

The Development and Trajectory of Parent-Child Conflict During College

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Dedication

This dissertation is dedicated to my parents, Drs. Feraydoon Bahrassa and Persis Shroff, who showed me the strength of perseverance and worked selflessly to build a life of opportunity for their children. I would also like to dedicate this dissertation to my fiancé, Zal Bilimoria, whose ceaseless love and support continues to amaze me.

Abstract

This two-study investigation examined parent-child conflict during young adulthood from the perspective of college students. Study 1a utilized a mixed-method approach to examine the content and resolution of parent-child conflict. Four qualitative themes of the content of conflict, as well as conflict resolution, were found and compared to quantitative measures of family functioning, mental health, and physical health (Study 1a). Additionally, in a subset of the Study 1 sample (Study 1b), students who reported parent-child conflict reported higher frequencies of conflict, less perceived family support, and more psychological distress than those students who did not report conflict. Study 2 examined trajectories of parent-child conflict using quantitative longitudinal data spanning three points of time during college. Using latent class growth analysis, four distinct trajectories were found. The results demonstrate the importance of continuing to study parent-child relationships during the young adult years.

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CHAPTER 1

INTRODUCTION AND LITERATURE REVIEW

Parent-child conflict is rooted in the dynamic process of maintaining closeness while developing autonomy as children grow older (Aquilino, 1999; Collins, 1997). Most research on parent-child conflict has focused on early childhood through adolescence (Galambos & Kotylak, 2012; Laursen, Coy, & Collins, 1998;). Yet, as children enter into the young adult years, research on parent-child conflict remains limited. The present research seeks to illuminate parent-child conflict during young adulthood from the perspective of college students. Study 1a examined the content and resolution of parent-child conflict using a mixed-method approach. Study 1b investigated the relationship between qualitative and quantitative measures of parent-child conflict and how these measures of parent-child conflict relate to family functioning, mental health, and physical health. Study 2 explored trajectories of parent-child conflict using quantitative longitudinal data spanning three points of time during college.

Beyond Adolescence: Parent-Child Relationships in Young Adulthood

Adolescence has historically been viewed as a time of “storm and stress” in parent-child relationships as parents and children negotiate the developmental tasks of autonomy and closeness (Arnett, 1999). Early theorists, such as G. Stanley Hall (1904), Sigmund Freud (1905/1962) and Anna Freud (1958, 1968, 1969), specifically characterized adolescence as a time of intense conflict with parents, emotional volatility, and extremes in behavior. However, contemporary researchers have not found strong evidence for the notion that parent-child relationships are consistently turbulent during adolescence (Arnett, 1999; Eccles et al., 1993; Steinberg & Morris, 2001). A meta-

analysis by Laursen, Coy, and Collins (1998), for instance, found the frequency of parent-child conflict increases during early adolescence and declines by late adolescence. Researchers now view parent-child relationships during adolescence as mostly supportive, accepting, and warm (Ackard, Neumark-Sztainer, Story, & Perry, 2006; Rutter, Graham, Chadwick, & Yule, 1986). Although there is greater clarity about parent-child relationships during adolescence, there remains limited knowledge and research on parent-child relationships during young adulthood.

As adolescents make the transition to young adulthood, it is important to continue to examine the role of parents in young adults' lives. However, the focus of research during young adulthood - the developmental period between 18- and 30-years old when most individuals are no longer living with their parents and many are attending college - has generally been on peer and romantic interactions (Arnett, 2000; Collins & van Dulmen, 2006; Galambos & Kotylak, 2012). Although peer and romantic relationships have implications for the emotional well-being of young adults, young adults still rely on their parents for support (Levitt, Silver, & Santos, 2007). Moreover, negative parent-child interactions during young adulthood are a significant source of psychological distress, correlate with risk behavior in young adults, and effect well-being over the lifespan (Jung, 1995; Lee & Liu, 2001; Pillemer, Suitor, Mueller-Johnson, Sechrist, & Heidorn, 2006; Roberts & Bengtson, 1996).

The dynamics of the parent-child relationship change from adolescence to young adulthood in a direction of greater closeness. Aspects of closeness, defined by a sense of intimacy, connectedness, and perceived support, increase during young adulthood (Allen & Hauser, 1996). The process of closeness is fostered by shifting parental expectations

of children and decreasing attempts by parents to control their children's behavior (Aquilino, 1997; Rossi & Rossi, 1990; Tubman & Lerner, 1994). As part of this shift, young adults also have the capacity to influence their parents to a greater extent than in adolescence (Umberson, 1992). During young adulthood, most parents report feeling emotionally close to their children (Aquilino, 1997), and conversely, most young adults report greater intimacy with parents during the young adult period as compared to adolescence (Rice & Mulkeen, 1995). Young adults are also likely to report a stronger sense of obligation toward their family, particularly those youth coming from recent immigrant backgrounds (Fuligni & Pedersen, 2002). Yet one of the major developmental tasks of young adulthood is to concurrently individuate from parents through the process of gaining autonomy.

The process of gaining autonomy is multifaceted and involves varying cognitive, emotional, and behavioral components. Young adults begin thinking, feeling, and behaving autonomously by developing a sense of self-reliance and control over their life, making decisions without relying on others, gaining a sense of identity separate from their parents, making independent decisions about life choices, and regulating their own behavior (Frank, Avery, & Laman, 1988; Kenyon & Koerner, 2009; Sessa & Steinberg, 1991; Wray-Lake, Crouter, & McHale, 2010). Educational pursuits, identity formation, and participation in romantic relationships are all part of the autonomy-gaining process and reflect the progression to more adult-like roles. With these transitions, the nature of the parent-child relationship changes as young adults gain a sense of identity as separate individuals and renegotiate their roles as "children."

Central in this autonomy-gaining process, young adults begin to solidify their own value system rather than rely on the values of their parents as they transition out of the household (Knafo & Schwartz, 2004). Values play an important role in the process of gaining autonomy and are crucial to the development of identity and personhood (Hitlin & Piliavin, 2004). In particular, they influence individual motivation and aspects of behavioral change (Hitlin & Piliavin, 2004). As cited by Arnett (2000), Perry (1970/1999) found that young adults who attend college tend to undergo transformations in which their values change from that of their parents. Changes in young adult values may have significant implications for parent-child relationships. Understanding value disagreements between parents and young adults gives us some indication of how parents and children renegotiate the roles in their relationship. Notably, shifts in values may result in changes in parent-child conflict, an important aspect of the parent-child relationship.

Parent-Child Conflict in Young Adulthood

Parent-child conflict, defined as an interactional pattern characterized by mutual disagreement, is a salient issue for young adults (Aquilino, 1999). Yet, we know little about parent-child conflict during young adulthood (Arnett, 2006; Galambos & Kotylak, 2012). There are many possible reasons for the limited research. First, researchers tend to view parent-child conflict during young adulthood as relatively unimportant compared to parent-child conflict during adolescence (Clarke, Preston, Raksin, & Bengtson, 1999). Instead, most researchers have focused on early adolescence where the frequency of conflict is the highest (Laursen et al., 1998). Second, lay notions of development assume full-fledged autonomy and independence occur at 18 years of age. Parents are viewed as

having little to no influence beyond this point (Feldman & Quatman, 1988). As such, less attention has been paid to later parent-child dynamics. Furthermore, most research on parent-child conflict uses quantitative measures that examine the frequency, duration, or intensity of conflict (Clarke, Preston, Raksin, & Bengtson, 1999). However, the use of quantitative measures alone does not elucidate how the content of conflict changes during young adulthood, how these topics affect the quality of relationships, and how the resolution status of conflict impacts parent-child relationships and young adults' well-being.

Research suggests that parent-child conflict after adolescence continues to play an important role in young adults' lives. For example, when individuals reflect on salient relationship memories, parental conflict during young adulthood is a common theme (McLean & Thorne, 2003). Additionally, when participants in the McLean and Thorne study recalled stories of parent-child conflict, they were more likely to engage in self-reflection or meaning-making highlighting the significance of these events for well-being. In young adulthood, parent-child conflict also still contributes to negative psychological well-being and poorer academic performance (Anderson & Yuenger, 1987; Archer & Lamnin, 1985; Bahrassa, Syed, Su, & Lee, 2011; Hannum & Dvorak, 2004; Lee & Liu, 2001). Though these studies are helpful for understanding the importance of parent-child conflict during young adulthood, a closer focus on the content and resolution of parent-child conflict during young adulthood is necessary.

The content of conflict during young adulthood. From the extant research available, the content of parent-child conflict evolves from adolescence to young adulthood. For example, parent-child conflict during adolescence is typically limited to

mundane family issues such as completing homework, doing household chores, fighting with siblings, or arguing about appearance (Ellis-Schwabe & Thornburg, 1986; Galambos & Almeida, 1992; Smetana, 1989). As adolescents transition to young adulthood, the manifestation of conflict often changes to reflect more salient value differences. In a qualitative study with older adults (average age = 39) and their parents (Clarke et al., 1999), six themes of current parent-child conflict were found: communication/interaction styles, habits/lifestyle choices, child-rearing practices/values, work habits and orientation, politics/religion/ideology, and household standards/maintenance. Moreover, value disagreements around lifestyle choices and/or religious beliefs are commonly seen between adult children and their parents (Suitor & Pillemer, 1988; Zhang, 2004). These changes in the content of parent-child conflict suggest the importance of further study during young adult years.

Only one study known to this author qualitatively examined the content of parent-child conflict in young adult college students (Renk et al., 2006). Using a sample of 273 college students between the ages of 18 and 22, this study detailed participants' experiences of the four most common topics of conflict with their mothers and fathers. Conflict around material possessions, independence, peer issues, and values were identified as the most frequent topics of parent-child conflict. However, the methodology used to categorize the topics of conflict was limited. The coding categories used in this study were based on a prior scheme developed using adolescent samples. Responses were categorized into these adolescent themes, thus potentially missing the unique topics of conflict for young adults. Additionally, the categories of conflict were not clearly distinguishable from one another. For example, it was unclear how "separation-

individuation” responses were differentiated from those coded in the “independence” category.

Previous literature has identified other topics of conflict involving financial support, romantic relationships, and education/career choices. Given that students often rely on their parents for financial support during the transition to adulthood, finances may be a significant source of parent-child conflict (Aquilino, 2005). As discussed in Galambos and Kotylak (2012), the amount of responsibility for finances progressively increases during young adulthood and can be conceptualized as part of the autonomy-gaining process. Negotiating this change has the potential to invite disagreements between parents and young adults particularly when their values around finances clash. A similar process of taking on greater responsibility and complexity in romantic relationships is also established in the young adult years (Arnett, 2006; Galambos & Kotylak, 2012). Chung (2001) found that decisions around dating and marriage practices were important for understanding parent-child conflict for late adolescents and young adults. This study also identified disagreements involving education and career concerns as a significant source of parent-child conflict. This is consistent with research in college counseling settings identifying parental expectations regarding education and career choices as common sources of student distress (Archer & Lamnin, 1985). Along with understanding the different topics of conflict, it is also important to consider how parents and children navigate the resolution of disagreements during young adulthood.

Conflict resolution as it relates to parent-child conflict. Parent-child conflict resolution – defined as the ability to resolve disagreements with parents – has implications for children’s well-being. It has been studied mostly in adolescent samples

and the findings suggest, when parents and children resolve conflict, it leads to better mental health outcomes for children. For example, effective conflict resolution is associated with lower levels of depression (Tucker, Mchale, & Crouter, 2003), reduced anxiety (Wijsbroek, Hale, van Doorn, Raaijmakers, & Meeus, 2010), and better adjustment (Branje, van Doorn, van der Valk, & Meeus, 2009) in adolescent samples.

In young adult samples, research suggests that conflict resolution behaviors, learned through family interactions, can have global implications for children well into adulthood (Repetti, Taylor, & Seeman, 2002). Unfortunately, most of the existing research for young adults focuses on conflict resolution in peer or romantic relationships rather than with parents. However, within this literature, there is some research linking parent-child conflict resolution behaviors to outcomes with young adults' romantic partners. Reese-Weber and Bartle-Haring (1998) found that young adults' ability to resolve conflict with their parents directly related to their ability to resolve conflict in romantic relationships. Moreover, young adults' family communication patterns correlated with styles of communication in romantic relationships (Koerner & Fitzpatrick, 2002). These studies demonstrate the continuing influence of parent-child conflict resolution for young adults.

As children mature into young adulthood, evidence suggests they develop more effective communication skills. Laursen, Finkelstein, and Betts (2001) found that young adults are more likely than adolescents to use negotiation strategies and less likely to use coercion in attempting to resolve conflict. Young adults were also more likely to use open communication styles which lead to less conflict and better adjustment in college student samples (Orrego & Rodriguez, 2001). However, more research is needed to

understand parent-child conflict resolution for young adults and how it continues to relate to family functioning and well-being.

Individual differences as sources of diversity in parent-child conflict. There is some evidence that individual differences may influence parent-child conflict. In terms of child gender, past research generally suggests no gender differences in parent-child conflict (Hannum & Dvorak, 2004; Lee, Choe, Kim, & Ngo, 2000; Renk et al., 2006). Similarly, there are no gender differences on other relationship variables (e.g., parental warmth, attachment, agreement) between parents and their college-aged children (Chung, Chen, Greenberger, & Heckhausen, 2009; Kenny, 1987; Morton & Markey, 2006). In retrospective accounts about changes in relationships with parents from adolescence to young adulthood, no gender differences in perceptions of change were found (Lefkowitz, 2005). I was only able to identify one study that found gender differences in parent-child conflict during young adulthood on a dating and marriage subscale in Asian American college samples, such that men reported less conflict than women (Chung, 2001). However, using adolescent samples gender differences are demonstrated in family relationships and adolescent outcomes (Gutman & Eccles, 2007). Additionally, gender differences are found in styles of conflict resolution for men and women (Holt & DeVore, 2005). Further research is needed to understand the association of gender with parent-child conflict.

