The Hidden Costs of Success: A Mixed Methods Approach to Examining Achievement Pressures in Affluent Youth

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LOYOLA UNIVERSITY CHICAGO

THE HIDDEN COSTS OF SUCCESS: A MIXED METHODS APPROACH TO
EXAMINING ACHIEVEMENT PRESSURES IN AFFLUENT YOUTH

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL
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BY
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ABSTRACT

Within the last ten years, researchers have begun to recognize that youth from affluent backgrounds report elevated adjustment problems (Csikszentmihalyi & Schneider 2001; Luthar & Lantendresse 2005a), yet contributing factors have rarely been investigated. The present study explored various parenting variables and their influence on adolescents from affluent communities, including two parent-focused parenting variables (i.e., parental perfectionism and parent life satisfaction) and three adolescent-focused parenting variables (i.e., perceived parental pressure, parents’ future goals for their children, and parental involvement in their children’s lives). Using a mixed methods approach (i.e., quantitative and qualitative data), both linear and curvilinear relations between parenting variables and adolescent adjustment (i.e., depressive symptoms, anxiety, and life satisfaction) as well as mediation and moderation models were examined. Participants included 10th grade students and their parents (n = 88 parent-child pairs) from four affluent high schools in the Northeast and Midwest. Although it was proposed that parents’ traits and adjustment could be linked to adolescent adjustment through various parental behaviors and values (i.e., mediation), we found more support for the conditions under which parental factors may be related to affluent adolescent adjustment (i.e., moderation). Lower levels of parental pressure, less emphasis on achievement-oriented values, and greater emphasis on fulfillment-oriented values provided circumstances in which parental traits and adjustment could be linked to
healthier adolescent adjustment. Findings also highlighted that the synchronicity or match between what the child needs/desires and the parent’s emotional and behavioral involvement may be of particular importance. Additionally, socially prescribed perfectionism was a consistently unfavorable aspect of parenting, linked to other undesirable parenting variables, and negatively associated with positive aspects of parenting. In contrast, parent life satisfaction was associated with greater emphasis on adolescent growth and fulfillment.
Despite the vast literature on both risk and protective factors contributing to adjustment among middle class and economically disadvantaged youth, few researchers have examined the upper end of the socioeconomic spectrum. Only in the last decade have researchers begun to acknowledge that the “privileged” status of affluent children may not be as harmless or advantageous as previously thought, and that adolescents from affluent families are vulnerable to significant adjustment problems for a unique set of reasons (Ansary & Luthar, 2009; Luthar, 2003; Luthar & Barkin, 2012; Luthar & Latendresse, 2005a). Affluence is generally defined as a median annual family income of roughly $125,000 (Luthar & Latedresse, 2005b). Given recent findings suggesting that affluent adolescents experience equivalent or higher levels of anxiety and depression as compared to normative samples and their economically disadvantaged counterparts (Luthar & Barkin, 2012; Luthar & Lantendresse, 2005a) and that these adjustment problems lead to worse outcomes later in life (Ansary, Luthar, & McMahon, 2012), further research is warranted.

It is widely accepted that contextual factors greatly influence children’s attitudes and beliefs, which subsequently shape how a child interacts with their environment and ultimately influence patterns of continuity and discontinuity in their behavior.
(Bronfenbrenner, 1989; Rutter & Sroufe, 2000). Given that context plays a major role in both healthy adjustment and the development of adjustment problems, it is crucial to examine the association between risk and resilience factors within influential contexts (Ansary, Luthar, & McMahon, 2012).

**Adjustment in Affluent Adolescents**

Adolescence has been identified by numerous researchers as a time period of significant transition and adjustment. Specifically, symptoms of anxiety and depression escalate during this time (Graber, 2009). Studies indicate that suburban adolescents in affluent communities experience adjustment difficulties commensurate with those struggling with economic deprivation, sparse resources, and exposure to violence (Luthar & D’Avanzo, 1999). In particular, internalizing problems (i.e., anxiety and depressive symptoms) have been identified as adjustment difficulties to which wealthy, high achieving youth are most vulnerable (Luthar, 2003; Luthar, Ansary, & McMahon, 2012; Luthar & Barkin, 2012; Luthar & Sexton, 2004). In addition to experiencing higher levels of internalizing symptoms, affluent youth are also less satisfied with their lives in general (Csikszentmihalyi & Schneider, 2001). Furthermore, research suggests that these problems worsen over time. Adjustment disturbances in affluent communities begin to elevate in seventh grade (Luthar & Becker, 2002; Luthar & Latendresse, 2005b) and continue escalating through the 10th and 12th grades (Luthar & Ansary, 2005; Luthar & Goldstein, 2008).

Why are affluent adolescents experiencing such significant struggles? Research indicates that upward mobility, prestige, affluence, and professional success are all highly
valued in affluent communities (Luthar & Sexton, 2004). Though achievement-oriented values have been cited as a potential antecedent of adjustment problems in affluent adolescents (Luther & Latendresse, 2005a; Travers, Bohnert, & Randall, 2013), the source of this pressure has not been fully explained. The present study suggests that these achievement-oriented values are evident within the parent context. To better understand the achievement values unique to the culture of affluence, the present study draws on existing literature describing several parenting factors that may significantly impact adolescent adjustment.

**Parental Perfectionism**

One of the parenting variables that is highly understudied in affluent populations is parental perfectionism. Initially, perfectionism was often portrayed as either adaptive/normal or maladaptive/neurotic (Hamacheck, 1978; Hollender 1965). Adaptive perfectionism is described as setting personal goals or standards that lead to feelings of satisfaction with performance, while maladaptive perfectionism is characterized by setting inflexible or unattainable standards that often lead to dissatisfaction with performance (Enns & Cox, 2002). In addition to this dichotomous characterization of perfectionism, numerous other conceptualizations have been proposed. A strong case can be made, however, for a multidimensional model of perfectionism (Cox, Enns, & Clara, 2002; Enns & Cox, 2002). This model posits that perfectionism has both intrapersonal and interpersonal components, and identifies three separate domains: (1) self-oriented perfectionism, (2) other-oriented perfectionism, and (3) socially prescribed perfectionism. *Self-oriented perfectionism* is defined as perfectionistic demands towards oneself, and
often involves exceedingly high, unrealistic, and self-imposed standards accompanied by an intensive self-scrutiny, criticism, and inability to accept flaws and failure in oneself (Hewitt & Flett, 1991). Other-oriented perfectionism is self-oriented perfectionism turned outward and involves demanding that others meet one’s own exaggerated and unrealistic standards (Blatt, 1995). Socially prescribed perfectionism reflects one’s perception of perfectionistic demands from others directed towards oneself. This domain involves a preoccupation with evaluations from others and encompasses the belief that other people hold unrealistic expectations that one must meet in order to win their approval (Blatt, 1995; Lundh, 2004).

Few studies to date have explored parental perfectionism in affluent samples, yet recent research conducted from the same data set utilized in the current study suggests that parental perfectionism (i.e., self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism) is not directly linked to adolescent adjustment (i.e., depressive symptoms, anxiety, and life satisfaction) (Randall, Bohnert, & Travers, under review). Although adolescents’ own perfectionism has been linked with numerous adjustment disturbances, including depression, anxiety, eating disorders, and achievement and relationship problems (for reviews, see Flett & Hewitt, 2002), less is known about the indirect effect of parental perfectionism on adolescent adjustment. Since research suggests that an individual’s perfectionism can negatively impact their own adjustment, but parental perfectionism does not seem to be directly linked to adolescent adjustment, the present study investigated whether the three distinct domains of parental perfectionism (i.e., self-oriented perfectionism, other-oriented perfectionism, and socially
prescribed perfectionism) are *indirectly* associated with levels of depressive symptoms, anxiety, and life satisfaction in their adolescent children.

Prior research suggests that perfectionism is often transmitted across generations and that children suffer as a result. In other words, children with perfectionistic parents are likely to also demonstrate perfectionism and experience concurrent psychological difficulties (Hewitt & Flett, 1991) such as low self-esteem, depression, and suicidality (e.g., Hamilton & Schweitzer, 2000; Yoon & Lau, 2008). Ample evidence links one’s own maladaptive perfectionism to their negative adjustment, yet research also connects positive conceptualizations of perfectionism (Stoeber & Otto, 2006) with several emotional and academic benefits. For example, one study found associations between adaptive perfectionism and more secure attachments, better academic satisfaction/integration, and less depression in a college population (Rice & Mirzadeh, 2000). Another study found that setting high standards may lead to higher motivation and higher achievement (Bieling, Israeli, Smith, & Antony, 2003). In addition, other research has shown that adaptive perfectionism, defined as positive striving toward achievement (Stober & Otto, 2006), correlates positively with self-efficacy (Frost, Marten, Lahart, & Rosenblate, 1990) and positive affect (Frost et al., 1993).

Although concerns regarding perfectionism are clearly warranted, the potential benefits of perfectionism have rarely been explored. It may be that curvilinear relations exist between parental perfectionism and adolescent adjustment. Although no studies to our knowledge have tested for these relations, others have demonstrated curvilinear relations between behavioral/psychological control (Kakihara & Tilton-Weaver, 2009),
family acceptance/control (Kurdek & Fine, 1994), and adolescent adjustment. Furthermore, no research to date has investigated the relations between parental perfectionism and adolescent adjustment in a sample of affluent parents and adolescents. The present study aims to close this gap by examining for both linear and curvilinear relations between parental perfectionism and adolescent adjustment in an affluent sample.

**Parental Life Satisfaction**

In addition to parental perfectionism, parental adjustment is also believed to relate to adolescent development and adjustment. Life satisfaction refers to a global assessment of an individual’s quality of life according to his or her own chosen criteria (Shin & Johnson, 1978). Life satisfaction is well studied in child, adolescent, and college-age populations, yet few researchers have examined parental life satisfaction or its association with adolescent adjustment. Pediatric research suggests that parental distress and dissatisfaction create stressful environments for their children that can lead to increased levels of adjustment problems (e.g., Deater-Deckard, 2006), which can potentially have long-term adverse effects on their children’s lives. In contrast, research suggests that positive family experiences, effective communication among family members, and a focus on emotional support all promote psychological well-being among youth (Park, 2004). In general, the literature focuses more on the absence of life satisfaction. Yet researchers are now recognizing the importance of subjective well-being, which highlights the presence of positive factors rather than the simple absence of negative factors. Low levels of pathological symptoms does not necessarily indicate high levels of
positive well-being, thus it is important to examine positive indicators, such as life satisfaction (Cowen, 1991, 1994).

Parental life satisfaction in affluent populations is especially understudied, although recent work indicates that more research is warranted. Investigators often emphasize the importance of the child’s needs, but fail to adequately address the needs of the parent or the impact an unhappy parent can have on a child. Levine (2006) suggests that several factors may contribute to life satisfaction, or lack thereof, in affluent parents. For example, long work hours of one parent can leave the other feeling like a single parent. Excessively busy schedules and shuttling of children may interfere with parents’ time for friendships, marital activities, and community involvement (Levine, 2006). In addition, the cultural values that are often emphasized in affluent communities (e.g., wealth, status, image, and material consumption) are associated with lower personal well-being and psychosocial health in general (Kasser, 2002). Furthermore, a desire to avoid any display of weakness or “tarnishing” of a perfect image may prevent these parents from seeking help when problems arise, allowing difficulties to persist and escalate (Levine, 2006). For all of these reasons, affluent parents may be vulnerable and, given that affluent parents tend to live in communities in which wealth and success are highly valued and that parents’ happiness is likely to influence child adjustment, it is crucial to examine parental life satisfaction as well as its potential impact on adolescent adjustment in this population. Thus the present study examined both the direct and indirect effects of parental life satisfaction on adolescents’ depressive symptoms, anxiety, and life satisfaction.
**Perceived Parental Pressure**

The current study also aims to determine the influence of parenting as viewed through the eyes of the adolescent, including adolescents’ perception of parental pressure. Perceived parental pressure is defined in the literature as the degree to which youth believe their parents (1) set high performance standards for them (i.e., evaluation), and (2) are overly critical of their performance after failing to achieve those high standards (i.e., criticism; Luthar & Becker, 2002; Sagar & Stoeber, 2009; Stöber, 1998; Stumpf & Parker, 2000). The present study posits that perceived parental pressure may be a risk factor for affluent youth. In other words, parents’ endorsement of achievement-oriented values may contribute to adolescent adjustment problems, particularly among adolescents who perceive high parental pressure.

As previously discussed, adolescence is a time period of increased risk for adjustment disturbances. Not only are youth more susceptible to the development of internalizing and externalizing problems, but they also exhibit more self-consciousness and sensitivity to social standards and achievement expectations. As a result, perceived parental pressure may also affect adolescent adjustment (Flett et al., 2002). The transactional development of the parent-child relationship is often implicated as an important source of internalizing difficulties in adolescents (Hudson & Rapee, 2001; Rapee, 1997; Renshaw, 2008). Several studies suggest that perceived parental criticism and exceedingly high expectations (i.e., perceived parental pressure) are related to the development of psychological problems, including low self-efficacy, increased social
anxiety, and more difficulties in the parent-child relationship (Biran & Reese, 2007; Luthar & Barkin, 2012; Renshaw, 2008).

