & Moos, R. H. (2002). Children of parents with unipolar depression: A comparison of stably remitted, partially remitted, and nonremitted parents and nondepressed controls. *Child Psychiatry and Human Development, 32*, 165-185. doi:10.1023/A:1017924421229

Tobin, D. L., & Griffing, A. S. (1996). Coping, sexual abuse, and compensatory behavior. *International Journal of Eating Disorders, 20*, 143-148. doi:10.1002/(SICI)1098-108X(199609)20:2<143::AID-EAT4>3.3.CO;2-3

Todd, D. M., Deane, F. P., & McKenna, P. A. (1997). Appropriateness of SCL-90-R adolescent and adult norms for outpatient and nonpatient college students. *Journal of Counseling Psychology, 44*, 294-301. doi:10.1037//0022-0167.44.3.294

Tozzi, F., Aggen, S. H., Neale, B. M., Anderson, C. B., Mazzeo, S. E., Neale, M. C., . . . Bulik, C. (2004). The structure of perfectionism: A twin study. *Behavior Genetics, 34*, 483-494. doi:10.1023/B:BEGE.0000038486.47219.76

Tsao, J. C., Myers, C. D., Craske, M. G., Bursch, B., Kim, S. C., & Keltzer, L. K. (2005). Parent and child anxiety sensitivity: Relationship in a nonclinical sample. *Journal of Psychopathology and Behavioral Assessment, 27*, 259-268. doi:10.1007/s10862-005-2406-8

Turner, P. A. (2008). Impact of parental depression on child adjustment and protection afforded by child temperament. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 68*, 7681.

Turner, S. M., Beidel, D. C., & Costello, A. (1987). Psychopathology in the offspring of anxiety disorders patients. *Journal of Consulting and Clinical Psychology, 55*, 229-235. doi:10.1037//0022-006X.55.2.229

Turner, S. M., Beidel, D. C., & Roberson-Nay, R. (2005). Offspring of anxious parents: Reactivity, habituation, and anxiety-proneness. *Behaviour Research and Therapy, 43*, 1263-1279. doi:10.1016/j.brat.2004.09.005

Turner, S. M., Beidel, D. C., Roberson-Nay, R., & Tervo, K. (2003). Parenting behaviors in parents with anxiety disorders. *Behaviour Research and Therapy, 41*, 541-554. doi:10.1016/S0005-7967(02)00028-1

United States Census Bureau. (2000). *Census 2000 state and county quickfacts: Nevada*. Retrieved March 28, 2006, from http://quickfacts.census.gov/qfd/states.32000.html

United States Census Bureau. (2004). *2004 American community survey: Median family income by size*. Retrieved March 28, 2006, from http://www.census.gov/hhes/www/income/medincsizeandstate.xls

United States Census Bureau. (2006). *2006 American community survey: Demographic and housing estimates*. Retrieved May 28, 2008, from http://factfinder.census.gov

Vallence, J. K., Dunn, J. G., & Dunn, J. L. (2006). Perfectionism, anger, and situation criticality in competitive youth ice hockey. *Journal of Sport and Exercise Psychology, 28*, 383-406. Retrieved from: http://journals.humankinetics.com/jsep

Vandel, D. L. (2000). Parents, peer groups, and other socializing influences. *Developmental Psychology, 36*, 699-710. doi:10.1037//0012-1649.36.6.699

van den Akker, A., Dekovic, M. & Prinzie, P. (2010). Transitioning to adolescence: How challenges in child personality and overreactive parenting predict adolescent adjustment problems. *Development and Psychopathology, 22*, 151-163. doi:10.1017/S0954579409990320

van Hanswijck de Jonge, L., & Waller, G. (2003). Perfectionism levels in African-American and Caucasian adolescents. *Personality and Individual Differences, 34*, 1447-1451. doi:10.1016/S0191-8869(02)00126-5

Van Yperen, N., & Hagedoorn, M. (2008). Living up to high standards and psychological distress. *European Journal of Personality, 22*, 337-346. doi:10.1002/per.681

Vega-Lahr, N., & Field, T. M. (1986). Type A behavior in preschool children. *Child Development, 57*, 1333-1348. doi:10.2307/1130413