In terms of race, there is limited research comparing differences in the content and resolution of parent-child conflict. Most research on conflict with parents during college has been examined in White samples (Aquilino, 1997; Lefkowitz, 2005; Rice & Mulkeen, 1995; Rossi & Rossi, 1990; Thornton, Orbuch, & Axxin, 1995). The

comparative research that does exist focuses on group differences in the frequency of conflict and has demonstrated that there are differences between White, Asian American, and Hispanic students and even within Asian American ethnic groups (Lee, Choe, Kim, & Ngo, 2000; Lee & Liu, 2001). Casting a wider view, group differences on other parent-child relationship variables (e.g., cohesion, warmth, acceptance) exist between racial groups (Greenberger & Chen, 1996; Jackson, Treiber, Turner, Davis, & Strong, 1999). Additionally, race differences in expectations of becoming an adult, perceptions of family support, and outcomes related to psychological well-being are found (Arnett, 2003; Chung et al., 2009). In one study sampling 14- to 22-year olds, race differences in conflict resolution were found such that non-White participants tended to comply with their parents more so than White participants (Phinney, Kim-Jo, Osorio, & Vilhjalmsdottir, 2005). More research is needed to compare racial groups on the content and resolution of parent-child conflict.

Turning to other individual differences variables, generation status may explain some of the race differences found in parent-child conflict. Literature detailing the experiences of parent-child conflict in immigrant families suggests that differences in values (i.e., acculturative conflict) between immigrant parents and their U.S.-raised children are a source of conflict (Juang, Syed, & Takagi, 2007; Lee & Liu, 2001; Portes & Rumbaut, 2001). Indeed, acculturative parent-child conflict is uniquely predictive of mental health and well-being over and above normative parent-child conflict (e.g., chores, schoolwork, money; Juang, Syed, Cookston, Wang, & Kim, 2012). This suggests the autonomy-gaining process particularly as it relates to parent-child conflict may be different for students with immigrant parents. In all, it is hard to be certain about the

confounding influence of race and generation status on parent-child relationships during young adulthood and more research is needed.

Past research on age differences in parent-child conflict generally suggests improvement in relationships from the adolescent to young adult years. For instance, intimacy between parents and children increases over time (assessed at ages 13, 17, & 21; Rice & Mulkeen, 1995), suggesting that conflict may decrease over this period. Additionally, in a sample of young adults, parent-child reports suggest improvement in relationships from ages 18 to 23 (Thornton et al., 1995). In retrospective accounts about changes in relationships with parents from adolescence to young adulthood (18 to 24), age had a small but significant influence ($B = -.09, p < .01$) on reports of conflict (Lefkowitz, 2005). And in a longitudinal study done with 133 middle-class, all White, mostly Jewish children, researchers found earlier relationship qualities had a weakening influence on adjustment in young adulthood (Tubman & Lerner, 1994). In terms of conflict resolution, there is some evidence to suggest that young adults begin developing more effective ways of resolving conflict than adolescents (Reese-Weber, 2000), however more research is needed to understand how the content and resolution of parent-child conflict may differ for younger versus older young adults.

Parent-child conflict and conflict resolution in relation to well-being and family variables. As already discussed, problems and conflict with parents cause student distress (Anderson & Yuenger, 1987; Archer & Lamnin, 1985) and are associated with negative outcomes from the perspective of young adults (Jung, 1995; Lee & Liu, 2001; Pillemer et al., 2006). More specifically, parent-child conflict during young adulthood has been associated with psychological distress and reduced feelings of attachment

toward parents (Hannum & Dvorak, 2004). Parent-child conflict has also been linked to lower perceptions of parental support which in turn lead to a higher likelihood of reported depressive symptoms in adolescent samples (Sheeber, Hops, Alpert, Davis, & Andrews, 1997; Shek, 1998). Additionally, conflict resolution has implications for relationship satisfaction for parents and children and also influences well-being (Orrego & Rodriguez, 2001; Sillars, Canary, & Tafoya, 2004). However, the delineation of the content and resolution of parent-child conflict and their impact on young adults' well-being and other family variables remains unknown. Given these limitations, more research is necessary to elucidate the content and resolution of parent-child conflict during young adulthood.

Stability and Change in the Frequency of Parent-Child Conflict

In addition to limited research on the content and resolution of parent-child conflict, there is also little research on how parent-child conflict changes during the young adult years. Beyond adolescence, the literature details two lines of thinking about how parent-child conflict changes in frequency as children grow older (Tubman & Lerner, 1994). One hypothesis suggests little to no change based on the idea that relationship patterns will persist into adulthood. Known as the continuity hypothesis, this idea draws from attachment and social learning theories that purport relationships generally remain the same over the course of a lifetime. Both social learning and attachment theories support the notion that the patterns of family communication, closeness, and conflict in relationships among parents and children will persist similarly into young adulthood. Indeed, young adults who retrospectively report higher levels of closeness with parents during adolescence also report higher levels of closeness as adults (Rossi & Rossi, 1990). With a sample of 14- to 20-year olds, elements of family

relationships show high levels of stability ($r = .71$) across a one year period (Sheeber et al., 1997). Moreover, during young adulthood, there is strong continuity and agreement among parents and children regarding relationship quality (Thornton et al., 1995).

The second hypothesis is one of discontinuity, that is, relationships are more likely to change in the face of life transitions, changing parental expectations, and in the process of striving for autonomy (Collins & Russell, 1991; Grotevant & Cooper, 1986). Indeed, changes in parental expectations can influence the quality and nature of parent-child relationships. Of the few longitudinal studies, O'Connor, Allen, Bell, and Hauser (1996) found little continuity in mother-child relationships as measured by autonomy-relatedness at age 15 and relationship contact and satisfaction at 25 years of age ($r_s = .15$). Adolescents who displayed low levels of relatedness during adolescence reported close contact with their mothers 10 years later. Additionally, studies have consistently found a small to moderate degree of continuity between early parent-child relationship patterns and patterns in young adulthood, suggesting that the earlier effects attenuate over time (Aquilino, 2006). From the perspective of parents, national survey data indicate that earlier patterns of interaction account for less than 10% of the variance in the current relationship of parents and young adults (Aquilino, 1997).

Rather than thinking about these two lines of research as contradictory, they can be instead thought of as complementary. For the most part, it seems that parent-child relationships remain stable during young adulthood. However, because of the transitional nature of the young adulthood period and the developmental changes involved, parent-child relationships have an increasing potential to change. For example, men and women maintain different levels of contact with their parents during young adulthood which has

differing long-term implications (Sneed et al., 2006). This illustrates the importance of understanding aspects of both stability and change in parent-child relationships during young adulthood.

Trajectories of parent-child conflict. There is ample evidence that parent-child relationships generally stay the same or improve over the college years and/or young adulthood (Aquilino, 1997; Rice & Mulkeen, 1995; Rossi & Rossi, 1990; Thornton et al., 1995). Qualitative research on parent-child relationships during college suggests that most students report no change or positive changes in their relationship quality with parents (Lefkowitz, 2005). Additionally, parents who report more conflict in parent-child relationships when children are teens (12 to 18) are also more likely to report conflict when children are young adults (18 to 24; Aquilino, 1997). Furthermore, college attendance influences later reports of conflict such that parents' whose children are enrolled in college report less parent-child conflict than those who are not enrolled (Aquilino, 1997).

However, there is evidence of deterioration in parent-child relationships during young adulthood. In qualitative research, some students (2-9%) describe arguing more and feeling less close to their parents (Lefkowitz, 2005). Marshall and colleagues demonstrated that over a three-year period, university students were more likely to believe that they mattered less to their mothers (Marshall, Liu, Wu, Berzonsky, & Adams, 2010). To the extent that perceptions of mattering reflect a dimension of the parent-child relationship, this finding suggests possible deterioration of the quality of the parent-child relationship.

Methodological Considerations in Parent-Child Conflict

Mixed-method approaches to studying parent-child conflict. A central problem of existing research is that it almost exclusively relies on self-report survey data to understand parent-child conflict during young adulthood. The close-ended approach in quantitative methodology can be useful for capturing objective, baseline measurements for large groups of individuals. However, quantitative approaches can also be limited in their ability to capture greater context and meaning of phenomena like parent-child conflict. A mixed-method approach can build on the strengths of qualitative and quantitative methods to form a more comprehensive picture of parent-child conflict during young adulthood.

The process of mixed-method research involves incorporating both qualitative and quantitative information to generalize from a sample to a population and gain a deeper understanding of phenomena of interest (Hanson, Creswell, Plano Clark, Petska, & Creswell, 2005). Using multiple methods in a single research design can help utilize the strengths of qualitative and quantitative research. One method can be used to elaborate on the results of the other method in a complementary fashion rather than thinking of the two methodologies as incompatible (Hanson et al., 2005). As Hanson and colleagues (2005) discuss, mixed-method approaches can help with better understanding a research question by integrating consistent information from qualitative and quantitative methods, identifying new variables of interest through different methods, using quantitative approaches to identify groups or variables and then expanding on the research with qualitative approaches, and promoting the understanding of marginalized or unrepresented groups.

Mixed-method approaches can be particularly useful in studying phenomena such as the content and resolution of parent-child conflict in young adulthood. Given that there is limited research on parent-child conflict during young adulthood, qualitative methods can further our understanding of the content and resolution of conflict in the parent-child relationship. Additionally, integrating quantitative information with qualitative information on parent-child conflict can allow one to look at a variety of different outcomes and broaden our understanding of how parent-child conflict manifests itself in young adulthood. The purpose of Study 1 is to integrate qualitative and quantitative information to help broaden our understanding of parent-child conflict during young adulthood.

Person-centered approaches to studying parent-child conflict. Along with reliance on quantitative methodology, existing research also has largely used variable-centered approaches to study parent-child conflict. Variable-centered approaches are used when the focus of research is exploring relationships among variables (Muthén & Muthén, 2000). This can be helpful for understanding how different variables relate to outcomes. However, many research questions seek to explore relationships among individuals. Known as person-centered approaches, the goal is to “classify individuals into distinct groups or categories based on individual response patterns so that individuals within a group are more similar than individuals between groups” (Jung & Wickrama, 2008, p. 303). The person-centered approach is helpful for understanding how individuals change over time and the latent groups or classes of individuals within a sample (Wang & Bodner, 2007). The purpose of Study 2 is to examine different growth trajectories of parent-child conflict over the college years and to understand how different

demographic variables may be related to aspects of stability and change in parent-child conflict.

Present Study

Using a two-study design, the purpose of the present study was to understand the role of parent-child conflict using different methodological approaches to capture the process and change of parent-child relationships during college. For Study 1, I used a mixed-method approach to understanding the content and resolution of parent-child conflict reported from the perspective of students in their relationship with their parents. I investigated the following questions: 1) What kinds of conflict with parents are reported by college students and what is the resolution status of the stated conflict? (Study 1a), 2) Are there gender, race, or age differences in the content and resolution of conflict during young adulthood? (Study 1a), 3) How do the content and resolution of conflict relate to mental and physical health outcomes, perceived family support, and frequency of conflict? (Study 1a), and 4) What is the relationship between qualitative and quantitative measures of parent-child value conflict? (Study 1b). For Study 2, I sought to investigate trajectories of parent-child conflict using quantitative longitudinal data spanning three time points during college. I explored the following questions: 1) Does the frequency of conflict with parents change during college? Are there between-group differences, and if so, how many growth trajectories are represented in the sample? 2) Are age, gender, race, or generation status associated with different trajectories of parent-child conflict?

CHAPTER 2

STUDY 1A

In Study 1a, I qualitatively examined the types of conflict and the resolution of conflict in parent-child relationships during the college years. I specifically sought to investigate the following questions:

1. What kinds of conflict with parents are reported by college students and what is the resolution status of the stated conflict?

In order to investigate this question, I analyzed qualitatively coded student responses to an open-ended question of college students' reports of value differences with their parents and, if reported, the resolution of conflict (i.e., whether the conflict was resolved or unresolved). Previous literature has identified topics of conflict involving habits and lifestyle choices, financial support, educational choices, and romantic relationships in young adults' interactions with their parents (Aquilino, 2005, Arnett, 2006; Chung, 2001; Galambos & Kotylak, 2012; Renk et al., 2006). However, given the exploratory purpose and the qualitative nature of the research, I did not make any specific hypotheses about the content of conflict that college students experience with their parents or if they resolved that stated conflict.

2. Are there gender, race, or age differences in the content and resolution of conflict during young adulthood?

As reviewed before, individual characteristics are sources of diversity in parent-child conflict. For the most part, past research suggests little to no gender differences in parent-child conflict; however, it is still important to still

empirically test for gender differences. I hypothesized that there would be no significant gender differences in the content or resolution of conflict. In regards to race differences, we know little about how race is related to the content and resolution of parent-child conflict, so no specific hypotheses were made in regards to the content and resolution of parent-child value conflict. Past research on age differences in parent-child conflict generally suggests improvement in relationships from the adolescence to young adulthood. However, we do not know how the content and resolution of this conflict differs for younger versus older young adults. Therefore, in this study, I explored group differences across age by the types of conflict.

3. How do the content and resolution of conflict relate to mental and physical health outcomes, perceived family support, and frequency of conflict?

Given the limitations of the existing research detailing the content of parent-child conflict during young adulthood, it is not known if the content of conflict will relate differentially to mental and physical health outcomes, perceived family support, and frequency of conflict. Conflict with parents causes distress in young adulthood, however, the delineation of content of conflict and its relation to distress remains unknown. Using mixed-methods, I approached the question of how parent-child conflict related to mental and physical health outcomes in an exploratory way and made no specific hypotheses.

The existing research on resolution of conflict suggests that those individuals who are able to resolve conflict have better mental health outcomes. I hypothesized that students who reported resolved conflict will report better mental

and physical health, greater family support, and lower frequency of conflict than those who reported unresolved conflict.