Empirical research supports the claim that achievement pressure from parents is significantly associated with distress among affluent youth (Ablard & Parker, 1997; Ansary, Luthar, & McMahon, 2012; Luthar & Becker, 2002; Randall, Bohnert, & Travers, in press). For example, Luthar and Becker (2002) found that affluent adolescents who believe their parents emphasize their achievements over their personal well-being report higher levels of internalizing symptoms. Furthermore, these adolescents then begin to set excessively high standards for themselves and subsequently report greater emotional distress (i.e., depressive and anxiety symptoms) and delinquency (Luthar & Becker, 2002). Research also suggests that academic underperformance in the context of intense pressure to achieve is particularly distressing for affluent youth (Ansary, Luthar, & McMahon, 2012). Consistent with these findings, a recent investigation drawing on the same sample used in the current study found that adolescents who report higher levels of perceived parental pressure exhibit higher levels of depressive symptoms and lower levels of life satisfaction (Randall, Bohnert, & Travers, under review).

Although several studies have demonstrated a significant relation between perceived parental pressure and symptoms of adolescent depression and anxiety (Neumeister, 2004; Stoeber & Rambow, 2007; Chambless & Steketee, 1999; Sagar & Stoeber, 2009; Randall, Bohnert, & Travers, under review), the complete absence of perceived pressure may not be beneficial either. It is possible that a paucity of parental pressure to achieve may be interpreted by adolescents as a lack of interest or investment
in their lives, which may exacerbate the low parent-child closeness often found in affluent populations (Luthar & Latendresse, 2005b). To our knowledge, researchers have not examined perceived parental pressure as both a risk and protective factor to help explain the relation between parental perfectionism and adjustment problems. In an effort to take a more nuanced approach in examining the impact of this pressure, the present study explored linear and curvilinear associations between perceived parental pressure and adolescent adjustment. Furthermore, we extended the current body of literature by investigating whether perceived parental pressure is a mediator or a moderator of parent-focused parenting variables (i.e., parental perfectionism and parent life satisfaction) and adolescent adjustment (i.e., depressive symptoms, anxiety, and life satisfaction) (see Figure 2).

**Parents’ Future Goals for Their Children**

Parents of academically talented and affluent youth are often accused of pressuring their children to attain high levels of achievement (Ablard & Parker, 1997; Levine, 2006). Although research suggests that parental support of high achievement is beneficial in moderation (Stevenson & Baker, 1987), there is concern that unrealistic parental expectations create excessive pressure and can lead to childhood adjustment problems (Sigel, 1987; Levine, 2006). Parents’ beliefs about academic performance are thought to be influenced by numerous factors, including education level (Steinberg, Lamborn, Dornbusch, & Darling, 1992), yet these values have rarely been examined in high socioeconomic status (SES) populations. Affluent communities engender specific cultural norms about achievement and success that are different from those of the lower
and middle classes. More specifically, it has been suggested that affluent parents value prestige, affluence, and professional success (Luthar & Sexton, 2004). This type of pressure is a unique aspect of the culture of affluence, which may have a significant impact on adolescent adjustment.

The present study posits that certain types of parental goals can lead to achievement pressures, which may subsequently contribute to adjustment problems in affluent adolescents. Parents have aspirations for their children that reflect the values and qualities of life they desire for their children in the future (Dix & Branca, 2003; LeVine, 2003). These long-term goals influence the way in which parents rear and socialize their children, and vary across cultures (Whiting & Edwards, 1988; LeVine et al., 1994). Furthermore, childrearing practices differ based on parents’ SES (LeVine et al., 1994). Given that the culture of affluence emphasizes prestige and upward mobility, and that excessive achievement pressure can lead to adjustment problems in adolescents, it is crucial to examine parents’ future academic and career goals for their children.

Although no researchers to our knowledge have directly investigated parents’ academic and career goals for their children, some have examined parents’ general life goals for their children. For example, Chilman (1980) found that parents report wanting their children to find personal happiness, become independent and build their feelings of self-worth, obtain a good education, experience social success, and maintain good health. Furthermore, mothers and fathers seem to hold similar goals for their children, and these goals are alike for sons and daughters (Chilman, 1980).
According to the sociocultural perspective, parents transmit their beliefs and values through everyday interactions (Okagaki, Hammond, & Seamon et al., 1999) by explicitly sharing their beliefs and/or modeling behavioral ideals (Rogoff, 1990). Research suggests that parental values play an important role in their children’s education and career development by shaping children’s perceptions of the appropriateness of education- and occupation-related decisions (Astin, 1984) and providing encouragement and/or opportunities to reach educational and vocational goals (Young, 1994). Furthermore, adolescents are fully aware of the aspirations their parents have for them, as research demonstrates that children as young as 10 years of age are able to state the occupational goals their parents have for them (Seligman, Weinstock, & Heflin, 1991).

It is well-established in the literature that parents’ goals for their children significantly predict child academic achievement (e.g., Zimmerman, Bandura, & Martinez-Pons, 1992; Bandura, Barbaranelli, Caprara, and Pastorelli, 1996), yet few studies have examined links to adjustment. Ablard and Parker (1997) touch on this issue with their investigation of parents’ achievement goals (i.e., performance vs. learning) for their adolescent children in relation to both parents’ and children’s perfectionism. Data suggest that parents’ own perfectionism is significantly related to their achievement goals for their children. Furthermore, children of more performance-oriented parents (i.e., emphasize superiority) exhibit a greater propensity for dysfunctional perfectionism than children of more learning-oriented parents (i.e., emphasize comprehension). Although psychological problems were not directly assessed in this study, it is important to note that dysfunctional perfectionism has been linked to several psychological difficulties.
(Hewitt & Flett, 1991), including low self-esteem, depression, and suicidality (e.g., Hamilton & Schweitzer, 2000; Yoon & Lau, 2008).

In sum, it is clear that parents have goals for their children, and that these aspirations influence children’s views of their own objectives (Seligman, Weinstock, & Owings, 1988). Many parents believe it is their responsibility to set high expectations for their children in order to teach them the benefits of hard work and the pleasures of surmounting difficult challenges (Levine, 2006). But are certain types of goals more harmful than helpful? The present study aimed to examine the specific content of parents’ academic and career goals for their adolescents as well as their links to adolescent adjustment. More specifically, the objective was to determine whether parental goals functioned as a mediator or moderator when examining the relations between parent-focused parenting variables (i.e., parental perfectionism and life satisfaction) and adolescent adjustment (i.e., adolescent depressive symptoms, anxiety, and life satisfaction).

Although no known studies to date have examined the role of parents’ goals for their children in adolescent adjustment outcomes, one recent investigation using the same data set as the current study tested several mediation models to clarify relations among adolescents’ motivational climate, goal orientation, and adjustment problems (i.e., depressive symptoms, anxiety, life satisfaction) (Travers, Bohnert, & Randall, 2013). Results suggested that affluent adolescents who perceived their school climates to be more supportive and non-competitive tended to define personal success as learning and improvement (i.e., rather than beating others) and also experienced fewer depressive
symptoms and greater life satisfaction. Interestingly, however, adolescents who perceived that their school climates emphasized performance goals (i.e., superiority) were not themselves more focused on winning/beating others, nor did they report more depressive symptoms or less life satisfaction. Thus, the associations between motivational climate, goal orientation, and adjustment emerged only when positive aspects of school environment and individual achievement values were considered.

In accordance with previous literature, we examined parents’ goals in terms of how much they reflected performance/achievement values as opposed to learning/fulfillment values. Analogous to Nicholls’ (1984) two types of goal orientation, we conceptualized parents’ goals as valuing (1) learning and self-actualization (i.e., task orientation), or (2) performance and success (i.e., ego orientation). Research suggests task orientation is linked to positive outcomes such as less performance anxiety, higher intrinsic motivation, and persistence in the face of setbacks (Ames, 1992; Duda, 1993; Duda & Ntoumanis, 2005; Kavussanu & Roberts, 1996). Ego orientation, however, is associated with negative outcomes including more performance anxiety, decreased intrinsic motivation, and withdrawal in the face of failure (Newton & Duda, 1993; Roberts, 2001, 2006; Roberts, Treasure, & Conroy, 2007). Thus it is crucial to examine the potential impact parents’ future academic and career goals have on their adolescents’ adjustment.

It is important to note, however, that high parental expectation in and of itself may not lead to detrimental adjustment problems in adolescents, and some level of parental expectation may actually be beneficial. As discussed with other variables of interest in
this study, the examination of links between parent’s goals for their children and adolescent adjustment requires a more nuanced approach. Therefore, the present study examined the relations between adolescent adjustment and parental emphasis on achievement-oriented values (i.e., prestige, performance, upward mobility, professional or academic success, or affluence), and/or emphasis on fulfillment-oriented values (i.e., happiness, fulfillment, person progress or growth, learning, identity development, enjoyment, satisfaction, work-life balance, passions/interests, choice, exploration). Using this framework, we were able to examine the impact of different types of goals. No known studies to date directly assess parents’ academic and career goals for their children in an affluent sample, nor have they tested for differences in adolescent adjustment based on goals coded for achievement and fulfillment qualities.

Of note, the parental goals data in the present study was collected in a qualitative format. There is a longstanding debate among researchers regarding the best methodology (i.e., quantitative versus qualitative) with which to conduct research. Proponents of the quantitative tradition have dismissed qualitative research as vague and even unscientific (see Mays & Pope, 1995), while advocates of qualitative research suggest that their work provides a richer and more culturally nuanced approach (Wiggins, 2011). Although quantitative research may allow for greater generalizability of findings, it is rigid and lacks a certain richness. While qualitative data is flexible and allows for the collection of more nuanced information, it lacks generalizability. Mixed methods research (MMR) accommodates both sides of the quantitative-qualitative debate by utilizing the strengths of each methodology to make up for the other’s weaknesses.
Most researchers acknowledge that all methods have their limitations (e.g., Shadish, Cook, & Campbell, 2002) and some express concern that constraining research questions to one methodology leaves the field vulnerable to those limitations (e.g., Kelle, 2006). Thus, the integration of these methodologies in MMR (i.e., methodological eclecticism) provides the ideal solution to the quantitative-qualitative debate. Furthermore, recent evidence attests to the value of using a mixed methods approach in the mental health field in particular (Creswell & Zhang, 2010; Palinkas, Horwitz, Chamberlain, Hurlburt, & Landsverk, 2011). Although the majority of data collected for the present study was quantitative in nature, this study also utilized qualitative data to describe parents’ academic and career goals for their children, thereby employing a mixed method approach.

**Parental Involvement**

In addition to differing in the type of academic and career goals they have for their children, parents also vary in level of involvement they have in their children’s lives. Luthar and Latendresse (2005a) hypothesize that physical and emotional isolation from adults are two main antecedents of adjustment problems in affluent adolescents. Research indicates that high school students in upper-middle-class communities are often left home alone, and that affluent children report low emotional closeness with their parents at levels equivalent to youth in severe poverty (Luthar & Latendresse, 2005b). Furthermore, it is hypothesized that the demands of affluent parents’ professional careers hamper the important communication and family bonding time that typically leads to parent-child closeness (Luthar & Latendresse, 2005a).
Parents’ physical and emotional absences are associated with increased levels of distress and adjustment disturbances in affluent youth (Luthar & Latendresse, 2005b). The data indicate that closeness to parents is a protective factor against both internalizing (i.e., depression and anxiety) and externalizing (i.e., substance use and delinquency) symptoms, while parental criticism is a risk factor for increased internalizing symptoms and lower school competence (Luthar & Barkin, 2012; Luthar & Latendresse, 2005b). Furthermore, the lack of physical presence of parents (i.e., afterschool supervision) predicts more internalizing and externalizing problems, fewer meals eaten with parents, and lower school grades (Luthar & Latendresse, 2005b). Conversely, more family time (including family meals) predicts better psychosocial adjustment two years later (Crouter, Head, McHale, & Tucker, 2004). Thus parental presence and involvement are incredibly important and influential on adjustment for affluent adolescents.

Despite ample evidence suggesting the importance of parental involvement in the lives of their adolescents, parental intrusiveness, over-involvement, restrictiveness, or over-protectiveness can actually have highly negative effects. For example, Ginsburg and Bronstein (1993) examined the impact of parental over-involvement in relation to youths’ motivation and academic performance. They found that higher parental surveillance of homework, negative and controlling reactions to grades, and over-controlling family styles in general were associated with more extrinsic motivation and lower academic performance. Conversely, they found that parental encouragement was associated with intrinsic motivation and autonomy-supporting family styles were associated with higher academic performance (Ginsburg & Bronstein, 1993).
Thus it appears that a happy medium between under-involvement (e.g., absentee parents) and over-involvement (e.g., helicopter parents) is ideal for adolescent adjustment. Due to the evidence suggesting that some level of parental involvement is important for positive adolescent adjustment, the present study examined several domains of parental involvement and adolescents’ satisfaction with parental involvement, as well as curvilinear relations between this involvement and adolescent adjustment. Furthermore, we aimed to determine the specific type of role parental involvement plays by testing it as both a mediator and moderator of the relation between parent-focused parenting variables (i.e., parental perfectionism and life satisfaction) and adolescent adjustment (i.e., adolescent depressive symptoms, anxiety, and life satisfaction).