Verner-Filion, J. & Gaudreau, P. (2010). From perfectionism to academic adjustment: The mediating role of achievement goals. *Personality and Individual Differences, 49,* 181-186. doi:10.1016/j.paid.2010.03.029

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. doi:10.1207/s15327752jpa7201_3

Vistainer, P., & Matthews, K. A. (1987). Stability of overt Type A children: Results from a two- and five-year longitudinal study. *Child Development, 58,* 1586-1591. doi:10. 2307/1130697

Vohs, K. D., Bardone, A. M., Joiner, T. E., Jr., Abramson, L. Y., & Heatherton, T. F. (1999). Perfectionism, perceived weight status, and self-esteem interact to predict bulimic symptoms: A model of bulimic symptom development. *Journal of Abnormal Psychology, 108,* 695-700. doi:10.1037//0021-843X.108.4.695

Wang, A., Peterson, G. W., & Morphey, L. K. (2007). Who is more important for early adolescents' developmental choices? Peers or parents? *Marriage and Family Review, 42,* 95-122. doi: 10.1300/J002v42n02_06

Wang, K. (2010). The Family Almost Perfect Scale: Development, psychometric properties, and comparing Asian and European Americans. *Asian American Journal of Psychology, 1,* 186-199. doi:10.1037/a0020732

Ward, C. H., & Eisler, R. M. (1987). Type A behavior, achievement striving, and dysfunctional self-evaluation system. *Journal of Personality and Social Psychology, 53,* 318-329. doi:10.1037//0022-3514.53.2.318

Warner, V., Mufson, L., & Weissman, M. M. (1995). Offspring at high and low risk for depression and anxiety: Mechanisms of psychiatrics disorder. *Journal of the American Academy of Child and Adolescent Psychiatry, 34*, 786-797. doi:10.1097/00004583-199506000-00020

Warren, S. L., Gunnar, M. R., Kagan, J., Anders, T. F., Simmens, S. J., Rones, M., et al. (2003). Maternal panic disorder: Infant temperament, neurophysiology, and parenting behaviors. *Journal of the American Academy of Child and Adolescent Psychiatry, 42*, 814-825. doi:10.1097/01.CHI.0000046872.56865.02

Wassenaar, E., le Grange, D., Winship, J., & Lachenicht, L. (2000). The prevalence of eating disorder pathology in a cross-ethnic population of female students in South Africa. *European Eating Disorders Review, 8*, 225-236. doi:10.1002/(SICI)1099-0968(200005)8:3<225::AID-ERV324>3.0.CO;2-P

Watson, H., Raykos, B., Street, H., Fursland, A., & Nathan, P. (2011). Mediators between perfectionism and eating disorder psychopathology: Shape and weight overvaluation and conditional goal-setting. *International Journal of Eating Disorders*, 44, 142-149. doi:10.1002/eat.20788

Watt, M. C., & Stewart, S. H. (2000). Anxiety sensitivity mediates the relationships between childhood learning experiences and elevated hypochondriacal concerns in young adulthood. *Journal of Psychosomatic Research, 49*, 107-118. doi:10.1016/S0022-3999(00)00097-0

Watt, M. C., Stewart, S. H., & Cox, B. J. (1998). A retrospective study of the learning history origins of anxiety sensitivity. *Behaviour Research and Therapy, 36*, 505-525. doi:10.1016/S0005-7967(97)10029-8

Wear, R. W., & Pratz, O. (1987). Test-retest reliability for the Eating Disorder Inventory, *International Journal of Eating Disorders, 6,* 767-769. doi:10.1002/1098-108X(198711)6:6<767::AID-EAT2260060611>3.0.CO;2-V

Wei, M., Heppner, P. P., Russell, D. W., & Young, S. K. (2006). Maladaptive perfectionism and ineffective coping as mediators between attachment and future depression: A prospective analysis. *Journal of Counseling Psychology, 53,* 67-79. doi:10.1037/0022-0167.53.1.67