Method

Participants

Sample. Data from 878 undergraduate students (611 women, 267 men) between the ages of 17 and 30 ($M = 20.6$, $SD = 2.0$) were included as participants in the study.

See Figure 1 for a flowchart of the sample. Class standings included 346 first-year, 223 second-year, 156 third-year, 116 fourth-year, and 37 above fourth-year students.

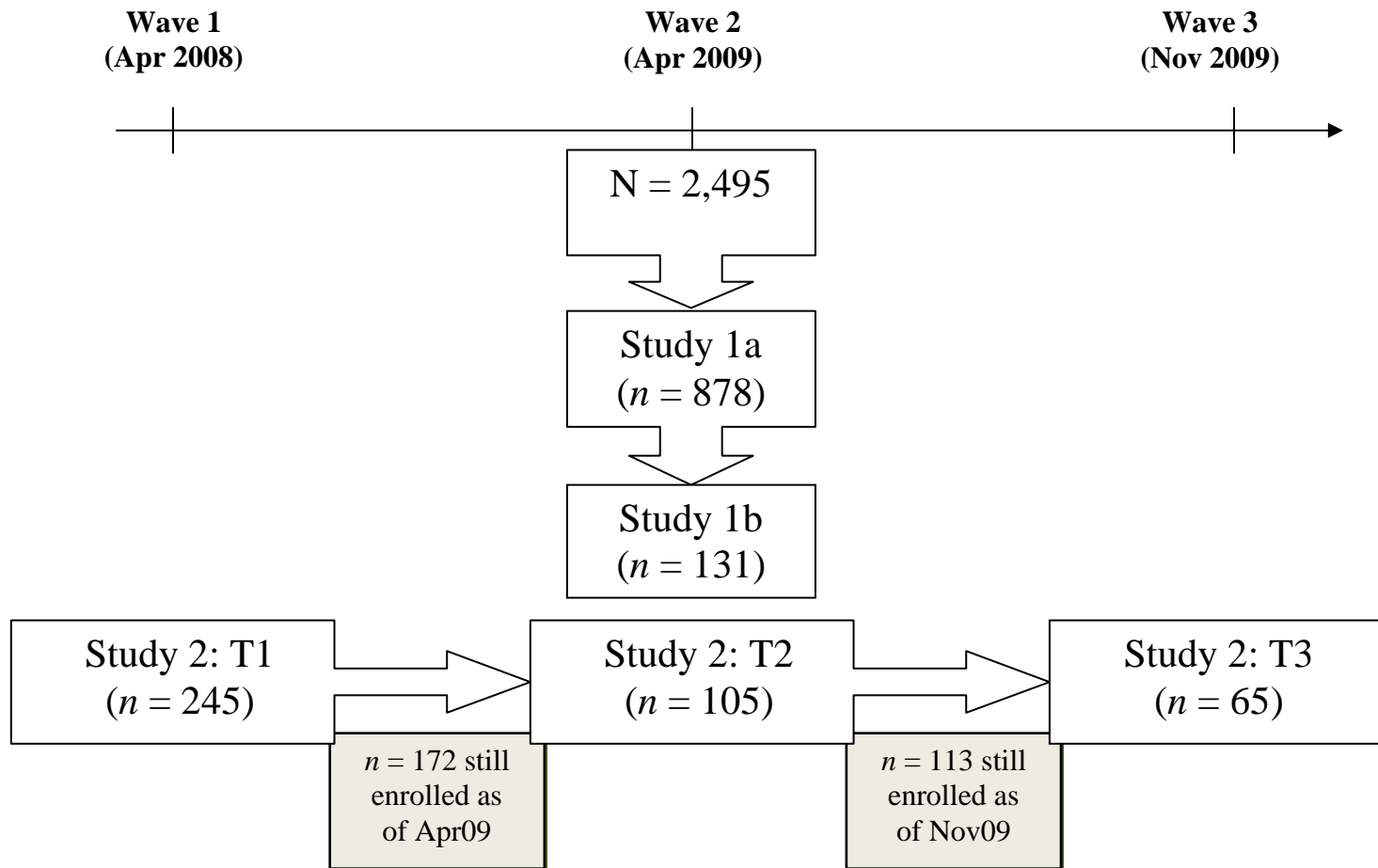
Participants' racial background was analyzed from information gathered by the university and included 75 Asian American, 26 Black, 24 Chicano/Mexican/Hispanic, 5 Native American, and 721 White students. Twenty-seven students were missing racial information and classified in the non-specified category.

Procedures

Participants were drawn from a larger multi-year study assessing student satisfaction, retention, and graduation of undergraduates enrolled in the College of Liberal Arts (CLA) at a large, public Midwestern university. Students who were non-degree seeking, had previous degrees, or no identifiable term of admission were not invited to participate in the study. All other students ($N = 12,567$) enrolled in the CLA were invited to fill out the online *CLA Experience Survey* during course registration that took place in April 2009. Two email reminders were sent out over the course of data collection and approximately 20% of invited students filled out the survey. Of the students who consented ($N = 2,571$) to participate in the survey, only those students who fell within the 17- to 30-age range were included in the study ($N = 2,495$).

Figure 1

Flow chart of study samples



Students who participated were entered into a raffle to win one of 100 \$7 gift cards or one of two \$50 gift certificates to the student bookstore as incentives to participate.

From the sample of 2,495 students, a subset ($N = 1,617$) did not directly or clearly answer the prompt and were excluded from the data analysis. These students did not report enough information about parent-child conflict on qualitative and quantitative measures of parent-child conflict. More specifically, students who did not provide any information about parent-child conflict on the qualitative prompt and reported a frequency of conflict at '*Once in a while*' levels or above (see below) were excluded. The final sample ($N = 878$) was used in all subsequent analyses.

Measures

Frequency of Conflict. Participants read the following statement: "For the following questions, think of situations in which differences in values occurred between you and your parent(s)/guardian(s)." They were then asked to rate the frequency of conflict by responding to the following item: "How often do you experience these types of family situations with your parent(s)/guardian(s)?" A 5-point scale (1 = *Almost never*, 2 = *Once in a while*, 3 = *Sometimes*, 4 = *Often*, 5 = *Always*) was used to assess frequency of conflict.

Types and Resolution of Conflict. After the above question, participants had the choice to respond to the following prompt: "Describe a situation in which differences in values occurred between you and your parent(s). Be sure to mention who was involved, what values were different, and how the situation ended." The coding team was composed of the current author and two undergraduate research assistants. Additionally,

coding questions were brought to a lab of graduate students/researchers when discrepancies were not resolved by the coding team. We used the thematic analysis method to code the data (Braun & Clarke, 2006). Thematic analysis is a qualitative method for identifying, analyzing, and reporting themes within a dataset. It is comprised of six steps which can be conducted in an iterative process and were done for both types of conflict and resolution of conflict separately.

The first step, *familiarizing yourself with the data*, involved reading and re-reading participants' responses. Second, the coding team *generated initial codes* using a randomly selected subset of 20% of the participants' responses. After examination of the initial codes or categories, themes were generated during the third step, *searching for themes*. The themes that were found were largely data-driven although past research around likely topics of conflict also influenced generation of the themes (Kenyon & Koerner, 2009; Morton & Markey, 2006; Renk et al., 2006). The fourth step, *reviewing the themes*, involved refining the themes and checking to make sure there were enough data to support the themes. During this step, the 11 initial codes for types of conflict were collapsed into four themes described below. For resolution of conflict, the 5 initial codes were collapsed into four themes described below. Fifth, the coding team *defined and named the themes* by refining the specifics of each theme and generating clear definitions and names for the themes. The last step involved *producing the report* which involves reporting the themes and describing examples in the results section. Throughout the coding process, the coding team was blind to participant demographics and other

student characteristics. During weekly meetings, any disagreements in coding were resolved by group consensus.

For types of conflict, categories and themes were mutually exclusive and interrater reliability between the two undergraduate research assistants was high ($\kappa = .87$) for the complete dataset. The four themes are: 1) *Social Issues*, which involved responses that captured conflict around differing political or religious beliefs and/or social values, 2) *Future Success*, which involved responses that captured conflict stemming from differing financial priorities and academic decisions, 3) *Lifestyle*, which involved conflict that captured different beliefs about how students' live their everyday lives, including issues involving substance use and romantic relationships, 4) *No Conflict*, which included responses who did not directly or clearly answer the prompt and endorsed the '1 = *Almost never*' response option on the frequency of conflict measure described above. A more detailed description and examples are provided in the results section.

For resolution of conflict, categories were mutually exclusive and interrater reliability between the two undergraduate research assistants was high ($\kappa = .86$) for the complete dataset. The four themes are: 1) *Resolved*, which involved responses that stated the student and parent(s) who were involved in the conflict found some type of resolution which resulted in the ending of the conflict, 2) *Unresolved*, which involved responses that the conflict is ongoing and no solution has been reached, including responses in which the student states or implies that they are ignoring or avoiding the conflict, 3) *Unknown*, which involved responses that did not identify conflict or did not answer the prompt appropriately, 4) *Not Specified*, which involved responses that did not specifically state

the resolution of the conflict even though they identified a type of conflict in their response. A more detailed description and examples are provided in the results section.

Multidimensional Scale of Perceived Social Support – family items (MSPSS-family; Zimet, Dahlem, Zimet, & Farley, 1988). The MSPSS-family is a 4-item measure of perceived family support from the perspective of the participant. Sample items include, “I get the emotional help and support I need from my family,” and “My family really tries to help me.” Items are rated on a 5-point scale according to the level of agreement (1 = *Strongly disagree*, 2 = *Somewhat disagree*, 3 = *Neutral*, 4 = *Somewhat agree*, 5 = *Strongly agree*). The MSPSS has been used in diverse young adult populations and scores have demonstrated good internal reliability and discriminant validity (Canty-Mitchell & Zimet, 2000; Dahlem, Zimet, & Walker, 1991). For this sample, the internal reliability of scores from the 4-item family scale was $\alpha = .91$.

Past month mental health. Participants were asked to respond to the following prompt, “How would you rate your emotional health in the past month?” A 5-point scale (1 = *Poor*, 2 = *Fair*, 3 = *Average*, 4 = *Good*, 5 = *Excellent*) was used to assess past month mental health.

Past month physical health. Participants were asked to respond to the following prompt, “How would you rate your physical health in the past month?” A 5-point scale (1 = *Poor*, 2 = *Fair*, 3 = *Average*, 4 = *Good*, 5 = *Excellent*) was used to assess past month physical health.

Results

Consistent with mixed-method approaches (Hanson et al., 2005), I integrated qualitative and quantitative information in the below sections to provide a holistic understanding of the information reported by participants about the content and resolution of parent-child conflict and how these relate to family functioning and mental and physical health outcomes.

Themes of Value Conflict

Four themes emerged in terms of the types of value conflict with parents. Table 1 details the sample sizes and relative percentages of participants in each theme. The four qualitative themes are summarized below and individual responses are included to illustrate each theme.

Table 1

Sample size and relative percentages for types of value conflict (N = 878)

Themes	<i>n</i>	%	Sub-themes	<i>n</i>	% within theme
<i>Social Issues</i>	90	10%	<i>Political/Social Beliefs</i>	57	63%
			<i>Religious Values</i>	33	37%
<i>Future Success</i>	135	15%	<i>Financial Priorities</i>	36	27%
			<i>Academic-related decisions</i>	99	73%
<i>Lifestyle</i>	96	11%	<i>Substance use</i>	7	7%
			<i>Romantic Relationships</i>	16	17%
			<i>Life Choices</i>	73	76%
<i>No Conflict</i>	557	64%	<i>Did not directly/clearly answer the qualitative prompt & reported 'Almost never' frequency of conflict</i>		

Social Issues. Ninety students (10%) reported conflict with their parents around social issues. These responses captured conflict around differing political and social beliefs ($n = 57$) or religious values ($n = 33$). For example, a 21-year old White woman in her senior year of college stated, “I developed much more liberal, social, and political values than my parents. The first few years my mom and I would argue about them nearly every time I came home to visit.” Many students reported how these types of conflict impact their conversations with parents. This was well-illustrated by a 20-year old White woman in her sophomore year of college:

My dad and I bump heads a lot about politics. He is very conservative, and I am more moderate on certain issues. Especially concerning global climate change, my dad is very resistant to its existence, and this has caused some tense conversations resulting in some elevated voice levels and a change in mood for the worse.

In terms of religious values, a 20-year old White woman in her junior year of college stated, “My mother is very unhappy that I have chosen not to share her religious beliefs anymore. We still disagree and get into fights regularly about this issue.” Included in the political and social beliefs category were responses that discuss different values around sexual orientation ($n = 9$), with some respondents explicitly mentioning their sexuality (e.g., an 18-year old White man in his first year of college stated, “I’m gay, they weren’t a fan of that, now we don’t talk about it.”) In another example, a 20-year old White woman in her sophomore year of college stated, “I’m a bisexual and my parents are very conservative. This has caused some fights, but we’re coming to a common ground.”

These responses were coded in this category as it is consistent with the current societal debate around gay rights and research suggesting sexual orientation views are interwoven with political and religious values (Haider-Markel & Meier, 1996).

Future Success. One-hundred thirty-five students (15%) reported conflict with their parents around future success. This was the largest group in the coded responses. These responses captured conflict around differing ideas about financial priorities ($n = 36$) and academic-related decisions ($n = 99$). Financial concerns around paying for school were a major issue as one 22-year old White man in his freshman year illustrated:

...There have been many times in my college career where I have needed financial support in order to pay tuition. Initially out of high school, I was enrolled at Portland State University when 2 weeks before I left [for college] I was notified that a \$20,000 loan was denied. Although my father has more than enough money to help me get the tuition paid, he wouldn't lend me the money which resulted in me not attending school right out of school.