Given that affluent youth are often pressured to achieve, we examined the roles of parents in (1) choosing classes, (2) completing homework, and (3) deciding to which colleges to apply. In an effort to capture parental involvement in other extracurricular and social domains of adolescent life, we also investigated the influence of parental involvement in (4) choosing organizing activities, (5) deciding which organized activities in which to remain a participant, (6) deciding which friends with whom to spend time, and (7) organization of adolescents’ day-to-day schedule. Given that research suggests mealtime is an important factor in the parent-child relationship (Crouter, Head, McHale, & Tucker, 2004), we also examined adolescent report of the (8) number of meals they eat with their parents each week. Finally, (9) adolescents’ overall satisfaction with their parents’ involvement in their lives was investigated.
Mediation and Moderation Models Examining Adolescent Adjustment

As research begins to substantiate the link between parental influence and adolescent adjustment, exploring mediation and moderation models may be the next step in gaining a more thorough understanding of these relations. One method for answering questions related to mechanisms of influence and conditions under which certain relations exist is to examine the fit of two models in a mediator versus moderator approach (Rose, Holmbeck, Coackley, & Franks, 2004). In this instance, variables can serve as both mediators and moderators, as each model addresses different objectives. The use of this type of analysis allows researchers to conclude which theory best accounts for a relation among a set of variables of interest.

The majority of research examining the impact of parenting variables on adolescent adjustment examines direct relations between variables. Yet the integration of numerous study findings suggests that the effects of parent-focused parenting variables on adolescent adjustment may differ based on certain adolescent-focused mechanisms or under certain circumstances. Thus the present study tested two models to examine whether the relations between (1) parental perfectionism and (2) parent life satisfaction and adolescent adjustment (i.e., depressive symptoms, anxiety, and life satisfaction) were mediated or moderated by (1) adolescents’ perceived parental pressure, (2) parents’ future academic/career goals for their children and (3) parental involvement in their adolescents’ lives (see Figures 1 and 2).

Previous research has already examined the role of perceived parental pressure as a mediator (e.g., Randall, Bohnert, & Travers, in press), therefore the present study did
Figure 1. Proposed Mediation Model

Figure 2. Proposed Moderation Model
not repeat this analysis. Findings from this research suggest that perceived parental pressure does mediate the relation between parental perfectionism and affluent adolescent adjustment. Specifically, adolescents with parents who report high levels of perfectionistic pressures from their surroundings (i.e., socially prescribed perfectionism) or who expect perfectionism from others (i.e., other-oriented perfectionism) experience their parents as more pressuring (i.e., perceived parental pressure) and also report higher levels of internalizing problems and lower levels of life satisfaction. This finding is consistent with prior research indicating that parents with “high pressure” personality dispositions, characterized by high levels of perfectionism, rigidity, critical attitudes, and anxiety, are “driven by status needs” (Hyson, Hirsh-Pasek, Rescorla, Cone, & Martell-Boinske, 1991, p. 348). In other words, high-pressure parents support values and beliefs associated with achievement and success and thus pressure their children to fulfill their expectations.

No known research, however, has examined perceived parental pressure as a moderator, nor has it investigated parental involvement in their adolescents’ lives or parents’ future academic and career goals for their children as both mediators and moderators. By testing two competing mediation and moderation models, the present study was able to answer questions about the conditions under which these variables are associated (i.e., moderation), as well as the mechanisms that clarify the associations (i.e., mediation) (Rose et al., 2004).

The first independent variable in the proposed mediation and moderation models is parental perfectionism. Children with perfectionistic parents are likely to experience
psychological difficulties (Hewitt & Flett, 1991) such as low self-esteem, depression, and suicidality (e.g., Hamilton & Schweitzer, 2000; Yoon & Lau, 2008). However, whether or not that perfectionism is expressed/communicated to the child in various ways may impact adolescent adjustment problems. Perhaps there is a significant difference between having a perfectionistic parent and having a perfectionistic parent who places a large amount of pressure on their child, communicates a desire for their child to achieve lofty future goals, or is over-or under-involved in their child’s life. For example, if a parent has highly perfectionistic traits, but their child does not perceive high levels of parental pressure, those perfectionistic traits may not impact adolescent adjustment as much as they would have if the child did perceive high levels of parental pressure. In moderation terms, it is possible that the relation between parental perfectionism and adolescent adjustment depends on the levels of these three adolescent-focused factors (i.e., perceived parental pressure, parents’ future goals for their children, and parental involvement). It is also possible that parents’ perfectionistic tendencies play a role in determining their future goals for their children or how deeply involved they become in their children’s lives, which subsequently leads to more positive or negative adolescent adjustment. In mediation terms, it may be that the parental perfectionism is linked to adolescent adjustment through these adolescent-focused mechanisms (i.e., parents’ future goals for their children and parental involvement).

The second independent variable in the proposed mediation and moderation models is parent life satisfaction. Although few investigators have examined this construct or its association with adolescent adjustment, research suggests that parental
distress can lead to increased levels of adjustment problems in their children (e.g., Deater-Deckard, 2006). In contrast, positive family experiences, effective communication among family members, and a focus on emotional support all promote psychological well-being among youth (Park, 2004). Thus, it follows that the relation between parent life satisfaction and adolescent adjustment may depend on (i.e., moderation) the types of family interactions, communication, and support adolescents receive (i.e., adolescent perceptions of parental pressure, parents’ future goals for their children, and parental involvement). For example, if a parent is highly dissatisfied with their own life and communicates ambitious future goals to their child as a means of living vicariously through him or her, the impact of parent life satisfaction on adolescent adjustment may be more negative than if the parent communicates more learning/fulfillment-oriented goals. It is also possible that higher/lower levels of parent life satisfaction impact how families interact, communicate, and support their adolescents, which subsequently leads to variations in adolescent adjustment (i.e., mediation). In sum, the proposed mediation and moderation models explored indirect and conditional relations between several parenting variables and adolescent adjustment.

Summary of the Present Study

The current cross-sectional study examined the role of several parenting variables in adolescent adjustment using a mixed methods research approach (i.e., quantitative and qualitative data). Findings from this study provide information regarding the relations between various parent- and adolescent-focused parenting variables that are influential on adolescent development, as well as how they are linked to adjustment among affluent
adolescents. The following aims were addressed: (1) the linear and curvilinear relations between several different aspects of parenting and adolescent adjustment were examined using both quantitative and qualitative data (2) the relations among the five parenting variables were examined, and (3) both mediation and moderation models were tested to determine whether relations between parent-focused parenting variables and adolescent adjustment were mediated or moderated by adolescent-focused parenting variables (see Figures 1 and 2).
Participants

Participants included 10th grade students (N = 123) and their parents. The current study only included complete adolescent-parent dyads, consisting of data from an adolescent and at least one parent/guardian. The final analytic sample included 88 parent-child pairs (40% male, 60% female) from four affluent high schools in the Northeast and Midwest. Participant ages ranged from 14 to 16 years (M = 15.54, SD = 0.38). Adolescents were 86% Caucasian, 3% African American, 2% Hispanic/Latino, and 9% Asian American. Eighty mothers and 28 fathers completed the parent survey. Fifteen percent of parents reported earning under $100,000 per year, 65% between $100,000 and $500,000, 13% between $500,000 and $900,000, and 7% $1,000,000 or more. The analytic sample (n = 88) was not significantly different than the original sample (n = 123) in terms of age, ethnicity, or annual income.

Inclusion criteria used to select affluent communities/schools were based on prior studies with this population (see Luthar & Goldstein, 2008; Luthar et al., 2006). Using census data (US Census Bureau, 2008), schools were selected from townships with (1) a median annual family income at or above $100,000 and (2) 25% or more of adults with a graduate degree. Once appropriate schools were identified, outreach was made to school personnel to assess interest in study participation. Eight schools were contacted, with four
agreeing to participate (50% participation rate). Within the schools that agreed to participate in the study, an average of 31% of students/families agreed to complete the survey. Of note, due to recruitment difficulties, the researchers altered inclusion criteria slightly to include one urban, private school in a Midwestern city that, due to being in an urban setting, is not in a township that fits the inclusion criteria. However, the investigators obtained information about the school population and noted that the median family income of the school was over $100,000 with 25% or more of parents with a graduate degree.

**Procedure**

School personnel granted permission to investigators to conduct in-person visits to each school to provide a brief description of the research and consent forms for the adolescents to bring home to their parents. Once the investigator obtained the parental consent, links to an online survey were emailed to each parent/caregiver(s) and the adolescents separately. Online materials instructed parents/caregivers and adolescents to complete their surveys alone in order to ensure confidentiality. Adolescents were reminded that all responses including the information they provide would be kept confidential and thus would not be shared with parents, teachers, activity leaders, or any other adults/children. After data collection, complete parent-child dyads were entered in a raffle to win one of three iPads.
Measures

Demographics

Parents were asked to indicate their age, ethnicity, marital status, the number of people living in their home and each person’s relationship to the participating child, their highest level of education, their current employment status, and their approximate annual income.

Parent-Focused Factors

Parental perfectionism. Parents/caregivers completed the *Multidimensional Perfectionism Scale* (MPS: Hewitt & Flett, 1991), a 45-item measure of perfectionism in which fifteen items are each devoted to the three perfectionism subscales: 1) self-oriented, 2) socially prescribed, and 3) other-oriented. Items are rated on a seven-point scale. Item examples include “One of my goals is to be perfect in everything I do” (self-oriented), “My family expects me to be perfect” (socially prescribed), and “I have high expectations for the people who are important to me” (other-oriented). Items are answered on a 7-point scale from 1 (strongly disagree) to 7 (strongly agree) with some reverse scoring. Scores were computed by averaging across items for each domain. The subscales have respectively demonstrated good internal consistency (.89/.79/.86) and test–retest reliability (.88/.85/.75). The MPS’s three-factor composition has been supported in clinical and nonclinical populations, and subscale scores correlate significantly with other measures of constructs comprising respective perfectionism dimensions (Hewitt & Flett, 1991). Internal consistency for the subscales (averaging
parents’ scores when two parent reporters for a family) in the current study were good and in agreement with prior findings (.85/.84/.78).

**Parental life satisfaction.** The Satisfaction with Life Scale (SWLS) is a measure of life satisfaction developed by Diener and colleagues (Diener, Emmons, Larsen & Griffin, 1985). It does not assess satisfaction with life in any particular domain, rather satisfaction with life as a whole. The SWLS consists of 5-items (e.g. “In most ways, my life is close to ideal” and “If I could live my life over, I would change almost nothing”) that was completed by parents. Using a 1-7 scale, respondents indicated their agreement with each statement (1 = strongly disagree; 7 = strongly agree). For the current study, the LS similarly demonstrated strong internal reliability ($\alpha = .92$).

**Adolescent-Focused Factors**

**Perceived parental pressure.** To measure perceived parental pressure, adolescents completed the Perceived Parental Pressure subscale from the English version of the *Multidimensional Inventory of Perfectionism in Sport* (MIPS; Stoeber, Otto, & Stoll, 2005) which was translated from the original German version (Stöber, Otto, & Stoll, 2004) to English using a back-translation procedure involving two bilingual speakers (one native English, one native German; see Brislin, Lonner, & Thorndike, 1973). The measure is comprised of eight items that make no reference to sport and were thus left unmodified. Items are answered on a 7-point scale from 1 (strongly disagree) to 7 (strongly agree), and scores were computed by averaging across items. Findings from Sagar & Stoeber (2009) indicated high reliability across scores with Cronbach’s alphas > .80. The current study also indicated good internal consistency ($\alpha = .94$)
Parents’ future goals. Parents were asked to respond to the open-ended question of, “What are your future academic and career goals for your child?” (Ablard & Parker, 1997). Responses received two codes; one for their emphasis on achievement-oriented values (i.e., prestige, performance, upward mobility, professional or academic success, or affluence), and one for their emphasis on fulfillment-oriented values (i.e., happiness, fulfillment, person progress or growth, learning, identity development, enjoyment, satisfaction, work- life balance, passions/interests, choice, exploration). Responses were scored as a 1 if they displayed no or minimal evidence of the value, 2 if they included some evidence of the value, or 3 if they contained significant evidence of the value. Achievement and Fulfillment codes were scored as independent of one another. Two trained graduate-level students double-coded 100% of this qualitative data. Inter-rater agreement was high for Achievement-Oriented ($\kappa = .81$) and Fulfillment-Oriented ($\kappa = .86$) responses. Of the final sample of 88 parent-child pairs, 70 mothers and 26 fathers provided codeable responses (i.e., 10 parents left this question blank). For cases in which both the mother and father provided codeable responses ($N = 18$), the scores were averaged to create one parent score. Similar to the rationale for averaging mother and father scores on other parent-report measures (e.g., parental perfectionism), we suggest that examining responses from multiple individuals living in the home together provides a more complete picture of the overall home environment.

Parental involvement. To assess parental involvement in various domains of adolescent life, youth responded to nine questions about parental involvement. They reported how involved their parents were in (1) choosing which classes to take, (2)
deciding which organized activities in which to become involved, (3) determining which organized activities in which to stay involved, (4) the organization of their day-to-day schedule, (5) decisions about to which colleges/universities to apply, (6) the completion of homework (i.e., writing essays, studying for tests, working on class projects), and (7) deciding which friends with which to spend time. Adolescents rated each of these seven questions on a 1-5 scale (1 = not at all involved, 5 = extremely involved). They responded to each item twice, once to describe the involvement of their primary caregiver and once to describe the involvement of their secondary caregiver. Frequency of mealtime was assessed by asking adolescents to indicate (8) the number of family meals (i.e., meals at which all or most of the family members living in the home were present) they ate on average per week. Finally, adolescents also reported their (9) satisfaction with each caregiver’s overall level of involvement in their life (1 = not at all satisfied to 5 = extremely satisfied). All items measuring parental involvement (except item #8) prompted the adolescents for two rating responses (i.e., one for each caregiver). Ratings for caregiver 1 and 2 were highly correlated, therefore the ratings were averaged.