Wei, M., Mallinckrodt, B., Russell, D. W., & Abraham, W. T. (2004). Maladaptive perfectionism as a mediator and moderator between adult attachment and depressive mood. *Journal of Counseling Psychology, 51,* 201-212. doi:10.1037/0022-0167.51.2.201

Weidner, G., Sexton, G., Matarazzo, J., Pereira, C., & Friend, R. (1988). Type A behavior in children, adolescents and their parents. *Developmental Psychology, 24,* 118-121. doi:10.1037//0012-1649.24.1.118

Weintraub, S., Neale, J., & Liebert, D. (1975). Teacher ratings of children vulnerable to psychopathology. *American Journal of Ortopsychiatry, 45,* 839-845. doi:10.1111/j.1939-0025.1975.tb01211.x

Weissman, A., & Beck, A. (1978). *Development and validation of the Dysfunctional Attitudes Scale*. Paper presented at the annual meeting of the Association for Advancement of Behavior Therapy, Chicago, IL.

Weissman, M. (1993). Family genetic studies of panic disorder. *Psychiatry Research, 27,* 69-78. doi:10.1016/0022-3956(93)90018-W

Weissman, M., Paykel, E., & Klerman, G. (1972). The depressed woman as a mother. *Social Psychiatry, 7*, 98-108.

Weissman, M., Wickramaratne, P., Nomura, Y., Warner, V., Pilowsky, D., & Verdeli, H. (2006). Offspring of depressed parents: 20 years later. *American Journal of Psychiatry, 163*, 1001-1008. doi:10.1176/appi.ajp.163.6.1001

Welch, E., Miller, J., Ghaderi, A., & Vaillancourt, T. (2009). Does perfectionism mediate or moderate the relation between body dissatisfaction and disordered eating attitudes and behaviors? *Eating Behaviors, 10*, 168-175. doi:10.1016/j.eatbeh.2009.05.002

Welch, L. (1996). Internalizing and externalizing psychopathology and personality in parents and their adolescent offspring. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 56*, 5818.

Welner, Z., Welner, A., McCrary, M. D., & Leonard, M. A. (1977). Psychopathology in children of inpatients with depression: A controlled study. *Journal of Nervous and Mental Disease, 164*, 408-413. doi:10.1097/00005053-197706000-00006

Westen, D. (1999). *Psychology: Mind, brain, and culture* (2nd ed.). New York: Wiley.

Whaley, S. E., Pinto, A., & Sigman, M. (1999). Characterizing interactions between anxious mothers and their children. *Journal of Consulting and Clinical Psychology, 67*, 826-836. doi:10.1037//0022-006X.67.6.826

Wigfield, A., & Eccles, J. S. (2002). Students' motivation during the middle school years. In J. Aronson (Ed.), *Improving academic achievement: Impact of psychological factors on education* (pp. 159–184). San Diego, CA: Academic Press.

Wigfield, A., Lutz, S., & Wagner, L. (2005). Early Adolescents Development Across the Middle School Years: Implications for School Counselors. *Professional School Counseling, 9*, 112-119. Retrieved from: http://schoolcounselor.metapress.com

Wilksh, S., Durbridge, M., & Wade, T. (2008). A preliminary controlled comparison of programs designed to reduce risk of eating disorders targeting perfectionism and medical literacy. *Journal of the American Academy of Child and Adolescent Psychiatry, 47*, 939-947. doi:10.1097/CHI.0b013e3181799f4a

Woodside, D. B., Bulik, C. M., Halmi, K. A., Fichter, M. M., Kaplan, A., Berrettini, W., . . . Kaye, W. (2002). Personality, perfectionism, and attitudes toward eating in parents of individuals with eating disorders. *International Journal of Eating Disorders, 31*, 290-299. doi:10.1002/eat.10032

Wu, K., & Cortesi, G. (2009). Relations between perfectionism and obsessive-compulsive symptoms: Examination of specificity among the dimensions. *Journal of Anxiety Disorders, 23*, 393-400. doi:10.1016/j.janxdis.2008.11.006

Yorulmaz, O., Karancı, A. N., & Tekok-Kılıç, A. (2006). What are the roles of perfectionism and responsibility in checking and cleaning compulsions. *Anxiety Disorders, 20*, 312-327. doi:10.1016/j.janxdis.2005.02.009