Many students identified having conflict with their parents around choice of major. For example, a 23-year old African American man in his fifth year of college stated:

At one time, both my mom and dad wanted me to pursue a career in the medical field, like I had chosen to in the beginning, but I had switched my major to psychology and they didn't really like that. They wanted me to go into the medical field where the earning potential was higher than the psychology field. We resolved the situation by me agreeing to see how the psychology major goes and if that doesn't work then we can further discuss another career track.

Additionally, a 21-year old White man in his junior year of college illustrated how conflict around choosing a major can impact his personal growth:

Choosing my major was a huge clash of values between myself and my dad. He really wanted me to go into business because it's a career that you can basically be guaranteed a living and be able to take care of yourself in, but I really wanted (and am) going into political science and philosophy because I have more of an eye toward self-fulfillment and doing something that I love to do and that uses my gifts/talents to benefit the world. There was about one year where things were really tense between myself and my dad, and he still doesn't totally agree with my decision, but has come to accept it. This was one situation that has really been a large part of my personal growth in the last handful of years.

Students also expressed disagreements about future job opportunities. An 18-year old White man in his first year of college stated, "My mother wants me to pursue money while I want to pursue enjoyment (and also relevant job experience)," while a 18-year old Asian American woman in her first year of college stated, "They want me to go into med school, but I don't think my heart is set on it."

Lifestyle. Ninety-six students (11%) reported conflict with their parents around lifestyle choices. These responses captured conflict around differing ideas about how students' make everyday choices in their lives. This theme included responses that discussed substance use ($n = 7$), romantic relationships ($n = 16$), and life choices (e.g., utilization of time, involvement in social organizations, choice of friends; $n = 73$). In terms of substance use, a 19-year old White woman in her freshman year of college

stated, “My parents are very conservative and think drinking is horrible. So when they ask me if I drink I feel like I have to say no, even though I believe once you are in college it's not a big deal. So I told them I drink occasionally, and they are still mad about it but can't stop me.” In an example that illustrated differences in values about romantic relationships, a 18-year old White woman in her first year of college stated, “My parents don't really see eye to eye on relationships in young adulthood. My parents tend to still view me as someone in high school or something and I don't always feel like they fully trust me about things related to that.” Many times, students reported more than one lifestyle choice that engendered conflict with parents. For example, a 19-year old White woman in her first year of college stated, “I had a discussion with my parents over spring break and they disagree with my sexual life, my choice of clothes, my choice of religion, my choice of smoking, where I choose to live, and my consumption of alcohol.”

No Conflict. Five-hundred fifty-five students (64%) who did not directly or clearly answer the prompt and endorsed ‘Almost never’ on the frequency of conflict measure were included in this theme. Examples included a 19-year old Asian American man in his first year of college who reported, “My parents and I get along very well, and I keep them up to date with my academic and social life (well to an extent on the latter one!)” and a 28-year old White woman in her first year who indicated, “I am a parent and guardian myself and don't engage in disputes/significant differences with my family at this time in my life.” The responses in this theme were used as a comparison group in subsequent analyses, to determine if this group of students who reported little to no parent-child conflict had any meaningful differences from those themes described above.

Resolution of Conflict

The qualitative analyses presented here focus on the four themes that emerged in terms of the resolution of conflict with parents. Table 2 details sample sizes and relative percentages of participants in each category/theme. The four qualitative themes are summarized below and individual responses are included to illustrate each theme.

Table 2

Sample size and relative percentages for resolution of value conflict (N = 878)

Categories	N	% between categories	Themes	n	% within category
<i>Information</i>	259	29%	<i>Resolved</i>	106	41%
			<i>Unresolved</i>	153	59%
<i>No Information</i>	619	71%	<i>Unknown</i>	557	90%
			<i>Not specified</i>	62	10%

Resolved. One-hundred six students out of the 259 participants (41%) who gave responses (i.e., excluding participants in the *No Information* category) reported some type of resolution of conflict. Responses in which the student and/or parent(s) have decided to “agree to disagree” were coded in this theme. A 22-year old White man in his senior year stated, “My parents weren’t supporting when I chose to study abroad. However, I made the decision and decided to stick by it. I eventually brought them around to my point of view,” and a 19-year old White man in his freshman year stated:

The past few years I have been becoming my own person and developing who I am. The most common issues I have now with my parents is the fact that they have a hard time letting go. They try to "keep me under their wing" and I can no

longer do that for them. Things like what I am doing when I come home on certain weekends or where I go are common disputes. They currently have been able to let go a little more previously because of my persistence on becoming my own person. Arguments about my girlfriend and how much time I spend with her are much less of a concern now and they are understanding that I have the ability to make my own decisions now.

Additionally, responses in which the student decided to change their current behavior to be consistent with the parent's value was also coded in this theme ($n = 18$). For example, a 18-year old White woman in her freshman year stated, "My parents did not want me to come home on weekends so often. I took in their advice and came home less."

Unresolved. One-hundred three students out of the 259 participants (59%) who gave responses (i.e., excluding participants in the *No Information* category) reported that the conflict is ongoing and no solution has been reached. Responses which stated or implied the student was ignoring or avoiding the conflict were coded in this category. For example, a 20-year old White woman in her sophomore year of college stated, "When applying for the National Student exchange, my family told me it would be too expensive. I valued the experiences so I applied anyway and now I'm going to Hawaii without their help," and a 22-year old White man in his senior year stated, "My parents think that the earth is flat because it says so in the bible, but I think the earth is spherical. It is hard to get past this."

Not Specified. Sixty-two students out of 619 participants (10%) coded in the *No Information* category did not specifically state the resolution of the conflict even though

they identified a type of conflict in their response. The responses in this theme were used as a comparison group in subsequent analyses, to determine if this group of students had any meaningful differences from the other themes that are described above.

Unknown. Five-hundred fifty-seven students out of the 619 participants (90%) coded in the *No information* category left the response option blank or did not answer the prompt appropriately. These students did not provide any information about parent-child conflict. The responses in this theme were used as a comparison group in subsequent analyses, to determine if this group of students had any meaningful differences from the other themes.

Age, Gender, or Race Differences

I performed one-way ANOVAs with Bonferroni corrected post-hoc tests to test for group differences between the four themes of conflict (i.e., *Social Issues*, *Future Success*, *Lifestyle*, *No Conflict*) by age. Table 3 provides a summary of these results. Given the likelihood of finding significance with large samples, effect sizes were calculated using partial eta-squared (η_p^2) and Cohen's d^1 . Significant group differences were found by age ($F = 3.15$, $p < .05$, $\eta_p^2 = .01$). Specifically, students who reported *Social Issues* conflict were older ($M = 21.12$ vs. 20.24 , $d = .44$) than students who reported *Lifestyle* conflict.

I also performed Chi-square (χ^2) analyses to test group differences on gender and race by the four themes of conflict. Adjusted standardized residuals (ASR) were calculated when significant group differences were found in order to examine specifically how the groups differed. No significant group differences by gender were found between

¹ Interpretation of effect sizes for Cohen's d : small ($d = .2$), medium ($d = .5$), & large ($d = .8$)

the four themes of conflict. To test group differences by race, the sample was divided into Whites ($n = 721$), Asian Americans ($n = 75$), and Other ($n = 82$). Significant group differences were found, $\chi^2(6) = 14.3, p < .05$. Asian Americans were less likely than expected (ASR = -2.7, <1% of total Asian American sample) while Whites were more likely than expected (ASR = 2.4, 11% of White sample) to report *Social Issues* conflict.

One-way ANOVAs with Bonferroni corrected post-hoc tests were performed to test for group differences by age with the four themes (i.e., *Resolved, Unresolved, Not Specified, Unknown*) of resolution of conflict. Additionally, chi-square analyses were performed to test group differences by gender and race. No group differences were found on age, gender, or race with resolution of conflict.

Table 3

Results of chi-square analyses to test group differences by age, gender, and race

	Age	Gender	Race
Types of Conflict	3.15 (3)*	5.67 (3)	14.30 (6)*
Resolution of Conflict	2.41 (3)	1.05 (3)	9.41 (6)

Note. The first number under each column is the F or χ^2 statistic and the number in parentheses is the degrees of freedom. * indicates $p < .05$.

Relationships to Outcome Variables

I performed one-way ANOVAs with Bonferroni corrected post-hoc tests to examine group differences in past month mental health, past month physical health, and perceived family support by qualitatively coded types of conflict. Given the likelihood of finding significance with large samples, effect sizes were calculated using partial eta-squared (η_p^2) and Cohen's d for comparison. Table 4 provides a summary of the results.

Significant group differences were found on past month mental health ($F = 12.10, p < .001, \eta_p^2 = .040$), past month physical health ($F = 5.48, p < .01, \eta_p^2 = .018$), and perceived family support ($F = 17.04, p < .001, \eta_p^2 = .055$). Specifically, students who were coded in the *No Conflict* theme ($M = 3.65$) reported better mental health than students in the *Social Issues* ($M = 3.24, d = .36$), *Future Success* ($M = 3.09, d = .49$), and *Lifestyle* ($M = 3.30, d = .33$) themes. Additionally, students in the *No Conflict* theme reported better physical health than students in the *Future Success* ($M = 3.66$ vs. $3.28, d = .37$). Lastly, students in the *No Conflict* theme ($M = 4.23$) reported more perceived family support than students in the *Social Issues* ($M = 3.85, d = .43$) and *Future Success* ($M = 3.67, d = .59$) themes. Students in the *Lifestyle* theme ($M = 3.98, d = .33$) also reported more perceived family support than students in the *Future Success* theme.

One-way ANOVAs with Bonferroni corrected post-hoc tests were also performed to examine group differences in the frequency of conflict by the *Social Issues*, *Future Success*, and *Lifestyle* themes. The *No Conflict* theme was excluded from this analysis since the frequency of conflict was used to create this theme. No group differences were found on frequency of conflict by the *Social Issues*, *Future Success*, and *Lifestyle* themes.

Table 4

Results from one-way ANOVAs for types of conflict and outcome variables

Outcome Variable	<i>F</i>	<i>p</i>	η_p^2	Group Comparisons	Means	Cohen's <i>d</i>
Mental health	12.10	<.001	.04	1 vs. 2	--	--
				1 vs. 3	--	--
				1 vs. 4	3.2 vs 3.7	.36
				2 vs. 3	--	--
				2 vs. 4	3.1 vs 3.7	.49
				3 vs. 4	3.3 vs 3.7	.33
Physical health	5.48	.001	.02	1 vs. 2	--	--
				1 vs. 3	--	--
				1 vs. 4	--	--
				2 vs. 3	--	--
				2 vs. 4	3.3 vs 3.7	.37
				3 vs. 4	--	--
Perceived Family Support	17.04	<.001	.06	1 vs. 2	--	--
				1 vs. 3	--	--
				1 vs. 4	3.9 vs 4.2	.43
				2 vs. 3	3.7 vs 4.0	.33
				2 vs. 4	3.7 vs 4.2	.59
				3 vs. 4	--	--
Frequency of Conflict	1.19	.305	--	1 vs. 2	--	--
				1 vs. 3	--	--
				2 vs. 3	--	--

Note. 1 = *Social Issues*, 2 = *Future Success*, 3 = *Lifestyle*, 4 = *No Conflict*. Only means that are significantly different from each other at the $p < .05$ level are listed in the table. All measures are on a 1 to 5 pt. scale.

I performed one-way ANOVAs with Bonferroni corrected post-hoc tests to examine group differences in past month mental health, past month physical health, and perceived family support by qualitatively coded resolution of conflict. Table 5 provides a summary of the results. Significant group differences were found on past month mental health ($F = 13.62$, $p < .001$, $\eta_p^2 = .05$), perceived family support ($F = 20.46$, $p < .001$, $\eta_p^2 = .07$). For past month physical health, the overall model was significant ($F = 4.27$, $p < .01$), however, the post-hoc tests did not reveal specific group differences. Compared to

students with *Resolved* conflict, those who reported *Unresolved* conflict resolution had less perceived family support ($M = 3.66$ vs. 4.11 , $d = .48$). Compared to students with *Unknown* conflict resolution, those who reported *Unresolved* conflict resolution had poorer mental health ($M = 3.07$ vs. 3.65 , $d = .51$) and less perceived family support ($M = 3.66$ vs. 4.23 , $d = .59$). Additionally, students with *Not Specified* conflict resolution had poorer mental health ($M = 3.11$ vs. 3.65 , $d = .47$) and less perceived family support ($M = 3.69$ vs. 4.23 , $d = .62$) than the *Unknown* conflict resolution group. Lastly, students with *Resolved* conflict had greater perceived family support ($M = 4.11$ vs. 3.69 , $d = .50$) than students coded in the *Not Specified* conflict resolution group.

One-way ANOVAs with Bonferroni corrected post-hoc tests were also performed to examine group differences in the frequency of conflict by the *Unresolved*, *Resolved*, and *Not Specified* themes. The *Unknown* theme was excluded from this analysis since the frequency of conflict was used to create this theme. Group differences were found ($F = 7.72$, $p < .01$, $\eta_p^2 = .05$) such that students coded in the *Unresolved* theme ($M = 3.02$) reported higher frequency of conflict than students in the *Resolved* ($M = 2.50$, $d = .52$) theme.