**Adolescent Adjustment**

**Depression and anxiety.** The *Achenbach Youth Self Report–Depression scales* (YSR-D; Clarke et al., 1992) and *Anxiety scales* (YSR-A) was used to assess adolescent depression and anxiety. The YSR-D and YSR-A are each 16 items from the 118-item YSR measure (Achenbach, 1991). Participants read each statement and were instructed to rate whether it is not true (0), somewhat true (1), or very true (2). Both the depression
and anxiety subscales in the present study have good reliability ($\alpha = .85$ and .91, respectively).

**Life satisfaction.** Adolescents also completed the Satisfaction with Life Scale (SWLS) (Diener, Emmons, Larsen & Griffin, 1985). Using a 1-7 scale, respondents indicated their agreement with each statement (1 = strongly disagree; 7 = strongly agree). This measure has good reliability in the present sample ($\alpha = .88$).
CHAPTER THREE

RESULTS

Data Preparation

Missing Data

As the data set was approximately 99.2% complete (0.8% missing), all missing values were replaced via individual mean substitution. One advantage of this procedure is that it uses the non-missing information from each particular scale to calculate the mean for the missing items. Furthermore, as the missing cases represented a very small percentage of the overall data set (i.e., less than 1-2% of the total data set), the results obtained after having employed a mean substitution procedure are likely identical to the results that may have been obtained had the missing items not occurred (Widaman, 2006).

Nested Data

Multilevel data often arise from “nested” data structures (e.g., children are nested within schools), however nested data sets do not automatically require multilevel modeling (MLM; Peugh, 2010). In an effort to assess the need for MLM in the present data set, intra-class correlations (i.e., the proportion of adolescent adjustment score variation that occurs across schools) and design effects (i.e., a measure of how much the sampling variability in a sample differs from the sampling variability in a simple random sample) were calculated to determine how much variation in the outcome variables (i.e.,
depressive symptoms, anxiety, and life satisfaction) was present at the school level. Results indicated the presence of significant within-school variability for depressive symptoms, anxiety, and life satisfaction, but no significant between-school variability. Furthermore, all design effects were found to be smaller than 2.0 and all intra-class correlations were .01 or lower (Peugh, 2010). These results indicate that there was no significant variability in adolescent adjustment across schools, thus it was determined that data from all three schools could be combined for the purpose of conducting the primary analyses.

Creating Composites

**Perfectionism.** In instances when both mother and father report was obtained on the MPS ($n = 20$), perfectionism scores reflect the average of mother and father totals. However, in most cases, only one parent completed the perfectionism questionnaire, and this parent’s score was used in analyses ($n = 60$ for mothers, $n = 8$ for fathers).

**Parental involvement.** Adolescents rated how involved each of their caregivers were in several aspects of their lives. They responded to each item twice, once to describe the involvement of their primary caregiver and once to describe the involvement of their secondary caregiver. Correlations between ratings for caregivers 1 and 2 were all highly significant (see Table 1), thus the ratings were averaged to create composites.

**Parental involvement composites.** The present study proposed to examine parental involvement by asking adolescents to rate how involved their parents were in (1) choosing classes, (2) completing homework, (3) deciding to which colleges to apply, (4)
choosing organizing activities, (5) deciding which organized activities in which to remain a participant, (6) deciding which friends with whom to spend time, and (7) organization of adolescents’ day-to-day schedule. In addition, adolescents were also asked (8) number of meals they eat with their parents each week and (9) their overall satisfaction with their parents’ involvement in their lives. The majority of parental involvement variables were highly correlated (see Table 2). The first seven variables appeared to measure a unidimensional latent construct (Cronbach’s $\alpha = .814$). Furthermore, a principal components varimax rotation analysis revealed that all seven items load best onto one factor (see Table 3). As a result, the first seven variables were combined to create one parental involvement composite. Thus, three parental involvement variables were examined in the present study: (1) parental involvement composite (i.e., academic/extracurricular/social involvement; items 1-7), (2) family meals, and (3) adolescent satisfaction with involvement.

Table 1. Correlations between Caregivers 1 and 2 in Adolescent Ratings of Parental Involvement

<table>
<thead>
<tr>
<th>Parental involvement in</th>
<th>Correlation between caregivers 1 and 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decisions about which classes to take</td>
<td>.68**</td>
</tr>
<tr>
<td>Decisions about which organized activities to become involved in</td>
<td>.69**</td>
</tr>
<tr>
<td>Decisions about which organized activities to stay involved in</td>
<td>.68**</td>
</tr>
<tr>
<td>Day-to-day schedule</td>
<td>.56**</td>
</tr>
<tr>
<td>Decisions about which colleges to apply to</td>
<td>.71**</td>
</tr>
<tr>
<td>Helping with homework (i.e., writing essays, studying for tests, class projects)</td>
<td>.47**</td>
</tr>
<tr>
<td>Decisions about which friends to hang out with</td>
<td>.68**</td>
</tr>
<tr>
<td>Overall satisfaction with parental involvement</td>
<td>.46**</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01.
Table 2. Correlations among Types of Parental Involvement as Rated by Adolescents

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.  Classes</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.  OA become involved</td>
<td>.54**</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.  OA stay involved</td>
<td>.54**</td>
<td>.80**</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.  Schedule</td>
<td>.46**</td>
<td>.41**</td>
<td>.39**</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.  Colleges</td>
<td>.52**</td>
<td>.37**</td>
<td>.34**</td>
<td>.20</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.  Homework</td>
<td>.45**</td>
<td>.22*</td>
<td>.24*</td>
<td>.31**</td>
<td>.12</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.  Friends</td>
<td>.36**</td>
<td>.46**</td>
<td>.48**</td>
<td>.32**</td>
<td>.37**</td>
<td>.23*</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.  Family meals</td>
<td>.03</td>
<td>.09</td>
<td>-.08</td>
<td>.13</td>
<td>-.10</td>
<td>.02</td>
<td>.04</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>9.  Satisfaction with involvement</td>
<td>.01</td>
<td>-.01</td>
<td>-.15</td>
<td>-.09</td>
<td>-.06</td>
<td>.17</td>
<td>-.05</td>
<td>.18</td>
<td>—</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01.

Table 3. Rotated Component Matrix for Principal Components Analysis

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stay involved in OA</td>
<td>.83</td>
<td></td>
</tr>
<tr>
<td>Become involved in OA</td>
<td>.82</td>
<td></td>
</tr>
<tr>
<td>Classes</td>
<td>.80</td>
<td></td>
</tr>
<tr>
<td>Friends</td>
<td>.66</td>
<td></td>
</tr>
<tr>
<td>Schedule</td>
<td>.62</td>
<td></td>
</tr>
<tr>
<td>College applications</td>
<td>.61</td>
<td></td>
</tr>
<tr>
<td>Homework</td>
<td>.47</td>
<td></td>
</tr>
<tr>
<td>Family meals</td>
<td></td>
<td>.64</td>
</tr>
<tr>
<td>Satisfaction with involvement</td>
<td></td>
<td>.76</td>
</tr>
</tbody>
</table>

**Power Analysis**

A post hoc statistical power analysis (Hintze, 2011) was conducted to determine the likelihood of obtaining significant results in the data analyses at $p < .05$. The sample size ($N = 88$) provided very strong (95-99%) power to detect large or medium effects, but only weak (26-27%) power to detect small effects. Thus, although the sample size is
small, it is large enough to support the conducted analyses (F. Bryant, personal
communication, December 6, 2013).

**Descriptive Statistics**

Means and standard deviations for all study variables are presented in Table 4. Each domain of parental perfectionism (i.e., self-oriented, other-oriented, socially
prescribed) was measured on a scale ranging from 15-105. Overall, the mean levels of
self-oriented \((M = 60.61)\), other-oriented \((M = 58.99)\), and socially prescribed \((M =
45.66)\) perfectionism were moderate. A paired \(t\)-test was used to determine if scores on
the three domains significantly differed from one another. Results indicated that self-
oriented and other-oriented perfectionism were significantly higher than socially
prescribed perfectionism, \(t(87) = 11.12, p < .01\) and \(t(87) = 10.55, p < .01\), respectively.
Alternatively, self-oriented perfectionism and other-oriented perfectionism scores were
not significantly different from each other. Parent life satisfaction, which was measured
on a scale with a possible range of 5-35, was relatively high \((M = 26.6)\). Coded responses
of parents’ future academic and career goals for their children (ranging from 1 to 3) were
more likely to reflect achievement-oriented values \((M = 2.12)\) than fulfillment-oriented
values \((M = 1.85)\), \(F(1, 77) = 3.97, p = .05\).

Perceived parental pressure was measured on a scale with a possible range of 8-
48. Overall, the mean level of perceived parental pressure was moderate \((M = 22.77)\). All
domains of parental involvement (with the exception of family meals) were measured on
a scale with a possible range of 1-5. Mean levels of parental involvement ranged from
2.35-3.88. The mean level of adolescent satisfaction with parental involvement was relatively high ($M = 4.31$). The mean number of meals adolescents reported eating with their family each week was 5.26. Both depressive symptoms and anxiety were measured on a scale with a possible range of 0-32, and mean levels of depressive symptoms ($M = 8.33$) and anxiety ($M = 9.49$) were relatively low. Adolescent life satisfaction, which was measured on a scale with a possible range of 5-35, was relatively high ($M = 24.05$). These descriptive statistics indicate that the sample examined in the present study was relatively well-adjusted.

**Correlations**

Correlations among all study variables are presented in Table 4. All three parental perfectionism domains were positively correlated ($p < .01$). Additionally, socially prescribed perfectionism was positively correlated with perceived parental pressure ($p < .05$), and negatively correlated with parent life satisfaction ($p < .01$). Further, perceived parental pressure was positively correlated with depressive symptoms ($p < .01$) and negatively correlated with life satisfaction ($p < .05$), but unrelated to anxiety symptoms. Of note, no significant correlations were found between the three domains of parental perfectionism and adolescent adjustment measures (depressive symptoms, anxiety, life satisfaction) variables.

The parental involvement composite was positively correlated with perceived parental pressure ($p < .05$), but no other study variables. Interestingly, frequency of family meals was unrelated to the parental involvement composite, but was negatively
correlated with socially prescribed perfectionism ($p < .05$). Family meals were also negatively correlated with adolescent depressive symptoms ($p < .05$) and positively correlated with adolescent life satisfaction ($p < .01$). Adolescents’ overall satisfaction with their parents’ involvement was negatively correlated perceived parental pressure ($p < .01$), depressive symptoms ($p < .01$), and anxiety ($p < .05$), but positively correlated with adolescent life satisfaction ($p < .01$). Finally, adolescent depressive symptoms ($p < .01$), anxiety, and life satisfaction ($p < .01$) were all highly correlated.

Parents’ whose goals for their children were coded as highly achievement-oriented (i.e., prestige, performance, upward mobility, professional or academic success, or affluence) reported higher levels of self-oriented ($p < .01$), other-oriented ($p < .05$), and socially prescribed ($p < .05$) perfectionism. Parents whose goals for their children were coded as highly fulfillment-oriented (i.e., happiness, fulfillment, person progress or growth, learning, identity development, enjoyment, satisfaction, work-life balance, passions/interests, choice, exploration) indicated higher levels of life satisfaction ($p < .05$). Achievement- and fulfillment-oriented scores were highly negatively correlated ($p < .01$).

**Gender Differences**

In order to examine possible differences in study variables based on adolescent gender, $t$-tests were conducted across all included variables. Analyses indicated that the only significant gender difference was with regard to anxiety, with females reporting
higher levels of anxiety \((M = 10.92, SD = 7.93)\) than males \((M = 7.32, SD = 6.78)\), \(t(86) = -2.31, p < .05\).

**Income and Education Structure**

Income structure and its relation to other study variables were also examined. Of those who reported their household income \((n = 67)\), the majority \((49\%)\) were from families earning $100,000 to $300,000 per year (see Figure 3).

![Figure 3. Annual Household Income](image)

Regression analyses were used to examine relations between level of household income and all other study variables. Income was positively associated with parental self-oriented perfectionism, \(b = 1.27, \beta = .24, t(66) = 2.02, p < .05\), but was not related to the other forms of perfectionism (other-oriented perfectionism or socially prescribed perfectionism). Income was not found to be associated with any other study variables.

Of parents who reported their highest level of education \((n = 84)\) and using the status of the more educated parent in families with two participating parents, the majority of participants \((57\%)\) obtained a Master’s or Doctorate/JD degree (see Figure 4).
Table 4. Descriptive Information and Correlations among Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<td>.47**</td>
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</tr>
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<td>.31*</td>
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<td>.23*</td>
<td>-.38**</td>
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<td>.21</td>
<td>.23*</td>
<td>-.12</td>
<td>.20</td>
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<td>8. Parental Involvement Composite</td>
<td>-.04</td>
<td>.10</td>
<td>.10</td>
<td>.07</td>
<td>-.17</td>
<td>.07</td>
<td>.27*</td>
<td>—</td>
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<td>9. Family Meals</td>
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<td>.02</td>
<td>-.24*</td>
<td>.05</td>
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<td>-.18</td>
<td>.02</td>
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<td>10. Satisfaction with Involvement</td>
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<td>.15</td>
<td>.09</td>
<td>.09</td>
<td>-.12</td>
<td>-.36**</td>
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<td>.18</td>
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<tr>
<td>11. Adolescent Depressive Sxs</td>
<td>-.08</td>
<td>-.11</td>
<td>.13</td>
<td>.00</td>
<td>-.10</td>
<td>-.02</td>
<td>.30**</td>
<td>.10</td>
<td>-.25*</td>
<td>-.34**</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>-.10</td>
<td>.14</td>
<td>.04</td>
<td>-.07</td>
<td>.03</td>
<td>.20</td>
<td>.12</td>
<td>-.14</td>
<td>-.25*</td>
<td>.82**</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>13. Adolescent Life Satisfaction</td>
<td>.17</td>
<td>.17</td>
<td>-.08</td>
<td>-.08</td>
<td>.02</td>
<td>-.03</td>
<td>-.39**</td>
<td>-.11</td>
<td>.29**</td>
<td>.31**</td>
<td>-.57**</td>
<td>-.51**</td>
<td>—</td>
</tr>
</tbody>
</table>

*M* 57.55   60.51   44.36   26.60   2.12   1.85   22.77  3.10   5.26   4.31   8.33   9.49   24.05  
*S*D 13.06  9.91   11.59  5.80   0.70   0.70   10.20  0.79  2.34   0.81   5.62   7.33  6.79  
*Range* 15-105 15-105 15-105 5-35  1-3   1-3   8-48   1-5   0-21  1-5   0-32  0-32  5-35

*aParent report  
bAdolescent report  
*p < .05.  **p < .01.
Figure 4. Parents’ Highest Level of Education

**Family Structure**

The majority of parents (85%) who participated in the study were married to their child’s biological mother/father (see Figure 5).