Ye, H., Rice, K., & Storch, E. (2008). Perfectionism and peer relations among children with obsessive-compulsive disorder. *Child Psychiatry and Human Development, 39*, 415-426. doi:10.1007/s10578-008-0098-5

Yoon, J., & Lau, A. (2008). Maladaptive perfectionism and depressive symptoms among Asian American college students: Contributions of interdependence and parental

relations. *Cultural Diversity and Ethnic Minority Psychology, 14*, 92-101. doi:10.1037/1099-9809.14.2.92

Young, E. A., Clopton, J. R., & Bleckley, M. K. (2004). Perfectionism, low self-esteem and family factors as predictors of bulimic behavior. *Eating Behaviors, 5*, 273-283. doi:10.1016/S1471-0153(04)00047-9

Zlotnick, C., Hohlstein, L. A., Shea, M. T., Pearlstein, T., Recupero, P., & Bidadi, K. (1996). The relationship between sexual abuse and eating pathology. *International Journal of Eating Disorders, 20*, 129-134. doi:10.1002/(SICI)1098-108X(199609)20:2<129::AID-EAT2>3.0.CO;2-I

Zuroff, D. C., Blatt, S. J., Sotsky, S. M., Krupnick, J. L., Martin, D. J., Sanislow, A., & Simmens, S. (2000). Relation of therapeutic alliance and perfectionism to outcome in brief outpatient treatment of depression. *Journal of Consulting and Clinical Psychology, 68*, 114-124. doi:10.1037//0022-006X.68.1.114

Zuroff, D., Fournier, M., Moskowitz, D. (2007). Depression, perceived inferiority, and interpersonal behavior: Evidence for the involuntary defeat strategy. *Journal of Social and Clinical Psychology, 2*, 751-778. doi:10.1521/jscp.2007.26.7.751

# VITA

Graduate College
University of Nevada, Las Vegas

Lisa Caitlin Cook

Degrees:

Bachelor of Arts, Psychology, 2002
The College of William and Mary

Master of Arts, Psychology, 2007
University of Nevada, Las Vegas

Special Honors and Awards:

Summer 2008, Summer Scholarship
2007-2008, Barrick Fellowship
Summer 2006, GREAT Scholarship

Publications:

Kearney, C.A., Chapman, G., & Cook, L.C. (2005). Moving from assessment to treatment of school refusal behavior in youth. *International Journal of Behavioral and Consultation Therapy, 1*, 46-51.

Kearney, C.A., Chapman, G., & Cook, L.C. (2005). School refusal behavior in young children. *International Journal of Behavioral and Consultation Therapy*, 1, 212-218.

Kearney, C.A., Cook, L.C., Chapman, G., & Bensaheb, A. (2006). Exploratory and confirmatory factor analyses of the Motivation Assessment Scale and Resident Choice Assessment Scale. *Journal of Developmental and Physical Disabilities*.

Kearney, C.A., Cook, L.C., & Chapman, G. (2007). School stress and school refusal behavior. In Fink, G. (Ed.), *Encyclopedia of stress* (2nd ed.) (Vol. 3) (pp. 422-425). Oxford: Academic Press.

Kearney, C.A., Cook, L.C., Wechlser, A., Haight, C.M., & Stowman, S. (2008). Behavioral assessment. In M. Hersen & A.M. Gross (Eds.), *Handbook of clinical psychology, Volume 2: Children and adolescents* (pp. 551-574). Hoboken, JN: Wiley.

Cook, L.C., & Kearney, C.A. (2009). Parent and youth perfectionism and internalizing psychopathology. *Personality and Individual Differences*, *26,* 325-330.

Dissertation Title: The Influence of Parent Factors on Child Perfectionism: A Cross-Sectional Study

Dissertation Examination Committee:

Chairperson, Dr. Christopher Kearney, Ph. D.
Committee Member, Dr. Jeff Kern, Ph. D.
Committee Member, Dr. Brad Donohue, Ph. D.
Graduate Faculty Representative, Dr. Peggy Whitby, Ph. D.