Table 5

Results from one-way ANOVAs for resolution of conflict and outcome variables

Outcome Variable	<i>F</i>	<i>p</i>	η_p^2	Group Comparisons	Means	Cohen's <i>d</i>
Mental health	13.62	<.001	.05	1 vs. 2	--	--
				1 vs. 3	--	--
				1 vs. 4	3.1 vs 3.7	.51
				2 vs. 3	--	--
				2 vs. 4	--	--
				3 vs. 4	3.1 vs 3.7	.47
Physical health	4.27	.005	--	1 vs. 2	--	--
				1 vs. 3	--	--
				1 vs. 4	--	--
				2 vs. 3	--	--
				2 vs. 4	--	--
				3 vs. 4	--	--
Perceived Family Support	20.46	<.001	.07	1 vs. 2	3.7 vs 4.1	.48
				1 vs. 3	--	--
				1 vs. 4	3.7 vs 4.2	.59
				2 vs. 3	4.1 vs 3.7	.50
				2 vs. 4	--	--
				3 vs. 4	3.7 vs 4.2	.62
Frequency of Conflict	7.72	.001	.05	1 vs. 2	3.0 vs 2.5	.52
				1 vs. 3	--	--
				2 vs. 3	--	--

Note. 1 = *Unresolved*, 2 = *Resolved*, 3 = *Not Specified*, 4 = *Unknown*. Only means that are significantly different from each other at the $p < .05$ level are listed in the table.

Discussion

In Study 1a, I utilized mixed methodology to understand the content and resolution of parent-child conflict reported from the perspective of students. I also integrated qualitative and quantitative information to better understand how these two aspects of the parent-child relationship relate to outcome measures. The major findings are discussed below for the content and resolution of conflict.

The Content of Conflict and its Impact on Students

Qualitative responses were coded using thematic analysis to organize the content of parent-child conflict during young adulthood. I identified four qualitative themes: *Future Success*, *Lifestyle*, *Social Issues*, and *No Conflict*. The *No Conflict* group was the largest theme and was composed of students who left the prompt blank while also endorsing the lowest frequency of conflict. Students in the *No Conflict* theme reported better mental health than those in each of the other themes (i.e., *Future Success*, *Lifestyle*, & *Social Issues*). It is likely that the experience of parent-child conflict was less salient for students in the *No Conflict* theme compared to students coded in the other themes.

Future Success was the second most common conflict theme and captured parent-child conflict around financial priorities and academic-related decisions. This finding corresponds with research suggesting financial matters are a significant source of conflict for parents and their young adult children during the transition to college (Kenyon & Koerner, 2009). Moreover, academic difficulties and career/future anxieties are some of the most common concerns brought to college counseling centers (Salovey & D'Andrea, 1984). Research also links parent-child conflict around educational and career aspirations with poorer student well-being (Chung, 2001). For the present study, students who reported *Future Success* conflict endorsed poorer mental health, poorer physical health, and less perceived family support than those students in the *No Conflict* theme. Additionally, students who reported *Future Success* conflict endorsed less perceived family support than those students in the *Lifestyle* theme. This highlights the importance

of understanding how conflict with parents influences financial, academic, and career-related student concerns.

Lifestyle choices were the third most common theme of conflict. Parent-child conflict in this theme concerned everyday life choices including decisions concerning cohabitation with romantic partners and beliefs around alcohol use. Conflict around cohabitation is identified as an important topic in the changing dynamics of the parent-child relationship as children assume more adult roles (Arnett, 2006; Clarke et al., 1999). Cohabitation with romantic partners tends to decrease the amount of time spent with parents and reduces feelings of closeness between parents and their young adult children (Bucx, Van Wel, Knijn, & Hagendoorn, 2008; Golish, 2000). Alcohol and drug use also create distance between young adults and parents who generally discourage such use (Turrisi, Jaccard, Taki, Dunnam, & Grimes, 2001). For the present study, students coded in the *Lifestyle* theme had poorer mental health than students in the *No Conflict* theme and reported more perceived family support than students coded in the *Future Success* theme. This demonstrates that conflict around lifestyle choices influences students' well-being and aspects of the parent-child relationship.

Social Issues were the smallest conflict theme and involved parent-child conflict around political, social, and religious values. This theme also included conflict over sexual orientation, which is closely related to political and social values (Haider-Markel & Meier, 1996). Unlike the other themes, there were significant group differences by age and race. Older students were more likely to report *Social Issues* conflict. As students progress through college, their political and social values are likely to change. In

particular, traditional ideology tends to decline and views that are more egalitarian are adopted (Bryant, 2003; Lottes & Kuriloff, 1994). The influences of peers, academic courses, and experiences with diversity also can contribute to changing values and social identities (Lewis et al., 2005). Conflict involving *Social Issues* may reflect the renegotiation process of these changing beliefs and values in parent-child relationships. Group differences in race were also found such that Asian American students were less likely than their White peers to report *Social Issues* conflict. At this point, I remain speculative in understanding these differences. It could be due to a number of factors, including culturally prescribed role responsibilities or culturally sanctioned expressions of autonomy. In many Asian American families, it is considered disrespectful for children to express strong disagreements with their parents (Rhee, Chang, & Rhee, 2003; Zane, Sue, Hu, & Kwon, 1991). Additionally, values around group harmony (i.e., interdependence) are more prevalent in some Asian American families rather than values of independence often seen in White families. Nonetheless, more research is needed to fully understand this group difference. In terms of outcomes, students coded in the *Social Issues* theme reported poorer mental health and less perceived family support than students coded in the *No Conflict* theme. This suggests that conflict involving *Social Issues* influence students' well-being and aspects of the parent-child relationship compared to students with little to no conflict.

Resolution of Conflict

Conflict is an inevitable part of parent-child relationships and the eventual resolution of that conflict is important for developing productive, harmonious

relationships. The parent-child relationship can serve as a model for how young adults resolve conflict in peer and romantic relationships (Reese-Weber, 2000). Among the students in this study who provided information about conflict resolution, a majority (59%) reported *Unresolved* conflict. Students in this theme reported that their stated conflict was ongoing and no solution had been reached. Responses in which the student was ignoring or avoiding conflict were also coded in this theme. No group differences were found on age, gender, or race within this theme. Compared to students who did not provide information about conflict resolution (i.e., the *Unknown* theme), those who reported *Unresolved* conflict resolution had poorer mental health and less perceived family support. This suggests that students in the *Unresolved* theme had lower quality parent-child relationships than those who did not provide information about conflict resolution.

Approximately 41% of students reported resolving their stated conflict with their parents and were coded in the *Resolved* theme. Responses in which the student and/or parent(s) have decided to “agree to disagree” were also coded in this theme. No group differences were found on age, gender, or race within this theme. Compared to students with *Unresolved* conflict, those who reported *Resolved* conflict resolution had more perceived family support. This finding is consistent with literature on the resolution of conflict in other relationship domains suggesting that the positive resolution of conflict is associated with better relationship quality (Branje et al., 2009; Tucker et al., 2003; Wijsbroek et al., 2010). Interestingly, students in the *Resolved* and *Unresolved* themes did not differ on mental and physical health outcomes, which is contrary to research

linking unresolved conflict to poorer adjustment in adolescent samples (Branje et al., 2009).

There were a small group of students coded in a *Not Specified* theme who did not specifically state the resolution of the conflict even though they identified a type of conflict. Just as in the *Unknown* theme, students in the *Not Specified* theme were used as a comparison group to determine if this group of students had any meaningful differences from the other themes. No group differences were found on age, gender, or race within this theme. However, students coded in the *Not Specified* theme had poorer mental health than the *Unknown* conflict resolution groups. Additionally, students in the *Not Specified* theme had lower perceived family support than students coded in the *Resolved* conflict resolution group. Of note, there were no significant differences on the outcome measures with the *Not Specified* theme and the *Unresolved* theme. This suggests students who reported conflict but did not report a resolution status were more similar to those that reported unresolved conflict on the outcome measures.

CHAPTER 3

STUDY 1B

In Study 1b, I further explored the relationship between qualitative and quantitative measures of parent-child value conflict using a subset of the larger survey administered in Study 1a. I expected to find a significant positive correlation between qualitative and quantitative measures of parent-child value conflict. Additionally, I hypothesized that the qualitative measure would be negatively related to perceived family support and positively related to psychological distress. I expected students who reported conflict to also report higher frequencies of conflict, less perceived family support, and more psychological distress than those students who did not report conflict.

Method

Participants

Sample. A subset of data were taken from Study 1a that included 131 undergraduate students (38 men, 93 women) between the ages of 17 and 30 ($M = 20.6$, $SD = 2.1$). See Figure 1 for a flowchart of the sample. Class standings included 51 first-year, 33 second-year, 25 third-year, 16 fourth-year, and 6 above fourth-year students. Participants' racial backgrounds were drawn from the university's office for institutional research. The sample included 35 Asian American, 11 Black, 10 Chicano/Mexican/Hispanic, 5 Native American, 66 White, and 4 non-specified. Participants self-identified as first-generation immigrants ($n = 23$) or with at least one immigrant parent ($n = 20$) or with no immigrant parents ($n = 80$). Two participants did not clearly indicate their generation status and 6 self-identified as adoptees.

Procedures

A subset of participants who completed the initial survey (Study 1a) were invited to complete a supplemental survey that included quantitative measures of family relationships and psychological well-being. This subset was recruited using an algorithm developed by the College of Liberal Arts to include approximately 50% students of color. All other aspects of the procedure were the same as described in Study 1a.

Measures

Family Conflict Scale – Short Form (FCS; Bahrassa et al., 2011). The FCS is a 5-item short form of the original 10-item measure (Lee et al., 2000) examining the frequency of perceived parent-child conflict from the student's perspective. Sample items include, "Your parent(s)/guardian(s) wants you to sacrifice personal interests for the sake of the family, but you feel this is unfair," and "You want to state your opinion, but your parent(s)/guardian(s) consider it to be disrespectful to talk back." Items are rated on a 5-point scale according to the frequency of occurrence (1 = *Almost never*, 2 = *Once in a while*, 3 = *Sometimes*, 4 = *Often*, 5 = *Almost always*). Higher ratings indicate greater conflict with parent(s)/guardian(s). Scores on the original and short-form versions of the scale have demonstrated good internal reliability and validity with diverse undergraduate students (Bahrassa et al., 2011; Lee & Liu, 2001) and with related parent-child measures (Lee et al., 2000). For this sample, the internal reliability of scores from the 5-item FCS was good ($\alpha = .94$).

Kessler Psychological Distress Scale (K10; Kessler et al., 2002). The K10 is a 10-item self-report measure of non-specific depressive and anxiety symptoms

experienced within the past month. Sample items include, feeling “tired out for no good reason,” “so nervous that nothing could calm you down,” and “worthless.” Items are rated on a 5-point scale according to the frequency of occurrence (1 = *None of the time*, 2 = *A little bit*, 3 = *Some of the time*, 4 = *Most of the time*, 5 = *All of the time*). The K10 has been used in worldwide epidemiological studies and scores have demonstrated good internal reliability (Furukawa, Kessler, Slade, & Andrews, 2003). For this sample, the scores obtained on the K10 demonstrated good internal reliability ($\alpha = .91$).

Multidimensional Scale of Perceived Social Support – family items (MSPSS-family; Zimet et al., 1988). The MSPSS-family is a 4-item measure of perceived family support from the perspective of the participant. Sample items include, “I get the emotional help and support I need from my family,” and “My family really tries to help me.” Items are rated on a 5-point scale according to the level of agreement (1 = *Strongly disagree*, 2 = *Somewhat disagree*, 3 = *Neutral*, 4 = *Somewhat agree*, 5 = *Strongly agree*). The MSPSS has been used in diverse young adult populations and demonstrated good internal reliability and discriminate validity (Dahlem et al., 1991; Canty-Mitchell & Zimet, 2000). For this sample, the internal reliability of scores from the 4-item scale was good ($\alpha = .92$).

Qualitative conflict measure. After the above question, participants had the choice to respond to the following prompt: “Describe a situation in which differences in values occurred between you and your parent(s). Be sure to mention who was involved, what values were different, and how the situation ended.” Two categories were created from the responses: *Conflict* and *No Conflict*. The *Conflict* category was composed of students coded in the *Social Issues*, *Future Success*, and *Lifestyle* themes. (See Study 1a

for a description of the themes; For the current sample, $n = 10$ for the *Social Issues* theme, $n = 24$ for the *Future Success* theme, and $n = 17$ for the *Lifestyle* theme.) Because the sample sizes were too small to analyze by theme, the three themes were aggregated to form the *Conflict* category ($n = 51$). The *No Conflict* category ($n = 80$) was composed of students coded in the *No Conflict* theme and contained responses which did not directly answer the prompt and endorsed the lowest frequency of conflict.

Results

Preliminary Analyses

I performed one-way ANOVAs with Bonferroni corrected post-hoc tests to examine group differences on the FCS, MSPSS-family, and K10 measures by demographics. To test group differences by race and maintain an adequate sample size, the sample was divided into 3 categories: White ($n = 178$), Asian American ($n = 128$), and Other ($n = 71$) race. To test group differences by generation status and maintain an adequate sample size, the sample was divided into 2 categories: 1st/2nd generation (included participants who identified as first-generation or with at least one immigrant parent; $n = 148$) and 3rd/+ generation ($n = 210$).

For the FCS, significant group differences were found only for race ($F[2] = 12.95$, $p < .001$, $\eta_p^2 = .17$) and generation status ($F[1] = 28.91$, $p < .001$, $\eta_p^2 = .19$). No significant group differences were found by gender, age, or class standing. Students identified as White ($M = 1.29$) had lower FCS scores than students identified as Asian American ($M = 2.23$, $d = .91$) or grouped in the Other Race category ($M = 2.01$, $d = .81$).

Additionally, students in the 1st/2nd generation group had higher FCS scores than those in the 3rd/+ generation group ($M = 2.38$ vs. 1.41 , $d = .92$).

For the MSPSS-family, marginally significant group differences were found only by generation status ($F[1] = 3.61$, $p = .06$, $\eta_p^2 = .03$). No significant group differences were found by age, gender, race, or class standing. Students in the 1st/2nd generation group reported lower perceived family support than those in the 3rd/+ generation group ($M = 3.71$ vs. 4.07 , $d = .35$).