Employment information was gathered from 79 mothers and 78 fathers. Data revealed that the majority of mothers were either employed full-time (38%) or full-time homemakers (29%) (see Figure 6). The majority of fathers (92%) were employed full time (see Figure 7). A closer investigation of employment on the household level revealed that the majority of participants (40%) came from single-earner families (see Figure 8).
Figure 6. Mothers’ Employment Status

Figure 7. Fathers’ Employment Status

Figure 8. Household Employment Status
**Linear and Curvilinear Analyses**

Regression equations (i.e., linear and curvilinear) were calculated to examine associations between parenting variables (i.e., parental perfectionism, parental life satisfaction, perceived parental pressure, parents’ goals, and parental involvement) and adolescent adjustment variables (i.e., depressive symptoms, anxiety, and life satisfaction). For curvilinear regressions the quadratic function was utilized, in which the linear term was entered into the regression model first, followed by the squared term.

**Parenting Variables and Adolescent Adjustment**

Analyses indicate that self-oriented perfectionism, socially prescribed perfectionism, and other-oriented perfectionism were not linearly or curvilinear associated with adolescent adjustment. Perceived parental pressure was found to be curvilinearly related to adolescent depressive symptoms, anxiety, and life satisfaction (see Table 5 and Figures 9-11). That is, adolescents who perceived very low and very high levels of parental pressure also experienced more depressive symptoms and anxiety, and less life satisfaction.

**Table 5. Curvilinear Relations between Perceived Parental Pressure and Adolescent Adjustment**

<table>
<thead>
<tr>
<th>Outcome variable</th>
<th>Equation</th>
<th>B</th>
<th>β</th>
<th>T</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depressive Sxs</td>
<td>Quadratic</td>
<td>.01</td>
<td>1.11</td>
<td>2.34</td>
<td>.02</td>
</tr>
<tr>
<td>Anxiety</td>
<td>Quadratic</td>
<td>.01</td>
<td>.84</td>
<td>1.70</td>
<td>.04</td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>Quadratic</td>
<td>-.01</td>
<td>-.91</td>
<td>-1.98</td>
<td>.04</td>
</tr>
</tbody>
</table>
Figure 9. Perceived Parental Pressure Predicting Adolescent Depressive Symptoms

Figure 10. Perceived Parental Pressure Predicting Adolescent Anxiety
Parents’ future academic and career goals were not found to be linearly or curvilinearly associated with any of the indices of adolescent adjustment. Relations between parental involvement and adolescent adjustment are displayed in Table 6. Analyses revealed that the parental involvement composite was neither linearly nor curvilinearly associated with adolescent adjustment, however, adolescent satisfaction with parental involvement was linearly related to all three indices of adolescent adjustment. More specifically, adolescents who reported higher levels of satisfaction with parental involvement reported fewer depressive symptoms, less anxiety, and higher levels of life satisfaction. In addition, adolescents who reported higher levels of satisfaction with parental involvement also reported lower levels of perceived parental pressure. Furthermore, family meals were linearly related to depressive symptoms and adolescent...
life satisfaction, but were unrelated to anxiety symptoms. Specifically, adolescents who reported eating more meals with their families also reported significantly fewer depressive symptoms and higher levels of life satisfaction.

Table 6. Linear Relations between Aspects of Parental Involvement and Adolescent Adjustment

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Outcome variable</th>
<th>B</th>
<th>( \beta )</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
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<td>Parental involvement composite</td>
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<td>.69</td>
<td>.10</td>
<td>.89</td>
<td>.37</td>
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<tr>
<td></td>
<td>2. Anxiety</td>
<td>1.44</td>
<td>.16</td>
<td>1.45</td>
<td>.15</td>
</tr>
<tr>
<td></td>
<td>3. Adolescent life satisfaction</td>
<td>-.97</td>
<td>-.11</td>
<td>-1.05</td>
<td>.30</td>
</tr>
<tr>
<td>Adolescent satisfaction with</td>
<td>1. Depressive symptoms</td>
<td>-2.34</td>
<td>-.34</td>
<td>-3.30</td>
<td>.00</td>
</tr>
<tr>
<td>parental involvement</td>
<td>2. Anxiety symptoms</td>
<td>-2.23</td>
<td>-.25</td>
<td>-2.35</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>3. Adolescent life satisfaction</td>
<td>2.57</td>
<td>.31</td>
<td>2.98</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>4. Perceived parental pressure</td>
<td>-4.54</td>
<td>-.36</td>
<td>-3.57</td>
<td>.00</td>
</tr>
<tr>
<td>Family meals</td>
<td>1. Depressive symptoms</td>
<td>-.60</td>
<td>-.25</td>
<td>-2.40</td>
<td>.02</td>
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<tr>
<td></td>
<td>2. Anxiety symptoms</td>
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<td>-.14</td>
<td>-1.32</td>
<td>.19</td>
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<td></td>
<td>3. Adolescent life satisfaction</td>
<td>.85</td>
<td>.29</td>
<td>2.83</td>
<td>.01</td>
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**Mediation Models**

As previously discussed, the present study aimed to examine both mediation and moderation models to obtain a more thorough understanding of which theory best accounts for the relations among the variables of interest. Currently, bootstrapping (Preacher & Hayes, 2004, 2008; Shrout & Bolger, 2002) is the considered the most valid and powerful method for examining indirect effects (Hayes, 2009), as it makes the fewest unrealistic assumptions about the shape of the sampling distribution and the indirect effect (Briggs, 2006; Fritz & MacKinnon, 2007; MacKinnon, Lockwood, & Williams, 2004; Williams & MacKinnon, 2008).

The bootstrapping approach includes four main steps (Shrout & Bolger, 2002). First, the original sample \( n \) is used as a population reservoir to create a pseudo (bootstrap)
sample of \( N \) people by randomly sampling observations with replacement from the original \( n \). Next, for each bootstrap sample, \( a \) and \( b \) are estimated and the product of the path coefficients are recorded. The third step involves repeating Steps 1 and 2 for a total of \( k \) times (where \( k = 5,000 \) as recommended by Hayes, 2009). When complete, this procedure results in \( k \) estimates of the indirect effect, and the distribution of this indirect effect will function as an approximation of the sampling distribution of the indirect effect. Finally, the \( k \) estimates will be used to generate a percentile-based bootstrap confidence interval, for which the cut points exclude \((\alpha/2) \times 100\%\) of the values from each tail of the empirical distribution. If zero is not between the lower and upper bound, then it is acceptable to claim that the indirect effect is not zero (Hayes, 2009; Shrout & Bolger, 2002). The present study used bootstrapping to generate bias corrected (BC) confidence intervals (CI’s, 95%), as they have been shown to produce better type I error rates and power compared to conventional CIs (Preacher, Rucker, & Hayes, 2007; Preacher & Hayes, 2008). All results are based on a bootstrapped sample of \( n = 5,000 \).

Results of the mediation analyses revealed no significant findings. Specifically, neither parents’ future goals for their children nor parental involvement were found to mediate the relations between (1) parental perfectionism and (2) parent life satisfaction and adolescent adjustment (i.e., depressive symptoms, anxiety, and life satisfaction) (see Figure 1). These results suggest that a mediation framework does not capture the relations between the variables of interest in this sample of affluent parents and youth.
Moderation Models

Moderation models provide a competing alternative to mediation and explore the particular circumstances under which a relation exists thereby offering a deeper understanding of the phenomenon of interest. PROCESS, a computational procedure for SPSS, is able to estimate the coefficients of a model using ordinary least squares (OLS) regression and generates conditional effects in moderation models (Hayes, 2012). PROCESS displays the proportion of the total variance in the outcome uniquely attributable to the interaction. Furthermore, it offers the option of using 10th, 25th, 50th, 75th, and 90th percentiles of the moderator when estimating the conditional effects of X. Traditionally, the mean, one standard deviation above the mean, and one standard deviation below the mean are used as definitions of “moderate,” “relatively high,” and “relatively low” on the moderator when probing an interaction. However, there is no guarantee that all three of these values will be within the range of the data. Thus, if the distribution of the moderator is skewed, one or more of these values may be a poor representation of moderate, low, or high. The five percentiles computed in PROCESS, however, will always be within the range of the data and can be interpreted as “very low,” “low,” “moderate,” “high,” and “very high” (Hayes, 2012). In light of these advantages, the PROCESS procedure was utilized to test the proposed moderation models.
Eighteen models examining relations between (1) parental perfectionism and (2) parent life satisfaction and adolescent adjustment (i.e., depressive symptoms, anxiety, and life satisfaction) moderated by (1) adolescents’ perceived parental pressure, (2) parents’ future academic/career goals for their children and (3) parental involvement in their adolescents’ lives, were tested (see Figure 2). Seven of the models yielded significant effects (Figure 12 and Table 7). The first significant moderation model (Parent LS X Satisfaction with Involvement $\rightarrow$ Dep) indicated a meaningful interaction between parent life satisfaction and adolescent satisfaction with parental involvement predicting adolescent depressive symptoms (see Figure 13). As can be seen in Table 8, the coefficient for the product of Parent LS and Satisfaction with Involvement was statistically different from zero ($p < .05$). The R-square increase due to the interaction indicated that approximately 5% of the variance in depressive symptoms was uniquely attributable to the interaction between Parent LS and Satisfaction with Involvement. The conditional effects of Parent LS on depressive symptoms at five different levels (10th, 25th, 50th, 75th and 90th percentiles) of Satisfaction with Involvement indicated that lower levels of parent life satisfaction were associated with more adolescent depressive symptoms, but only when adolescent satisfaction with parental involvement was very low. When satisfaction with involvement was low, moderate, high, or very high, parent life satisfaction was no longer related to adolescent depressive symptoms (see Table 8). In other words, parents who were less satisfied with their lives tended to have children who experienced more depressive symptoms, but only when youth were also less satisfied with parental involvement. Satisfaction with parental involvement did not
moderate the relations between parent life satisfaction and adolescent anxiety or life satisfaction. No other types of parental involvement (i.e., academic/extracurricular/social or family meals) moderated the relation between parent life satisfaction and adolescent adjustment.

Table 7. Significant Moderation Models

<table>
<thead>
<tr>
<th>Significant model</th>
<th>Independent variable</th>
<th>Dependent variable</th>
<th>Moderator</th>
<th>Coefficient for interaction</th>
<th>$R^2$-change</th>
<th>$p$</th>
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<tbody>
<tr>
<td>1</td>
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<td>Satisfaction with involvement</td>
<td>-.25</td>
<td>.05</td>
<td>.04</td>
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<tr>
<td>2</td>
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<td>Anxiety</td>
<td>Perceived parental pressure</td>
<td>-.01</td>
<td>.06</td>
<td>.03</td>
</tr>
<tr>
<td>3</td>
<td>Self-oriented perfectionism</td>
<td>Life satisfaction</td>
<td>Achievement-oriented goals</td>
<td>.19</td>
<td>.07</td>
<td>.03</td>
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<td>4</td>
<td>Self-oriented perfectionism</td>
<td>Life satisfaction</td>
<td>Fulfillment-oriented goals</td>
<td>-.28</td>
<td>.12</td>
<td>.00</td>
</tr>
<tr>
<td>5</td>
<td>Other-oriented perfectionism</td>
<td>Depressive symptoms</td>
<td>Fulfillment-oriented goals</td>
<td>.40</td>
<td>.06</td>
<td>.04</td>
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<tr>
<td>6</td>
<td>Other-oriented perfectionism</td>
<td>Anxiety</td>
<td>Fulfillment-oriented goals</td>
<td>.33</td>
<td>.08</td>
<td>.03</td>
</tr>
<tr>
<td>7</td>
<td>Other-oriented perfectionism</td>
<td>Life satisfaction</td>
<td>Fulfillment-oriented goals</td>
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<td>.05</td>
<td>.03</td>
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</table>

Table 8. Relation between Parent LS and Depressive Symptoms, Moderated by Satisfaction with Involvement

<table>
<thead>
<tr>
<th>Level of moderator</th>
<th>Conditional effect</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low (10th percentile)</td>
<td>.37</td>
<td>.04*</td>
</tr>
<tr>
<td>Low (25th percentile)</td>
<td>.12</td>
<td>.27</td>
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<tr>
<td>Moderate (50th percentile)</td>
<td>-.01</td>
<td>.96</td>
</tr>
<tr>
<td>High (75th percentile)</td>
<td>-.13</td>
<td>.30</td>
</tr>
<tr>
<td>Very high (90th percentile)</td>
<td>-.13</td>
<td>.30</td>
</tr>
</tbody>
</table>
Figure 12. Significant Moderation Models
Results for the second significant model (self-oriented perfectionism $\times$ perceived parental pressure $\rightarrow$ Anxiety) indicated a significant interaction between parent self-oriented perfectionism and adolescent perceived parental pressure predicting adolescent anxiety (see Figure 14). As can be seen in Table 9, the coefficient for the product of self-oriented perfectionism and perceived parental pressure was statistically different from zero ($p < .05$). The R-square increase due to the interaction is indicated that approximately 6% of the variance in anxiety was uniquely attributable to the interaction between self-oriented perfectionism and perceived parental pressure. The conditional effects of self-oriented perfectionism on anxiety at five different levels (10th, 25th, 50th, 75th, and 90th percentiles) of perceived parental pressure indicated that higher levels of self-oriented perfectionism were associated with more anxiety, but only when perceived parental pressure was high or very high. When perceived parental pressure is moderate, low, or very low, self-oriented perfectionism was no longer related to adolescent anxiety.
(see Table 9). In other words, parents who reported having high perfectionistic standards for themselves tended to have adolescents with higher levels of anxiety, but only when youth also perceived high levels of parental pressure. Perceived parental pressure did not moderate the relations between self-oriented perfectionism and adolescent depressive symptoms or life satisfaction.

Figure 14. Interaction Between Self-Oriented Perfectionism and Perceived Parental Pressure Predicting Anxiety

Table 9. Relation between Self-Oriented Perfectionism and Anxiety, Moderated by Perceived Parental Pressure

<table>
<thead>
<tr>
<th>Level of moderator</th>
<th>Conditional effect</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low (10th percentile)</td>
<td>.15</td>
<td>.16</td>
</tr>
<tr>
<td>Low (25th percentile)</td>
<td>.08</td>
<td>.33</td>
</tr>
<tr>
<td>Moderate (50th percentile)</td>
<td>-.02</td>
<td>.81</td>
</tr>
<tr>
<td>High (75th percentile)</td>
<td>-.15</td>
<td>.04*</td>
</tr>
<tr>
<td>Very high (90th percentile)</td>
<td>-.24</td>
<td>.02*</td>
</tr>
</tbody>
</table>
The third significant moderation model (self-oriented perfectionism \(\rightarrow\) Achievement-Oriented Goals \(\rightarrow\) SWLS) indicated a meaningful interaction between parent self-oriented perfectionism and parents’ future goals for their children predicting adolescent life satisfaction (see Figure 15). As can be seen in Table 10, the coefficient for the product of parent self-oriented perfectionism and Achievement-Oriented Goals was statistically different from zero \((p < .05)\). The R-square increase due to the interaction indicated that approximately 7% of the variance in adolescent life satisfaction was uniquely attributable to the interaction between parent self-oriented perfectionism and Achievement-Oriented Goals. The conditional effects of parent self-oriented perfectionism on life satisfaction at five different levels (10th, 25th, 50th, 75th, and 90th percentiles) of Achievement-Oriented Goals indicated that very low, low, and moderate emphasis on achievement-oriented goals was not associated with adolescent life satisfaction. When emphasis on achievement-oriented goals was high or very high, however, parent self-oriented perfectionism became significantly associated with lower levels of adolescent life satisfaction (see Table 10). In other words, parents who reported having high perfectionistic standards for themselves tended to have children with lower levels of life satisfaction, but only when parents strongly emphasized achievement-related goals. However, when parents did not strongly emphasize achievement, their adolescents were equally satisfied with their lives regardless of parental self-oriented perfectionism.

The fourth significant moderation model (self-oriented perfectionism \(\rightarrow\) Fulfillment-Oriented Goals \(\rightarrow\) SWLS) indicated another meaningful interaction between
Figure 15. Interaction Between Self-Oriented Perfectionism and Parents’ Achievement Goals Predicting SWLS

Table 10. Relation between Self-Oriented Perfectionism and SWLS, Moderated by Parents’ Achievement Goals

<table>
<thead>
<tr>
<th>Level of moderator</th>
<th>Conditional effect</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low (10th percentile)</td>
<td>-0.17</td>
<td>0.19</td>
</tr>
<tr>
<td>Low (25th percentile)</td>
<td>0.03</td>
<td>0.65</td>
</tr>
<tr>
<td>Moderate (50th percentile)</td>
<td>0.03</td>
<td>0.65</td>
</tr>
<tr>
<td>High (75th percentile)</td>
<td>0.22</td>
<td>0.01*</td>
</tr>
<tr>
<td>Very high (90th percentile)</td>
<td>0.22</td>
<td>0.01*</td>
</tr>
</tbody>
</table>

parent self-oriented perfectionism and parents’ future goals for their children predicting adolescent life satisfaction (see Figure 16). As can be seen in Table 11, the coefficient for the product of Parent self-oriented perfectionism and Fulfillment-Oriented Goals was statistically different from zero ($p < .01$). The R-square increase due to the interaction indicated that approximately 12% of the variance in adolescent life satisfaction was uniquely attributable to the interaction between parent self-oriented perfectionism and Fulfillment-Oriented Goals. The conditional effects of parent self-oriented perfectionism
on life satisfaction at five different levels (10th, 25th, 50th, 75th, and 90th percentiles) of Fulfillment-Oriented Goals indicated that higher levels of self-oriented perfectionism was associated with lower levels of life satisfaction, but only when parents exhibited very low or low levels of Fulfillment-Oriented Goals. Conversely, higher levels of self-oriented perfectionism were associated with high adolescent life satisfaction when parents exhibited very high levels of fulfillment-oriented goals. When parents exhibited moderate levels of fulfillment-oriented goals, however, the relation between parent self-oriented perfectionism and adolescent life satisfaction no longer existed. In other words, parents who reported having high perfectionistic standards for themselves tended to have children with lower levels of life satisfaction, but only when parents did not emphasize fulfillment goals. When parents did emphasize fulfillment goals, higher personal standards were actually associated with higher levels of adolescent life satisfaction. Parents’ goals for their children did not moderate the relations between self-oriented perfectionism and depressive symptoms or anxiety.

Figure 16. Interaction Between Self-Oriented Perfectionism and Parents’ Fulfillment Goals Predicting SWLS
Table 11. Relation between Self-Oriented Perfectionism and SWLS, Moderated by Parents’ Fulfillment Goals

<table>
<thead>
<tr>
<th>Level of moderator</th>
<th>Conditional effect</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low (10th percentile)</td>
<td>.26</td>
<td>.00**</td>
</tr>
<tr>
<td>Low (25th percentile)</td>
<td>.26</td>
<td>.00**</td>
</tr>
<tr>
<td>Moderate (50th percentile)</td>
<td>-.02</td>
<td>.81</td>
</tr>
<tr>
<td>High (75th percentile)</td>
<td>-.02</td>
<td>.81</td>
</tr>
<tr>
<td>Very high (90th percentile)</td>
<td>-.29</td>
<td>.03*</td>
</tr>
</tbody>
</table>

The fifth significant moderation model (other-oriented perfectionism X Fulfillment-Oriented Goals ➔ Depressive Symptoms) indicated a meaningful interaction between parent other-oriented perfectionism and parents’ future goals for their children predicting adolescent depressive symptoms (see Figure 17). As can be seen in Table 12, the coefficient for the product of parent other-oriented perfectionism and Fulfillment-Oriented Goals was statistically different from zero (p < .05). The R-square increase due to the interaction indicates that approximately 6% of the variance in adolescent depressive symptoms was uniquely attributable to the interaction between parent other-oriented perfectionism and Fulfillment-Oriented Goals. The conditional effects of parent other-oriented perfectionism on depressive symptoms at five different levels (10th, 25th, 50th, 75th, and 90th percentiles) of Fulfillment-Oriented Goals indicated that higher levels of parental other-oriented perfectionism were associated with more symptoms of adolescent depression, but only when the level of parental fulfillment-oriented goals was very low or low. When parents’ level of fulfillment-oriented goals was moderate, high, or very high, parent other-oriented perfectionism and adolescent depressive symptoms were no longer related. In other words, parents who reported having high expectations for
others tended to have children with more depressive symptoms, but only when they did not emphasize fulfillment goals.

![Figure 17. Interaction Between Other-Oriented Perfectionism and Parents’ Fulfillment Goals Predicting Adolescent Depressive Symptoms](image)

**Table 12. Relation between Other-Oriented Perfectionism and Depressive Symptoms, Moderated by Parents’ Fulfillment Goals**

<table>
<thead>
<tr>
<th>Level of moderator</th>
<th>Conditional effect</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low (10th percentile)</td>
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<td>.03*</td>
</tr>
<tr>
<td>Low (25th percentile)</td>
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<td>.03*</td>
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<tr>
<td>Moderate (50th percentile)</td>
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<td>.69</td>
</tr>
<tr>
<td>High (75th percentile)</td>
<td>-.03</td>
<td>.69</td>
</tr>
<tr>
<td>Very high (90th percentile)</td>
<td>.17</td>
<td>.20</td>
</tr>
</tbody>
</table>

The sixth significant moderation model (other-oriented perfectionism X Fulfillment-Oriented Goals → Anxiety) indicated a meaningful interaction between parent other-oriented perfectionism and parents’ future goals for their children predicting adolescent anxiety (see Figure 18). As can be seen in Table 13, the coefficient for the product of parent other-oriented perfectionism and Fulfillment-Oriented Goals was
statistically different from zero ($p < .05$). The R-square increase due to the interaction indicated that approximately 8% of the variance in adolescent anxiety was uniquely attributable to the interaction between parent other-oriented perfectionism and Fulfillment-Oriented Goals. The conditional effects of parent other-oriented perfectionism on anxiety at five different levels (10th, 25th, 50th, 75th, and 90th percentiles) of Fulfillment-Oriented Goals indicated that higher levels of parent other-oriented perfectionism were associated with higher levels of adolescent anxiety, but only when parents’ level of fulfillment-oriented goals was very low or low. While no relation existed between other-oriented perfectionism and anxiety when parents’ fulfillment-oriented goals moderate or high, the relation was marginally significant when fulfillment-oriented goals were very high. In other words, parents who reported having highly perfectionistic standards for others tended to have children with higher levels of anxiety, but only when they did not emphasize fulfillment goals. When parents highly emphasized fulfillment goals, their high standards for others was actually associated with less anxiety in their children (marginally significant trend).

Figure 18. Interaction Between Other-Oriented Perfectionism and Parents’ Fulfillment Goals Predicting Adolescent Anxiety
Table 13. Relation between Self-Oriented Perfectionism and SWLS, Moderated by Parents’ Achievement Goals

<table>
<thead>
<tr>
<th>Level of moderator</th>
<th>Conditional effect</th>
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</tr>
</thead>
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<td>.04*</td>
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<tr>
<td>Low (25th percentile)</td>
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<td>High (75th percentile)</td>
<td>.01</td>
<td>.93</td>
</tr>
<tr>
<td>Very high (90th percentile)</td>
<td>.34</td>
<td>.05</td>
</tr>
</tbody>
</table>

The seventh significant moderation model (other-oriented perfectionism X Fulfillment-Oriented Goals → SWLS) indicated a meaningful interaction between parent other-oriented perfectionism and parents’ future goals for their children predicting adolescent life satisfaction (see Figure 19). As can be seen in Table 14, the coefficient for the product of Parent other-oriented perfectionism and Fulfillment-Oriented Goals was statistically different from zero ($p < .05$). The R-square increase due to the interaction indicated that approximately 6% of the variance in adolescent life satisfaction was uniquely attributable to the interaction between parent other-oriented perfectionism and Fulfillment-Oriented Goals. The conditional effects of Parent other-oriented perfectionism on life satisfaction at five different levels (10th, 25th, 50th, 75th, and 90th percentiles) of Fulfillment-Oriented Goals indicated higher levels of other-oriented perfectionism were associated with lower adolescent life satisfaction when parents’ fulfillment-oriented goals were low or very low. When fulfillment-orientation levels were moderate, high, or very high, parent other-oriented perfectionism was no longer related to adolescent life satisfaction. In other words, parents who reported having highly perfectionistic standards for others tended to have children with lower levels of life
satisfaction, but only when they failed to emphasize fulfillment goals. When parents did emphasize fulfillment goals, high parental standards for others was unrelated to adolescent life satisfaction.