For the K10, significant group differences were found for race ($F[2] = 4.88$, $p < .01$, $\eta_p^2 = .07$), age ($F[1] = 7.44$, $p < .01$, $\eta_p^2 = .06$) and generation status ($F[1] = 7.37$, $p < .01$, $\eta_p^2 = .06$). No significant group differences were found by gender or class standing. Students identified as White ($M = 2.06$) had lower K10 scores than students identified as Asian American ($M = 2.56$, $d = .70$). Additionally, younger students ($M = 2.32$) had higher K10 scores than older students ($M = 1.88$, $d = .59$) and students in the 1st/2nd generation group ($M = 2.06$) had higher K10 scores than those in the 3rd/+ generation group ($M = 2.10$, $d = .48$).

Relationships Among Outcomes

Table 6 presents the descriptive statistics and intercorrelations of the variables. I performed one-way ANOVAs to examine group differences on the measures of family relationships and well-being by *Conflict* vs. *No Conflict* categories. Significant group differences were found on the FCS ($F[1] = 24.52$, $p < .001$, $\eta_p^2 = .16$), the MSPSS-family ($F[1] = 15.98$, $p < .001$, $\eta_p^2 = .11$), and the K10 ($F[1] = 17.27$, $p < .001$, $\eta_p^2 = .12$). On the FCS, students in the *Conflict* category reported higher frequencies of conflict than

students in the *No Conflict* category ($M = 2.23$ vs. 1.38 , $d = .84$). For the MSPSS-family, students in the *Conflict* category reported lower support than students in the *No Conflict* category ($M = 3.57$ vs. 4.24 , $d = .71$). For the K10, students in the *Conflict* category reported more psychological distress than students in the *No Conflict* category ($M = 2.56$ vs. 2.01 , $d = .73$).

Table 6

Bivariate Correlations and Descriptive Statistics for Variables (N = 131)

	1	2	3	4
1. Qualitative measure	--			
2. Family Conflict Scale (FCS)	.40**	--		
3. Perceived Family Support (MSPSS-family)	-.33**	-.58**	--	
4. Psychological Distress (K10)	.34**	.53**	-.36**	--
<i>Mean</i>	.39	1.71	3.98	2.22
<i>SD</i>	.49	1.04	.99	.79

Note. Qualitative measure is dichotomized into *No Conflict* (0) and *Conflict* (1) categories. ** indicates $p < .01$.

Because group differences were found on some of the quantitative measures, ANCOVAs were also examined for each of the quantitative measures by students' reported values differences with parents (*Conflict* vs. *No Conflict*) and covarying the respective demographic variable(s). Significant group differences were found for the FCS ($F[1] = 35.32$, $p < .001$, $\eta_p^2 = .23$), the MSPSS-family ($F[1] = 15.23$, $p < .001$, $\eta_p^2 = .11$), and the K10 ($F[1] = 19.34$, $p < .001$, $\eta_p^2 = .14$) in the same manner as described above.

Discussion

The purpose of Study 1b was to examine the relationship between qualitative and quantitative measures of parent-child conflict. Using a mixed-method approach, moderate significant positive correlations between qualitative and quantitative measures of parent-child conflict were found. This is consistent with the idea that qualitative and quantitative methods add distinct but complimentary information regarding different phenomena (Hansen et al., 2005). In line with research on the relationship between perceived support and parent-child conflict, the qualitative measure of parent-child conflict had a small negative relationship to perceived support (Sheeber et al., 1997). Additionally, the qualitative measure of parent-child conflict had a moderate positive relationship to psychological distress, consistent with past research linking conflict to student distress (Anderson & Yuenger, 1987; Archer & Lamnin, 1985; Lee & Liu, 2001). As expected, students who gave a qualitative response concerning conflict reported less perceived family support and more psychological distress than those students who did not report conflict.

Interestingly, there were individual differences in the quantitative measures of parent-child conflict and psychological distress. Asian American students were more likely to report higher frequency of parent-child conflict and more psychological distress. This is consistent with prior research that demonstrates higher frequencies of parent-child conflict for Asian American students which in turn is associated with higher levels of psychological distress (Lee & Liu, 2001). Additionally, students who identified as either 1st or 2nd generation immigrants reported higher frequency of parent-child conflict and more psychological distress. In line with prior research, this finding is likely due to the

added pressures of acculturative dissonance seen in immigrant families (Juang et al., 2012; Portes & Rumbaut, 2001). Also, younger students reported more psychological distress than older students. This finding may be reflective of the role transitions and renegotiation processes involved in entering young adulthood. For example, as children enter young adulthood they begin to take on more adult-like responsibilities and rely less on their parents for support (Arnett, 2001), which in turn can influence their emotional well-being.

CHAPTER 4

STUDY 2

For Study 2, I investigated trajectories of conflict with parents from the student's perspective. Understanding how the frequency of parent-child conflict changes during the young adult years lends perspective on the process of maintaining closeness but also gaining autonomy. Research has demonstrated changes in levels of conflict from early to late adolescence, but this has not been examined in the years after adolescence as the parent-child relationship continues to undergo adjustments (Galambos & Kotylak, 2012; Laursen et al., 1998). I used longitudinal quantitative data assessed at three points of time with latent class growth analysis (LCGA; Muthén & Muthén, 2000) to understand how the frequency of conflict changes during the young adult years. This method was chosen to examine how individuals change over time and the latent groups or classes of individuals within a sample (Wang & Bodner, 2007). Also, LCGA uses a person-centered approach which is useful for understanding how groups of individuals may be similar or different from one another (Muthén & Muthén, 2000).

In this study, I seek to examine the following questions:

- 1. Does the frequency of conflict with parents change during college? Are there between-group differences, and if so, how many growth trajectories are represented in the sample?**

Given prior research, I hypothesized that as a collective group, college students will report less frequent conflict over the data collection period.

However, when examining trajectories of parent-child conflict, I expected

intra-group differences based on the following patterns of change: (1) Stable, includes students who start at some level (i.e., high, medium, or low) of conflict and report little to no change over time, (2) Deteriorate, includes students who report increasing conflict over time, (3) Improve, includes students who report decreasing conflict over time. Based on the existing literature, I expected that the Improve group would be the largest while the Deteriorate group would be the smallest. Based on these three patterns, I expected to see 3-5 latent classes using LCGA.

2. Are age, gender, race, or generation status associated with different trajectories of parent-child conflict?

The existing research generally suggests that as young adults grow older, their relationships with their parents improve. In the present study, I anticipated that younger students would report more frequent parent-child conflict than older students. However, I remained exploratory in understanding how age was related to the different trajectories of parent-child conflict.

Since the majority of studies examining conflict with parents during college suggest no gender differences, I did not anticipate that gender would be related to different trajectories of parent-child conflict. However, I included gender in the preliminary analyses in order to test this assumption.

In the sample used in this study, race and generation status were conflated as many students of color were also immigrants. I believe that it is

the experience of being an immigrant rather than race that contributes to differences in the frequency of parent-child conflict. So for this research question, I hypothesized that generation status differences will ameliorate the influence of race when both variables are entered into the same model.

Method

Participants

Data from 245 undergraduate students (80 men, 165 women) between the ages of 18 and 30 ($M = 20.6$, $SD = 2.0$) were included as participants in the study at Time 1 (T1). See Figure 1 for a flowchart of the sample over time. Class standings included 82 first-year, 68 second-year, 52 third-year, 30 fourth-year, and 13 above fourth-year students at the time of the first data collection. Participants' racial background was analyzed from information obtained from the university registrar and included 16 Black, 75 Asian American, 16 Chicano/Mexican/Hispanic, 6 Native American, 129 White, and 3 non-specified. Participants self-identified as first-generation immigrants ($n = 34$) or with at least one immigrant parent ($n = 54$) or with no immigrant parents ($n = 142$). Two participants did not clearly indicate their generation status and 13 self-identified as adoptees.

Procedures

Participants were drawn from a larger multi-year study assessing student satisfaction, retention, and graduation of undergraduates enrolled in the College of Liberal Arts at a large, public Midwestern university. Students who were non-degree seeking, had previous degrees, or had no identifiable term of admission were not invited

to participate in the study. All other students enrolled in the College of Liberal Arts were invited to fill out the online *CLA Experience Survey* during course registration that took place in April 2008 (T1). Two email reminders were sent out over the course of data collection and approximately 22% ($n = 2,848$) filled out the survey. A subset ($n = 245$) of the total number of 17- to 30-year olds consenting to participate was given a version of the survey² that included measures of family relationships and psychological well-being. Students received \$20 gift cards to the student bookstore as an incentive to participate. In April 2009 (T2), 172 of the T1 students were still enrolled in the college and were invited to participate in the second data collection. One hundred and five students consented to participate (61% retention) and received \$20 gift cards to the student bookstore as compensation for their participation. In November 2009 (T3), 113 of the T1 students were still enrolled in the college and invited to participate in the third data collection and 65 students consented to participate (58% retention). They received \$20 gift cards to the student bookstore as a compensation for their participation.

A common challenge of longitudinal research is that participants are not always able to be followed completely through the course of data collection. The data from the maximum sample of 245 participants collected at T1 was used for several reasons. First, using the maximum sample allowed for a more robust sample size, which helped with model convergence and power in the statistical analyses. Second, the statistical method used in this study (i.e., LCGA) accounts for missing data using full information maximum likelihood, so including all participants and estimating missing data was less of a concern. The notion of predicting parent-child conflict for students who do not return

² The version of the survey used in this study is different from the version of the survey used in Study 1.

to college (i.e., graduated, transferred, or dropped out) was also considered. Parent-child conflict is an ongoing process that does not end after students leave college. With this assumption, it makes sense to include participants with missing data due to graduating, transferring, or dropping out. In order to be cautious about this assumption, all of the below analyses were run using the full sample ($n = 245$; reported below) and a smaller sample ($n = 120$), which included only participants with at least two points of data (see Appendix A for results with smaller sample). The results from the analyses of both samples were not meaningfully different from each other.

Measures

Family Conflict Scale (FCS; Lee et al., 2000). See Study 1a description for details. For this sample, the internal reliability of scores from the 5-item FCS was good ($\alpha = .90$).

Kessler Psychological Distress Scale (K10; Kessler et al., 2002). See Study 1b description for details. For this sample, the scores obtained on the K10 demonstrated good internal reliability ($\alpha = .86$).

Multidimensional Scale of Perceived Social Support – family items (MSPSS-family; Zimet et al., 1988). See Study 1a description for details. For this sample, the internal reliability of scores from the 4-item scale was good ($\alpha = .87$).

Results

Preliminary Analyses

Group differences analyses were performed to assess whether students who were measured at one, two, and three points of time significantly differed from each other on

demographic and family-related variables. The sample was divided into four groups: those that were measured at T1 only ($n = 125$), T1 and T2 only (T1-T2; $n = 55$), T1 and T3 only (T1-T3; $n = 15$), and at all three time points (T1-T2-T3; $n = 50$). Chi-square analyses showed no significant group differences by gender and race. In terms of class standing, significant group differences were found, $\chi^2(12) = 41.335, p < .001$, at T1. First-year students were more likely than expected (ASR = 2.2) to be in the T1-T3 group. Second-year students were more likely than expected (ASR = 2.9) to be in the T1-T2-T3 group. Third-year students were more likely than expected (ASR = 3.5) to be in the T1-T2 group and less likely than expected (ASR = -2.1) to be in the T1-T3 group. Fourth-year students were more likely than expected (ASR = 4.2) to be in the T1 only group and less likely than expected (ASR = -3.0) to be in the T1-T2-T3 group. In terms of age, significant group differences were found, $\chi^2(3) = 9.88, p < .05$. Younger students were less likely than expected (ASR = -2.6) to be in the T1 only group and more likely than expected (ASR = 2.8) to be in the T1-T2-T3 group. Older students were more likely than expected (ASR = 2.6) to be in the T1 only group and less likely than expected (ASR = -2.8) to be in the T1-T2-T3 group.

One-way ANOVAs with Bonferroni corrected post-hoc tests were performed to assess group differences with family and well-being variables at T1. There were no significant group differences on reports of parent-child conflict and psychological distress at T1 between the four groups. For perceived family support, the overall model was significant ($F = 2.85, p < .05$), however, the post-hoc tests did not reveal specific group differences.

The above analyses were repeated to compare those students who were measured once (i.e., T1 only) versus twice or more (T1-T2, T1-T3, T1-T2-T3; $n = 120$, 49%) during the data collection period. Chi-square analyses showed no significant group differences by gender and race. In terms of class standing, significant group differences were found $\chi^2(4) = 17.48, p < .05$, at T1. Fourth-year students were more likely than expected (ASR = 4.2) to be in the group measured once during the data collection period and less likely than expected (ASR = -4.2) to be in the group measured twice. In terms of age, significant group differences were found, $\chi^2(1) = 6.71, p < .05$. Younger students were less likely than expected (ASR = -2.6) to be in the group measured once and more likely than expected (ASR = 2.6) to be in the group measured twice. Older students were more likely than expected (ASR = 2.6) to be in the T1 only group and less likely than expected (ASR = -2.6) to be in the group measured twice.

One-way ANOVAs with Bonferroni corrected post-hoc tests were performed to assess group differences with family and well-being variables at T1. There were no significant group differences on reports of parent-child conflict and perceived family support at T1 between the two groups. For psychological distress, significant group differences were found ($F = 6.37, p < .05$). Students measured once reported more psychological distress than those students who were measured twice ($M = 2.19$ vs. $2.00, d = .32$).

Latent Class Growth Curve Analyses

LCGA has advantages over more conventional analyses, such as repeated-measures analysis of variance (RM-ANOVA) or simple change scores for several

reasons: (a) it has the ability to accurately handle a great deal of missing data (i.e., > 50%) using likelihood-based (i.e., full information maximum likelihood) calculations of parameters rather than score imputations; (b) it allows for examining individual differences in change over time, (c) LCGA allows for studying linear and non-linear effects to understand the change process; (d) in LCGA, the parameters are estimated separately from measurement error thus are less influenced by the error (i.e., the measurement error does not attenuate the parameter estimates), and (e) one can estimate error variances and covariances freely or using a specified pattern (in RM-ANOVA, variances and covariances are assumed to be equal across time; Grimm, Ferrer, & McArdle, 2010; Llabre, Spitzer, Siegel, Saab, & Schneiderman, 2004; Walker, Acock, Bowman, & Li, 1996).

Additionally, LCGA provides advantages over conventional longitudinal methods which use variable-centered approaches to examine change over time. In LCGA, the latent classes are derived from the empirical data rather than specified by the researcher such as in hierarchical linear modeling (HLM). LCGA allows researchers to fully capture inter-individual differences and intra-individual change within a population (Jung & Wickrama, 2008). For this study, the use of LCGA is advantageous over conventional longitudinal methods for understanding the process of change from a person-centered perspective and to examine subpopulations of change.

All of the below analyses were run using the full sample ($n = 245$; reported below) and a smaller sample ($n = 120$), which included only participants with at least two points of data. (See Appendix A for results with smaller sample.) Descriptive statistics

for parent-child conflict and covariates, age, race, and generation status, were examined including means, standard deviations, and frequency distributions. Fifteen students were excluded from the below analyses because they did not clearly indicate generation status or identified as adoptees. At T1, no group differences were found by gender. Group differences by race ($F[2] = 17.01, p < .001, \eta_p^2 = .13$), age ($F[1] = 4.43, p < .05, \eta_p^2 = .02$), and generation status ($F[1] = 47.83, p < .001, \eta_p^2 = .17$) were found. Asian American students reported more family conflict at T1 than White students ($M = 2.26$ vs. $1.47, d = .84$) and students classified in the Other group ($M = 2.26$ vs. $1.79, d = .45$). Younger students reported more family conflict than older students ($M = 1.82$ vs. $1.52, d = .34$). Students with at least one immigrant parent reported more family conflict than students with no immigrant parent ($M = 2.25$ vs. $1.44, d = .88$). Based on these results, age, race, and generation status were chosen as covariates in the analyses³.

I examined one- to five-class models of the frequency of parent-child conflict. For all analyses, I used full information maximum likelihood (FIML) estimation to account for missing data. FIML estimation provides more accurate parameter estimates than many of the traditional methods used to account for missing data (i.e., listwise deletion, pairwise deletion, multiple imputation; Enders & Bandalos, 2001). I scaled the variable Time so that the value of 0 represented T1, the first data collection period, the value of 1 represented the second data collection period assessed one year after T1, and the value of 1.5 represented the third data collection period assessed approximately six months after T2. Therefore, the intercept in all equations represents the participants'

³ The model was also run with class standing as a covariate based on the preliminary results, however, class standing was not significantly related to any of the latent classes and was subsequently removed from the final analyses due to its high correlation with age.

initial levels of parent-child conflict when they were first assessed. Because I had only three points of data and a significant amount of missing data, I elected to take a conservative approach by testing only linear models. Class selection was guided by past theory and research (Henson, Reise, & Kim, 2007; Nylund, Asparouhov, & Muthén, 2007; Wang & Bodner, 2007) as well as commonly used fit statistics that are appropriate to use with small sample sizes (e.g., sample size adjusted Bayesian Information Criterion [SSABIC], entropy, and bootstrap likelihood ratio test [BLRT]). Lower values of the SSABIC, higher values of entropy, and significant p values for the BLRT are indicative of better model fit. The BLRT fit statistic is useful for understanding the improvement in fit for neighboring class models and was chosen over the more traditional fit statistic, Vuong-Lo-Mendell-Rubin likelihood ratio test (VLMR-LRT), as it has been shown to be more robust (i.e., expected Type I error rates, more consistent power, better accuracy in correctly identifying the true number of classes; Nylund et al., 2007).

The one-class model demonstrated decreasing conflict over the three points of data ($M_{T1} = 1.75$, $M_{T2} = 1.66$, $M_{T3} = 1.60$). Table 7 shows the fit indices for the two- to five-class models. The four-class model was selected as the optimal result based on the fit statistics and the hypothesized growth trajectories. As seen in the table, the SSABIC values decreased as the number of classes increased to the fifth class. The entropy for the four-class model was slightly lower, but still good (i.e., above .80) according to recommended guidelines (Muthén, 2004) as compared to the three-class model. Additionally, the BLRT indicated better model fit for the four-class model over the three-class model. The five-class model also demonstrated good fit, however in two classes,

the number of individuals in each class decreased to under 20 (i.e., 6% & 8%).

Additionally, when examining the growth trajectories of the five-class model, there was not a meaningful difference in the trajectory of change over time (i.e., when examining the trajectories graphically, it seemed one of the four-class growth trajectories split into two in the five-class model; the initial levels of conflict were different, but the pattern of change was the same). Ultimately the four-class model was chosen, because it captured the different growth trajectories in a meaningful way and was consistent with past research (Aquilino, 1997; Lefkowitz, 2005; Rossi & Rossi, 1990).

Table 7

Fit indices for two- to five- class growth trajectories for parent-child conflict

	2 Class	3 Class	4 Class	5 Class
SSABIC	796.19	738.88	708.26	664.42
Entropy	0.91	0.97	0.88	0.89
Posterior Probabilities	.95, .98	.99, .98, .99	.96, .84, .92, .96	.83, .84, .98, .82, .97
% count in class	76, 24	72, 22, 6	64, 12, 14, 11	13, 11, 6, 8, 63
BLRT	<0.001	<0.001	<0.001	<0.001

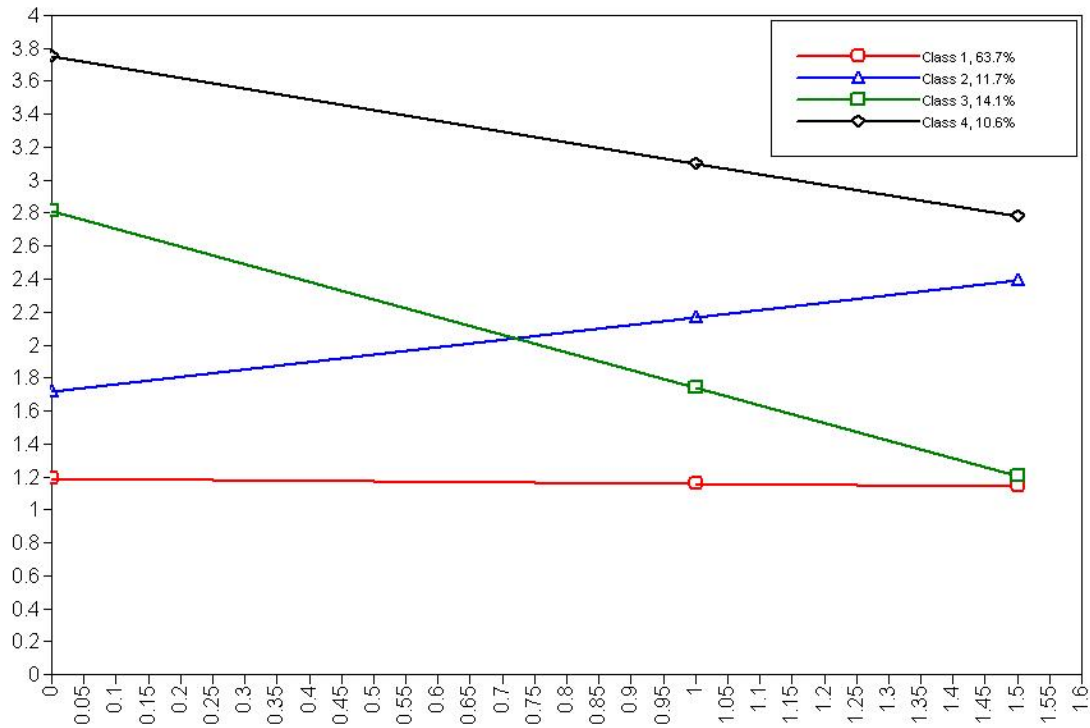
Note. Covariates included in model were age, race (White = 0, All other = 1), and generation status (3+ generation = 0, 1st/2nd generation = 1).

As seen in Figure 2, the four-class model revealed four distinct growth trajectories: 1) low stable parent-child conflict (class 1), 2) increasing parent-child conflict (class 2), 3) moderate to low decreasing parent-child conflict (class 3), and 4) high to moderate decreasing parent-child conflict (class 4). The largest portion of the

sample ($n = 156, 63.7\%$) fell into the low stable parent-child conflict category ($M = 1.19$) with a pattern of stable conflict over time (slope = -0.03 , n.s. different from zero). The second largest portion of the sample ($n = 34, 14.1\%$) fell into the moderate to low decreasing parent-child conflict category ($M = 2.81$) with a pattern of significantly decreasing growth over time (slope = $-1.07, p < .001$). The third largest portion of the sample ($n = 29, 11.7\%$) fell into the increasing parent-child conflict category ($M = 1.72$) with a pattern of significantly increasing growth over time (slope = $0.45, p < .001$). The final portion of the sample ($n = 26, 10.6\%$) fell into the high to moderate parent-child conflict category ($M = 3.75$) with a pattern of significantly decreasing growth over time (slope = $-0.65, p < .001$).

Figure 2

Four-class model of parent-child conflict growth trajectories for college students (n = 230)



The model results also revealed how covariates (age at T1, race, and generation status) were associated with individual class membership in the four latent growth trajectories. Age and race were not significant influences on individual class membership in the latent trajectories using class 4 as a reference group. Generation status significantly predicted individual class membership in latent class 1 ($\beta = -3.35, p < .001$) and class 3 ($\beta = -3.35, p < .001$) and marginally predicted individual class membership in latent class 2 ($\beta = -2.03, p = .09$) using class 4 as a reference group. In terms of odds

ratios, individuals classified as 1st or 2nd generation status were less likely to fall into class 1 (OR = 0.04), class 2 (OR = 0.13⁴), or class 3 (OR = 0.07) than class 4.

Post-hoc analyses with latent classes

Once latent class memberships were established, I could explore how these different growth trajectories related to family and psychological well-being variables. In order to corroborate the results from the LCGA, I first tested group differences on the parent-child conflict variable at T1. One-way ANOVAs with Bonferroni-corrected post-hoc tests were performed, and as expected, significant group differences were found ($F[3] = 512.96, p < .01$). All latent classes significantly differed from each other in terms of parent-child conflict levels at T1. See Table 8 for effect sizes and means.

Table 8

Effect sizes (Cohen's d) and means for the four latent classes on parent-child conflict

	1	2	3	4
1. Latent class 1	--			
2. Latent class 2	1.50	--		
3. Latent class 3	5.86	2.91	--	
4. Latent class 4	5.19	3.65	1.84	--
<i>Mean</i>	1.19	1.73	2.82	3.75

Note. All latent classes significantly differed from each other at the $p < .01$ level.

Using chi-square tests, group differences on demographic variables at T1 were also tested with the latent classes. Table 9 provides a summary of the results. No significant group differences were found on gender ($\chi^2[3] = 2.36, p > .05$), class standing ($\chi^2[12] = 11.20, p > .05$), or by missing data groups ($\chi^2[9] = 13.43, p > .05$). Significant group differences were found for race ($\chi^2[3] = 56.3, p < .01$), such that White students

⁴ Marginally significant ($p = .09$).

were more likely than expected to fall in latent class 1 (ASR = 7.4) and less likely than expected to fall in latent class 2, 3, and 4 (ASR = -4.3, -3.2, -3.6, respectively). The opposite pattern was found for students of color. In terms of age at T1, significant group differences were found ($\chi^2[3] = 10.4, p < .05$) such that younger students were more likely than expected (ASR = 3.2) while older students were less likely than expected (ASR = -3.2) to fall in latent class 3. In terms of generation status, significant group differences were found ($\chi^2[3] = 71.74, p < .01$) such that students who were third-generation or greater were more likely than expected to fall in latent class 1 (ASR = 8.1) and less likely than expected to fall in latent class 2, 3, and 4 (ASR = -4.6, -2.5, and -5.2, respectively). The opposite pattern was found for students who were 1st or 2nd generation.

Table 9

Result of chi-square analyses to test group differences of the 4-class latent growth trajectories by demographic variables

	χ^2 (df)	ASR	Group Difference
Age	10.4 (3)*	3.2	Younger > Older in class 3
Class Standing	11.20 (12)	--	--
Gender	6.15 (3)	--	--
Race	56.3 (3)**	7.4 -4.3, -3.2, -3.6	White > SOC in class 1 White < SOC in class 2, 3, 4
Generation Status	71.73 (3)**	8.1 -4.6, -2.5, -5.2	3+ gen > 1/2 gen in class 1 3+ gen < 1/2 gen in class 2, 3, 4
Patterns of Missing Data	13.43 (9)	--	--

Note. * indicates $p < .05$, ** indicates $p < .01$.

Using one-way ANOVAs, group differences on psychological distress and perceived family support at T1 were tested with the latent classes. Table 10 provides a summary of the results. Significant group differences were found on psychological

distress ($F[3] = 7.14, p < .01, \eta_p^2 = .09$) and perceived family support ($F[3] = 9.11, p < .01, \eta_p^2 = .11$). Students in latent class 3 ($M = 2.43$) reported more psychological distress than students in latent class 1 ($M = 2.01, d = .72$) and 2 ($M = 1.83, d = 1.09$). Students in latent class 1 ($M = 4.07$) reported higher perceived family support than students in latent class 3 ($M = 3.23, d = .88$) and 4 ($M = 3.45, d = .66$).