Figure 19. Interaction Between Other-Oriented Perfectionism and Parents’ Fulfillment Goals Predicting Adolescent Life Satisfaction

Table 14. Relation between Other-Oriented Perfectionism and SWLS, Moderated by Parents’ Fulfillment Goals

<table>
<thead>
<tr>
<th>Level of moderator</th>
<th>Conditional effect</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low (10th percentile)</td>
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<td>.03*</td>
</tr>
<tr>
<td>Low (25th percentile)</td>
<td>.33</td>
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<tr>
<td>Moderate (50th percentile)</td>
<td>.07</td>
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</tr>
<tr>
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<td>.07</td>
<td>.37</td>
</tr>
<tr>
<td>Very high (90th percentile)</td>
<td>-.18</td>
<td>.26</td>
</tr>
</tbody>
</table>
Table 15. Nonsignificant Findings

<table>
<thead>
<tr>
<th>Aim</th>
<th>Type of analysis</th>
<th>Nonsignificant findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aim 1:</strong> Test for linear and curvilinear relations between parenting variables and adolescent adjustment</td>
<td>Linear regression</td>
<td>Actual parental involvement was not linearly or curvilinearly associated with adolescent adjustment. Parental perfectionism was not associated with adolescent adjustment. Parent life satisfaction was not associated with adolescent adjustment. Family meal frequency was unrelated to adolescent anxiety. No linear or curvilinear relations between parents’ future goals for their children and adolescent adjustment.</td>
</tr>
<tr>
<td><strong>Aim 2:</strong> Examine how the 5 parenting variables are interrelated</td>
<td>Bivariate correlations</td>
<td>Fulfillment-oriented goals were unrelated to parental perfectionism. PPP was unrelated to OOP or SOP. The parental involvement composite was unrelated to other study variables. Neither family meals nor satisfaction with involvement were related to parents’ goals. Parent life satisfaction was unrelated to SOP or OOP and unrelated to achievement-oriented goals. PPP was unrelated to parents’ goals.</td>
</tr>
<tr>
<td><strong>Aim 3:</strong> Test the fit of two models in a mediator versus moderator approach</td>
<td>Mediation (bootstrapping)</td>
<td>Neither parents’ future goals nor parental involvement mediated the relations between (1) parental perfectionism and (2) parent life satisfaction and adolescent adjustment.</td>
</tr>
</tbody>
</table>

(1) Parent LS X satisfaction with involvement → adolescent anxiety or life satisfaction
(2) Parent LS X actual parent involvement → adolescent adjustment
(3) SOP X PPP → depressive symptoms/life satisfaction
(4) SOP X parents’ goals → depressive symptoms/anxiety
(5) SOP X parental involvement → adolescent adjustment
(6) OOP X achievement goals → adolescent adjustment
(7) OOP X PPP → adolescent adjustment
(8) OOP X parental involvement → adolescent adjustment
(9) SPP X parents’ goals → adolescent adjustment
(10) SPP X PPP → adolescent adjustment
(11) SPP X parental involvement → adolescent adjustment
(12) Parent LS X PPP → adolescent adjustment
(13) Parent LS X parents’ goals → adolescent adjustment
The present study aimed to examine the role of several different parenting variables in adolescent adjustment using a mixed methods research approach (i.e., quantitative and qualitative data). The main goals were to (1) examine the direct linear and curvilinear relations between several different aspects of parenting and adolescent adjustment, (2) investigate how the five parenting variables (i.e., parental perfectionism, parent life satisfaction, perceived parental pressure, parents’ future goals for their children, and parental involvement in their children’s lives) were interrelated, and (3) test two competing models to determine whether relations between parent-focused parenting variables (i.e., parental perfectionism and parent life satisfaction) and adolescent adjustment (i.e., depressive symptoms, anxiety, and life satisfaction) were mediated or moderated by adolescent-focused parenting variables (i.e., perceived parental pressure, parents’ future goals for their children, and parental involvement in their children’s lives).

Relations Between Parenting Variables and Adolescent Adjustment

Contrary to expectation, findings suggested that the parent-focused parenting variables (i.e., parental perfectionism and parent life satisfaction) were unrelated to adolescent adjustment. In contrast, adolescents who reported feeling more satisfied with their parents’ level of involvement in their lives reported fewer depressive symptoms, less anxiety, and higher levels of life satisfaction. Thus, the synchronicity between what
the parent provides and what the child needs/desires may be of particular importance when considering adolescent adjustment. If there is a poor match between what is provided and what is needed/desired, then parental involvement may be perceived by adolescents as pressure. Of note, *actual* parental involvement (i.e., adolescents’ ratings of how involved parents were in various aspects of their lives) was not associated with any adolescent adjustment outcomes. Given that adolescence is a crucial time for separation-individuation, a match between parents’ involvement and adolescents’ need/desire for involvement may be more influential in terms of adolescent adjustment.

We suggest that adolescent report of satisfaction with parental involvement, in part, represents their emotional experience of parental involvement. Previous literature indicates that parents’ physical and emotional absences are associated with increased levels of distress and adjustment disturbances in affluent youth (Luthar & Latendresse, 2005b); yet parental intrusiveness or over-involvement can also have highly negative effects on adolescent adjustment (Ginsburg & Bronstein, 1993). While previous literature describes the two extremes of parental involvement and their links to negative adolescent adjustment, no research to our knowledge has examined the amount or type of parental involvement that is associated with *positive* adolescent adjustment. We hypothesized that parents’ behavior (i.e., involvement), and specifically a “happy medium” between over- and under-involvement, would be ideal for positive adolescent adjustment. However, findings from the present study indicated that parents’ behavioral involvement may be less important than adolescents’ *emotional experience* of that involvement. Thus perhaps parents should strive for a level of involvement that is specific to and in sync with each
adolescent’s needs as opposed to subscribing to a “one-size-fits-all” theory that emphasizes a certain amount or type of involvement.

Although the majority of our findings indicated that parents’ behavioral involvement was not associated with adolescent adjustment, an examination of family meals revealed that adolescents who ate more meals with their families each week tended to experience fewer depressive symptoms and greater life satisfaction. While eating meals together is a behavior, we posit that there is something about engaging in family meals that represents a positive psychological engagement on the part of parents. The act of parents making time for family dinners may be perceived by adolescents as making time for them and thus caring more about them. The family systems literature notes that eating meals together provides an opportunity for families to “replenish themselves and affirm their experience of ‘we-ness’” (Larson & Richards, 1994, p. 217). When parents are physically absent from the home, fewer family meals are eaten and adolescents experience more internalizing, externalizing, and academic problems (Luthar & Latendresse, 2005b). Conversely, the literature suggests numerous advantages of family meals, including eating healthier foods (Neumark-Sztainer et al., 2000), providing family identity, order, and consistency (Wolin & Bennett, 1984), and the promotion of family communication (Lynam & Tenn, 1989; Riesch, 1997). Furthermore, more family time (including family meals) predicts better psychosocial adjustment in future years (Crouter, Head, McHale, & Tucker, 2004). The present study extended this literature by examining associations between frequency of family meals and adolescent adjustment within an affluent sample. Research on affluent youth has described a lack of a physical presence of
parents in the home and has noted connections between parental absence and fewer meals eaten with parents (Luthar & Latendresse, 2005b). However researchers have yet to examine links between the frequency of family meals and adolescent adjustment in this population. Results from our study suggest that affluent youth may receive benefits from family meals similar to those enjoyed by non-affluent youth in terms of psychosocial adjustment.

While results did not suggest that a “happy medium” between parental over- and under-involvement is associated with adolescent adjustment, moderate levels of perceived parental pressure were linked to more positive adolescent adjustment. Specifically, findings indicated that very low and very high levels of perceived parental pressure were associated with worse adjustment (i.e., more depressive and anxiety symptoms and lower life satisfaction), while moderate levels of perceived parental pressure were related to healthier adjustment (i.e., fewer depressive and anxiety symptoms and higher life satisfaction). The aforementioned argument about the importance of parental presence in the home versus parental intrusiveness or over-involvement may also help explain why a curvilinear relation exists between perceived parental pressure and adolescent adjustment. Several researchers have demonstrated a significant relation between perceived parental pressure and symptoms of adolescent depression and anxiety (Neumeister, 2004; Stoeber & Rambow, 2007; Chambless & Steketee, 1999; Sagar & Stoeber, 2009; Randall, Bohnert, & Travers, under review); the present study, however, hypothesized that the complete absence of perceived pressure may not be ideal either. Extremely low levels of parental pressure may be perceived by
adolescents as parental disengagement or a lack of investment (i.e., absentee parents), whereas extremely high levels of pressure may signify unrealistic expectations or psychologically-driven over-involvement (i.e., helicopter parents). Our data replicate the finding that intense parental pressure to achieve is not conducive to healthy adolescent adjustment, but adds to the current literature by demonstrating that a paucity of parental pressure is also associated with adjustment problems. Thus it appears that a moderate level of pressure or expectations is ideal for the adjustment of affluent youth. Of note, perceived parental pressure may be directly linked to adolescent adjustment due to common method variance, as both perceived parental pressure and all three types of adolescent adjustment were provided through adolescent-report.

Another parenting variable examined in the present study was parents’ future academic/career goals for their children. Interestingly, no direct relations were found between parents’ goals and adolescent adjustment. One hypothesis for this lack of findings is that adolescents’ satisfaction with parental goals or the parent-child goal “match” may be more influential on adolescent adjustment. Unfortunately, this study did not examine adolescents’ future academic/career goals for themselves; therefore, we are not able to speak to this point directly. However, we did test the hypothesis that parents’ future goals may be indirectly associated with adolescent adjustment. These findings are discussed further in the section on moderating relations.

**Relations Among Parenting Variables**

Findings indicated that more perfectionistic parents, and particularly parents who endorsed socially imposed perfectionistic pressures, tended to emphasize achievement
and success when describing their goals for their children, have children who experienced
more pressure from them, and eat fewer family meals with their children. In addition,
parents who reported feeling more satisfied in their own lives tended to emphasize
fulfillment and learning goals for their children. Interestingly, parental involvement was
unrelated to all parenting variables.

The perfectionism literature generally supports the finding that socially prescribed
perfectionism is a maladaptive type of perfectionism that is associated with negative
adjustment outcomes (Enns, Cox, & Clara, 2002; Hamachek, 1978; Hollender, 1965). In
the current study, socially prescribed perfectionism was linked to several negative aspects
of parenting, including lower parental life satisfaction, more achievement goals, more
perceived pressure, and fewer family meals. In contrast, other-oriented perfectionism and
self-oriented perfectionism were not directly related to multiple parenting variables (i.e.,
self-oriented perfectionism only linked to achievement goals). These results suggest that
socially prescribed perfectionism may be a more potently negative aspect of parenting.
Specifically, findings indicated that parents who perceived high perfectionistic
pressures/expectations from their environment (i.e., socially prescribed perfectionism)
tended to have children who perceived more pressure from them (i.e., perceived parental
pressure). As research suggests that perfectionism is often “transmitted” across
generations a (Hewitt & Flett, 1991), it is possible that parents displace the intense social
pressure to achieve onto their children. One way in which parents may displace this
pressure is through their future goals for their children. In the present study, more
perfectionistic parents tended to emphasize achievement goals for their children (i.e.,
emphasized prestige, performance, and success). Alternatively, parents who reported experiencing lower levels of perfectionistic pressure from their environment (i.e., socially prescribed perfectionism) experienced greater life satisfaction, and tended to report more fulfillment-oriented goals for their children (i.e., emphasized learning, identity development, satisfaction, and exploring passions); yet parent life satisfaction was unrelated to achievement goals. This finding may suggest that it is easier for parents to see the value in their children striving for fulfillment goals when they themselves feel fulfilled and are less affected by societal pressures to achieve and succeed. Interestingly, parent life satisfaction was not associated with any other parenting variables, nor was it directly linked to adolescent adjustment.

Although parents’ achievement-oriented goals for their children were unrelated to their life satisfaction, they were linked to higher levels of parental perfectionism (i.e., self-oriented perfectionism, socially prescribed perfectionism, and other-oriented perfectionism). These findings indicate an important link between perfectionistic traits in parents and the type of academic/career goals they have for their children. More specifically, parents who expected more from themselves (i.e., self-oriented perfectionism), had high expectations for others (i.e., other-oriented perfectionism), and/or perceived their environment as setting high standards (i.e., socially prescribed perfectionism) also tended to expect more of their children (i.e., emphasized prestige, performance, upward mobility, professional or academic success, or affluence). Of note, neither fulfillment nor achievement goals were associated with adolescent adjustment. These results suggest that neither parental perfectionism nor parents’ future goals alone
can directly account for adolescent adjustment. Rather, there may be other variables that mediate or moderate these relations. To our knowledge, no researchers have directly investigated parents’ academic and career goals for their children, nor have they examined links between these goals and parental perfectionism.

**Examining the Fit of Two Models**

The integration of numerous findings from previous literature suggests that the effects of parent-focused parenting variables on adolescent adjustment may differ based on certain adolescent-focused mechanisms or under certain circumstances. Thus the present study aimed to answer questions related to mechanisms of influence and conditions under which certain relations exist by examining the fit of two models in a mediator versus moderator approach (Rose, Holmbeck, Coackley, & Franks, 2004). Results indicated that a moderation model more accurately represents the relations among the set of variables of interest when compared to a mediation model. In other words, we are not able to provide information about why our variables of interest are related, but we are able to describe *when* or the *context in which* they are related. This finding suggests that it is important to consider certain adolescent-focused parenting variables when examining the links between parent-focused parenting variables and adolescent adjustment. In other words, the interaction between parent traits/adjustment (i.e., parent-focused parenting variables) and parental communication of values through behaviors and expectations (i.e., adolescent-focused parenting variables) is linked to adolescent adjustment (i.e., moderation).
Regarding mediation, neither parents’ future goals for their children nor parental involvement were found to mediate the relations between (1) parental perfectionism and (2) parent life satisfaction and adolescent adjustment (i.e., depressive symptoms, anxiety, and life satisfaction; see Figure 1). Although we have interpreted this lack of findings as an absence of support for the mediation model, it is also possible that the small sample size did not produce enough power to detect such results. However, several moderation analyses did yield significant results providing evidence that the variables of interest in the present study are linked under certain circumstances (i.e., moderation).

Several interesting findings emerged from the moderation analyses. First, adolescent satisfaction with parental involvement in their lives moderated the relation between parent life satisfaction and adolescent adjustment. Specifically, parents who were less satisfied with their lives tended to have children with more depressive symptoms, but only if adolescents were less satisfied with their parents’ level of involvement in their lives. When adolescents were more satisfied with parental involvement, parent life satisfaction was no longer related to adolescent depressive symptoms. As previously discussed, research suggests that parents’ physical and emotional absences are associated with increased levels of distress and adjustment disturbances in affluent youth (Luthar & Latendresse, 2005b). However, parental intrusiveness or over-involvement can also have highly negative effects on adolescent adjustment (Ginsburg & Bronstein, 1993). The finding in the present study may be linked to both “absentee” and “helicopter” parenting. Perhaps parents who are not satisfied with their lives are either disengaged from their children’s lives, or are living vicariously
through their children, resulting in over-involvement in their adolescents’ lives that mismatches what their child needs or desires. Thus, this finding similarly suggests that parents’ level of involvement should be in sync with each adolescent’s needs during this time of separation-individuation.

The second moderation finding indicated that, although certain parental characteristics (i.e., perfectionism) are not directly related to adolescent adjustment, the way in which these traits are expressed or communicated to adolescents is associated with adolescent adjustment. More specifically, parents who had high expectations for others (i.e., other-oriented perfectionism) tended to have children with worse adjustment (i.e., more depressive symptoms and anxiety, and lower life satisfaction), but only when they did not emphasize growth and satisfaction in their goals for their children (i.e., fulfillment-oriented goals). In the perfectionism literature, other-oriented perfectionism is typically considered to be a maladaptive type of perfectionism (Enns, Cox, & Clara, 2002; Hamachek, 1978; Hollender, 1965). However, when fulfillment goals are emphasized, perhaps the expression of other-oriented perfectionism demonstrates that a parent cares and is invested in their child’s life as opposed to being critical and demanding success. Of note, parents’ achievement-oriented goals did not moderate any of these relations. These results can be linked to one of the main findings in Travers, Bohnert, & Randall’s (2013) study examining the impact of the school environment on adolescent mental health; findings indicated that the associations between perceived school climate (i.e., motivational climate), personal definitions of success (i.e., goal orientation), and adolescent adjustment emerged only when positive aspects of school
environment and individual achievement values were considered. In other words, non-competitive values and collaborative environments were found to be particularly important for adolescent adjustment. Findings from the present study further support the idea that emphasizing nurturing and supportive values (i.e., fulfillment goals) may be more important than de-emphasizing performance and success (i.e., achievement goals).

In contrast, both achievement and fulfillment goals significantly moderated the relation between parents’ self-oriented perfectionism and adolescents’ life satisfaction. In other words, the link between parent self-oriented perfectionism and adolescent life satisfaction depended on the type of future academic/career goals parents had for their children. When parents emphasized prestige and success less, their highly perfectionistic self-imposed standards (i.e., self-oriented perfectionism) were unrelated to their children’s life satisfaction. However, when parents strongly emphasized achievement goals, higher levels of parent self-oriented perfectionism were significantly associated with lower levels of adolescent life satisfaction. Conversely, when parents failed to emphasize fulfillment goals or emphasized them very little, higher levels of parental self-oriented perfectionism were significantly associated with lower levels of adolescent life satisfaction. When there was a strong emphasis on fulfillment goals, however, higher levels of parent self-oriented perfectionism were linked to higher levels of adolescent life satisfaction. In the perfectionism literature, self-oriented perfectionism is viewed as maladaptive when it involves exceedingly high, unrealistic, and self-imposed standards accompanied by an intensive self-scrutiny, criticism, and inability to accept flaws and failure in oneself (Hewitt & Flett, 1991). However, when there is less emphasis on self-
doubt and criticism and more emphasis on pursuit of personal standards, self-oriented perfectionism has been described as an adaptive type of perfectionism (Enns, Cox, & Clara, 2002; Hamachek, 1978; Hollender, 1965). Thus, findings from the present study suggest that the way in which parental self-oriented perfectionism is linked to adolescent adjustment depends on the values/beliefs the parents hold regarding success, and how they then transmit those values/beliefs to their children through everyday interactions (e.g., future academic/career goals). Perhaps fulfillment goals are more in line with the pursuit of personal standards, a positive aspect of self-oriented perfectionism, while achievement goals are more strongly associated with self-doubt and criticism, the maladaptive features of self-oriented perfectionism. We hypothesize that different types of parental goals (i.e., fulfillment versus achievement) highlight the positive or negative aspects of self-oriented perfectionism, which is then associated with adolescent adjustment.

One final moderation finding that emerged indicated that perceived parental pressure moderated the relation between parental perfectionism and adolescent adjustment. Specifically, parents with highly perfectionistic self-imposed standards (i.e., self-oriented perfectionism) tended to have children who experienced more anxiety, but only when adolescents also perceived a large amount of parental pressure (i.e., perceived parental pressure). When perceived parental pressure was relatively low, the relation between self-oriented perfectionism and adolescent anxiety was insignificant. Again it was found that parents’ perfectionistic traits were linked to adolescent adjustment, but
only when translated into a recognizable, and negative message to adolescents (i.e., parental pressure).

Given the aforementioned finding that socially prescribed perfectionism is strongly linked to several other negative parenting variables, we found it surprising that the relation between socially prescribed perfectionism and adolescent adjustment was not moderated by any of the three adolescent-focused parenting variables. The perfectionism literature suggests that socially prescribed perfectionism is a maladaptive type of perfectionism that is associated with negative adjustment outcomes (Enns, Cox, & Clara, 2002; Hamachek, 1978; Hollender, 1965). Findings from this study indicate that the link between socially prescribed perfectionism and adolescent adjustment is not conditional, nor dependent upon any other parent-focused or adolescent-focused parenting variable. However, given that socially prescribed perfectionism is related to several parent-focused parenting variables that were related to adolescent outcomes (i.e., fewer family meals, higher levels of perceived parental pressure), it is possible that the relation between socially prescribed perfectionism, parenting variables, and adolescent outcomes is better described by a mediated or process-oriented model. Thus our lack of findings may be due to our small sample size, warranting further investigation with a larger sample. It is also possible that this hypothesized mediated relationship may be more prevalent in a clinical sample of adolescents from affluent communities.

The majority of previous research examining the impact of parenting variables on adolescent adjustment examines direct relations between variables. One recent study drawing on the same sample used in the current study found that perceived parental
pressure mediates the relation between parental perfectionism and adolescent adjustment in affluent youth (Randall, Bohnert, & Travers, under review). Specifically, adolescents with parents who report high levels of perfectionistic pressures from their surroundings (i.e., socially prescribed perfectionism) or who expect perfectionism from others (i.e., other-oriented perfectionism) experience their parents as more pressuring and also report higher levels of internalizing problems and lower levels of life satisfaction. No known research, however, has examined perceived parental pressure as a moderator, nor has it investigated parental involvement in their adolescents’ lives or parents’ future academic and career goals for their children as both mediators and moderators. The results from the current study suggest that parent-focused parenting variables are related to adolescent adjustment under specific conditions (i.e., moderation). While we are not able to provide information about why our variables of interest are related, we are able to describe when or the context in which they are related.

Limitations and Future Directions

The current study is one of few that examines the impact of the parent context on affluent adolescent adjustment. However, there were several limitations. First, the current study only evaluated the direct and indirect pathways with a sample of affluent adolescents. Although we propose that the factors included in the models were “culturally salient” based on prior literature, we did not compare the results to low- or middle-class adolescents, nor examine the model with an ethnically diverse sample. Therefore, future research is needed to clarify whether the theories proposed in the current study are unique to an affluent population or whether there is a consistent pattern among youth and
families from a wide range of socioeconomic and ethnic backgrounds. In addition, the adolescents in the current sample were relatively well-adjusted, which may have attenuated the strength of the findings; thus, future research should assess the fit of these models using a clinical sample. Another limitation of the present study involves the absence of potentially influential parent-child relationship variables. The literature stresses the importance of emotional closeness between children and parents, and suggests that emotional isolation is an influential factor in the adjustment disturbance of affluent youth (Luthar & Latendresse, 2005a). The present study did not directly assess the construct of emotional closeness; however the measures of parental involvement and adolescent satisfaction with parental involvement may provide some level of insight into how close adolescents feel to their parents. Family meals may also serve as a proxy for family connectedness in that highly connected families may be more likely to eat meals together (Neumark-Sztainer, Wall, Story, & Fulkerson, 2004).

Additional limitations of the study are methodological in nature. First, the cross-sectional design limits what can be concluded about the directionality of the findings. Second, the small sample size increases the risk of sampling error. The current study required complete child-parent pairs, which decreased the analytic sample. Of note, the sample size provided very strong (95-99%) power to detect large or medium effects, but only weak (26-27%) power to detect small effects. Thus, although the sample size is small, it is large enough to support our analyses. Finally, several of the significant linear and curvilinear findings included variables that were assessed through adolescent report only. Thus it is possible that significant relations are due to common method variance.
All moderation findings, however, included a mix of variables assessed through adolescent and parent report in each model. Future studies should use a larger sample and a multi-method approach with a longitudinal design to assess the developmental progression of parental perfectionism, parent life satisfaction, parents’ future goals for their children, perceived parental pressure, parental involvement, and affluent adolescent adjustment.

Furthermore, although the current study collected data from four different high schools across the country, certain school-level differences were not considered. While this aspect of the study makes the data more generalizable, it also raises questions about school differences. While conducting individual analyses by school would provide more clarity on this issue, the sample size was not large enough to do so. A recent study drawing from the same sample as the current investigation found that more performance-oriented climates (i.e., emphasize success, achievement) are associated with more adjustment problems while climates that emphasize learning and growth are associated with fewer adjustment problems (Travers, Bohnert, & Randall, 2013). Results suggest the importance of non-competitive achievement-oriented values and collaborative school contexts in adolescent adjustment. Thus future studies should investigate the role of school climate on adolescent adjustment and determine if and how the school environment may support or counter the beliefs and pressuring behaviors of perfectionistic parents. This information may help inform parent, teacher, and student intervention and/or prevention programs aimed at reducing adjustment problems in affluent communities.
Implications and Conclusions

The current study expands prior research by examining various parental factors thought to relate to affluent adolescent adjustment, studying the relations among these variables, and considering when and how these parental factors may exert their influence. Although we proposed that parents’ traits and adjustment could be linked to adolescent adjustment through various parental behaviors and values (i.e., mediation), we found more support for the conditions under which parental factors may be related to affluent adolescent adjustment (i.e., moderation). For example, lower levels of parental pressure, less emphasis on achievement-oriented values, and greater emphasis on fulfillment-oriented values provided circumstances in which parental traits and adjustment could be linked to healthier adolescent adjustment. Findings also highlighted that the synchronicity or match between what the child needs/desires and the parent’s emotional and behavioral involvement may be of particular importance. Additionally, socially prescribed perfectionism was a consistently unfavorable aspect of parenting, linked to other undesirable parenting variables, and negatively associated with positive aspects of parenting. In contrast, parent life satisfaction was associated with greater emphasis on adolescent growth and fulfillment. Results did not, however, provide insight into the mechanisms by which or conditions under which parental socially prescribed perfectionism is related to adolescent adjustment; as such, further investigation is needed.

In sum, parents in affluent communities are struggling with perfectionism and potentially lower levels of life satisfaction. These difficulties are manifested, emotionally and/or behaviorally, in a way that may be influencing adolescents, which could
subsequently lead to psychosocial adjustment problems. Thus parents are an important point of entry with regards to intervention. Given our newfound understanding of the conditions under which certain types of parental perfectionism impact adolescent adjustment, this study helps to clarify aims for the development of prevention and intervention programs. For example, findings from the current investigation support the idea that parents within the culture of affluence report an immense amount of pressure from their external environment to be perfect (i.e., socially prescribed perfectionism) and that this struggle may be “passed on” to their children. Therefore developing programs that focus on supporting parents and helping them manage their stress may help minimize the extent to which their children report negative developmental outcomes. Furthermore, given the importance of the parent-child “match,” interventions should focus on parent-child work at the individual and programming levels. Although it is clear that prevention and intervention programs which aim to counter the difficulties faced by parents and children within the culture of affluence must assume a multi-systemic approach, this study is an important step towards achieving the goal of positive youth development and promotion of better adjustment among affluent adolescents.


VITA

Lea V. Travers graduated from Brown University with honors in 2008 where she completed a dual major in Cognitive Neuroscience and Hispanic Studies. Before beginning graduate school at Loyola University Chicago, she worked at the Rush NeuroBehavioral Center in Chicago, IL as a pediatric neuropsychological testing technician. She also worked as a research assistant at Northwestern University’s Feinberg School of Medicine on a study examining affective processing in women with postpartum depression. Lea is currently a Ph.D. student in the Clinical Psychology program at Loyola University Chicago. Since beginning graduate school, she has completed a psychotherapy practicum at Loyola’s undergraduate psychological Wellness Center and a school-based therapy practicum at Wediko Children’s Services in Boston, MA. She has also completed pediatric neuropsychological assessment practica at the University of Chicago Medical Center and Tufts Medical Center’s Floating Hospital for Children. Currently, Lea is a pre-doctoral intern at Rush University Medical Center in Chicago, IL where she is completing her training as a pediatric psychologist. Lea’s research with Loyola faculty advisor Amy Bohnert includes the investigation of organized activity involvement, obesity, and psychosocial adjustment in adolescents. Along with colleague Edin Randall, Lea has developed a separate program of research examining various cultural factors impacting the psychosocial adjustment of affluent youth. Lea will graduate from Loyola University Chicago in May of 2015 with a Ph.D. in Clinical Psychology.