Table 10

Results from one-way ANOVAs for psychological distress and perceived family support

Outcome Variable	<i>F</i>	<i>p</i>	η_p^2	Group Comparisons	Means	Cohen's <i>d</i>
Psychological Distress	7.14	<.01	.09	1 vs. 2	--	--
				1 vs. 3	2.0 vs 2.4	.72
				1 vs. 4	--	--
				2 vs. 3	1.8 vs 2.4	1.1
				2 vs. 4	--	--
				3 vs. 4	--	--
Perceived Family Support	9.11	<.01	.11	1 vs. 2	--	--
				1 vs. 3	4.1 vs 3.2	.88
				1 vs. 4	4.1 vs 3.5	.66
				2 vs. 3	--	--
				2 vs. 4	--	--
				3 vs. 4	--	--

Discussion

For Study 2, I investigated how parent-child conflict changes over the course of college. Using LGCA, I was able to take into account individual variability in initial levels of conflict and variability in the change process by assessing different trajectories of change. These growth trajectories or latent classes were derived from the data rather than specified by the researcher as done in traditional longitudinal modeling (i.e., HLM). LGCA also allowed me to take into account covariates. The covariates were chosen

based on initial levels of parent-child conflict. Students who were younger in age, who identified as Asian American, and who reported having at least one immigrant parent reported more initial parent-child conflict and these variables were thus chosen as covariates.

As predicted, a variety of latent classes within the sample were identified. Ultimately, four latent classes of parent-child conflict growth trajectories were chosen. The largest latent class (63.7%) fell into the low stable parent-child conflict group (class 1). These students started with low levels of parent-child conflict and maintained those levels over the course of data collection. Indeed, there was no significant change in slope for levels of parent-child conflict for class 1. The second largest latent class (14.1%) fell into the moderate to low decreasing parent-child conflict group (class 3). These students started with moderate levels of parent-child conflict and conflict decreased over the course of data collection. The magnitude of the slope for class 3 was the largest of those groups that changed. The third largest latent class (11.7%) significantly increased in parent-child conflict over the course of data collection (class 2). These students started with lower levels of parent-child conflict and reported an increase in levels of conflict over the course of data collection. The smallest latent class (10.6%) fell from high levels to moderate levels of conflict (class 4). These students started with high levels of parent-child conflict and conflict decreased to moderate levels over the course of data collection. This same pattern of results was found when the analyses were run with participants with at least two points of data (i.e., when the majority of missing data was taken out; see Appendix A).

The growth trajectories found in this study are consistent with past research suggesting that the majority of students report no change or improvement in parent-child relationship in the young adult years (Aquilino, 1997; Lefkowitz, 2005; Rice & Mulkeen, 1995; Rossi & Rossi, 1990; Thornton et al., 1995). Interestingly, this study demonstrated that there is a small group of students (i.e., class 2) whose relationship deteriorates with their parents during young adulthood. This is consistent with past research that has found a small percentage of young adults who described feeling less close and arguing more with their parents during the college years (Lefkowitz, 2005). When parent-child relationships deteriorate during the college years, it has implications for student's well-being. Indeed, disagreements with parents were rated the second highest personal stressor among students accessing services in university counseling centers (Archer & Lammin, 1985). Thus, even though this group of students reflects a small percentage of the total sample, it is important to understand their struggles with their parents and how conflict can impact students' overall well-being.

The model results also revealed associations with demographic covariates for the four latent classes. Though group differences for age, race, and generation status were found with initial levels of conflict (i.e., at T1), only generation status was significantly associated with a latent trajectory when examining covariates in the model. Individuals classified as 1st or 2nd generation were more likely to fall into class 4 (e.g., the high to moderate decreasing group) as compared to the other three classes. This suggests that 1st and 2nd generation students are more likely to start out a higher levels of perceived parent-child conflict than their later generation peers. Additionally, they are likely to

experience a decrease in conflict over time, however, it does not decrease as quickly as it does for those in class 3 (e.g., the moderate to low decreasing group). The differences in initial levels of conflict correspond with cross-sectional research demonstrating that children of immigrants face more parent-child conflict due to acculturative dissonance over and above normative parent-child conflict (Juang et al., 2012). Additionally, the results demonstrate that conflict does decrease for this group of students, however, at a slower rate than other groups of students.

In order to understand more about the different latent growth trajectories that were derived from the data, post-hoc analyses testing group differences between the latent classes were performed. The post-hoc tests performed with the latent classes provided an additional perspective on the types of students who fell into each latent class. Of note, there were no significant differences by gender, class standing, or by missing data. Race differences were found such that White students were more likely than expected to fall into latent class 1 and students of color were more likely to fall into latent classes 2, 3, and 4. In terms of generation status, students who were 3rd generation or greater were more likely than expected to fall in latent class 1 while 1st and 2nd generation students were more likely to fall into latent classes 2, 3, and 4.

The group differences analyses reported in the preceding paragraph differ from the LCGA covariate findings due to the method used to analyze the data. The post-hoc analysis examined race and generation status separately and both variables were found to be associated with latent class 1. Using LCGA, race and generation status were tested

together in the same model and the results demonstrate that generation status ameliorates the influence of race differences.

In terms of the other outcome variables, I found group differences in terms of psychological distress and perceived family support at T1. Students in latent class 3 reported more psychological distress than students in latent class 1 and 2 at initial data collection. Additionally, students in latent class 1 reported higher perceived family support than students in latent class 3 and 4. Taken together, these results suggest students who report little to no change in parent-child relationship have better mental health and family support than other groups of students. This is consistent with past research suggesting that children who experience higher levels of parent-child conflict also report poorer mental health and relationship quality with their parents (Greenberg & Chen, 1996; Hannum & Dvorak, 2004; Shek, 1998). In all, the results from this study demonstrate that different group of students have varying trajectories of parent-child conflict during college.

CHAPTER 5

GENERAL DISCUSSION

The present research sought to investigate aspects of parent-child conflict during the college years. Study 1 utilized mixed methodology to understand the content and resolution of parent-child conflict reported from the perspective of students. Themes of parent-child conflict were generated from open-ended responses and compared to demographic, family, and well-being measures (Study 1a). Additionally, qualitative and quantitative measures of parent-child conflict were compared in order to understand their concurrent relationship (Study 1b). For Study 2, change in the frequency of parent-child conflict during college was examined using quantitative longitudinal data. Using LCGA, growth trajectories in parent-child conflict were examined across time.

In Study 1a, four themes of parent-child conflict (i.e., *Social Issues*, *Future Success*, *Lifestyle*, and *No Conflict*) were generated from the open-ended responses. Using a mixed-method approach, an important finding from this study was that students who responded to the prompt and coded in the *Social Issues*, *Future Success*, and *Lifestyle* themes reported similar outcomes in terms of physical health, mental health, perceived family support, and frequency of conflict. This suggests that regardless of the topic of conflict, young adults have similar experiences in regards to family functioning and well-being variables. Similarly, most of the significant difference found in Study 1a was between the *Social Issues*, *Future Success*, and *Lifestyle* themes versus the *No Conflict* theme. This finding suggests that the subject matter of the conflict may be less important than the *presence* of conflict in parent-child relationships. This is consistent with the focus of prior research on the frequency of parent-child conflict, which has been

found to be associated with more psychological distress and poorer quality of parent-child relationships (Greenberg & Chen, 1996; Hannum & Dvorak, 2004; Shek, 1998). Similar to experiences in adolescence, the presence of conflict rather than the types of conflict is associated with important family and well-being outcomes during young adulthood.

Also in Study 1a, the findings demonstrated the importance of the resolution of conflict for family functioning and well-being for young adults. More specifically, the results suggest that conflict resolution types are associated with students' mental health, physical health, and perceptions of support from their parents. Consistent with past research, students who are able to successfully resolve conflict have better overall outcomes than those who are unable to resolve conflict with parents (Branje et al., 2009; Tucker et al., 2003; Wijsbroek et al., 2010). These findings highlight the importance of understanding conflict resolution in parent-child relationships with young adults.

Study 1b extended the mixed-method approach of Study 1a and examined the relationship between qualitative and quantitative measures of parent-child conflict. A dichotomized measure of parent-child conflict was generated from qualitative responses and compared to quantitative measures of parent-child conflict, perceived family support, and psychological distress. Students who provided information about parent-child conflict reported higher frequencies of conflict, less perceived family support, and more psychological distress than those students who did not report conflict. Unfortunately, I was unable to test whether the qualitative themes of parent-child conflict developed in Study 1a differentially related to the outcome variables due to small sample sizes.

However, I was able to examine the relationship between qualitative and quantitative measures that examined parent-child conflict in terms of value disagreements. Each of these measures provides unique information which helps elucidate the nature of parent-child conflict in young adulthood.

Study 2 examined how parent-child conflict changes for young adults during the course of college. Four different growth trajectories were found illustrating the heterogeneity of students' experience with parent-child conflict. All four growth trajectories had significantly different initial levels and rates of change of parent-child conflict. The largest group of students started with low levels of parent-child conflict and maintained those levels over the course of data collection. Given that the majority of students fell in this trajectory, this finding provides support consistent with the continuity hypothesis, which states that parent-child relationships remain relatively consistent over the course of children's lives. However, more than one-third of the students reported some change over the course of college and provided support for the discontinuity hypothesis. One can interpret these results as complementary rather than conflicting by understanding that for some groups of students there is little to no change and for other groups of students there is significant change. These results reflect the heterogeneity in students' experiences of parent-child conflict.

Of those students who reported some change, the majority reported that their relationships with their parents improved over the course of data collection. However, one of the major findings from this study was that a small subset of students reported that their relationship with their parents deteriorated. This is consistent with past research

demonstrating that a small group of students report being less close and arguing more with their parents during the college years (Lefkowitz, 2005). Indeed, disagreements with parents are rated high in terms of personal stressors among students accessing services in university counseling centers (Archer & Lamnin, 1985). For both groups of students (i.e., those who reported decreases and those who reported increases in parent-child conflict), it is clear that the transition of renegotiating parent-child relationships is an active process that continues to change over time.

Of note, students who reported having at least one immigrant parent were more likely to report a change pattern in parent-child conflict most consistent with high initial levels of conflict and a slow reduction in conflict over the course of data collection (e.g., the high to moderate decreasing group). Additionally based on the post-hoc tests of the latent classes, they were also less likely to fall in the growth trajectory with little to no change in parent-child conflict. A growing body of literature has focused on examining the experiences of students with immigrant parents and parent-child conflict has been implicated in influencing students' health and well-being as well as their academic success (Bahrassa et al. 2011; Juang et al., 2012; Lee & Liu, 2001). The present research is the first study known to this author that demonstrates how the process of parent-child conflict may differ for students with immigrant parents.

Limitations and Future Directions

This study was one of the few studies using mixed-method approaches to examine parent-child conflict during the young adult college years. However, it is not without limitations. For all the studies, I collected data from young adults who were attending

college. I remain tentative in understanding the parent-child conflict experiences for those young adults who do not attend college. In Study 1a, the majority of students did not fill out the optional prompt qualifying the findings of the study to a significantly smaller sample. Additionally, students who did not fill out the prompt while also endorsing modest levels of parent-child conflict had to be excluded from the analyses. I remain tentative in understanding the experience of parent-child conflict for this group of students. In Study 1b, I was unable to examine how the qualitatively coded themes of conflict separately related to the quantitative measure of parent-child conflict due to the small sample size. The results from this study should be replicated with a larger sample.

The methodology used in Study 2 allowed for examining inter-individual change which has its advantages over traditional longitudinal methods in terms of examining different growth trajectories of change. Additionally, the methodology used full maximum likelihood functions to account for missing data. However, there was a large amount of missing data in this study due to attrition of the sample over the course of data collection.

Future studies can build upon this study by continuing to use mixed-method approaches and examine larger, more diverse samples of young adults. Along the same lines, it is important to understand how students enrolled in college may differ from young adults who do not attend college in terms of trajectories of parent-child conflict. Additionally, future research should also examine additional variables that may play a role in the parent-child relationship during the young adult years, such as leaving home (Mayseless & Hai, 1998).

Conclusions

This research sought to investigate the content, resolution, and frequency of parent-child relationships during the college years using a mixed-method approach. The major finding for Study 1a was that students experience a wide range of topics of conflict with their parents. However, it is the presence of conflict rather than the type of conflict that has implications for students' health and well-being. Study 1b demonstrated that qualitative and quantitative measures can contribute unique information about parent-child conflict. Students who reported conflict also reported higher frequencies of parent-child conflict, less perceived family support, and more psychological distress than students who did not report conflict. For Study 2, four latent growth trajectories were found in the sample demonstrating the heterogeneity in students' parent-child relationship during the college years. Overwhelmingly, students report improvement or no change in parent-child conflict, however, there is a small group of students for which conflict increases over the course of college. Additionally, the experience of having parents who are immigrants contributes to a higher frequency of parent-child conflict. Future research can focus on replication of the results using larger, more diverse samples of young adults.

REFERENCES

- Ackard, D. M., Neumark-Sztainer, D., Story, M., Perry, C. (2006). Parent–child connectedness and behavioral and emotional health among adolescents. *American Journal of Preventative Medicine*, *30*(1), 59-66.
doi:10.1016/j.amepre.2005.09.013
- Allen, J. P., & Hauser, S. T. (1996). Autonomy and relatedness in adolescent-family interactions as predictors of young adults' states of mind regarding attachment. *Development and Psychopathology*, *8*, 793–809.
- Anderson, W. & Yuenger, C. (1987). Parents as a source of stress for college students. *College student journal*, *21*(4), 317-323.
- Aquilino, W. S. (1997). From adolescent to young adult: A prospective study of parent-child relations during the transition to adulthood. *Journal of Marriage and Family*, *59*(3), 670-686.
- Aquilino, W. S. (1999). Two views of one relationship: Comparing parents' and young adult children's reports of the quality of intergenerational relations. *Journal of Marriage and Family*, *61*(4), 858-870.
- Aquilino, W. S. (2005). Impact of family structure on parental attitudes toward economic support of adult children over the transition to adulthood. *Journal of Family Issues*, *26*(2), 143-167. doi: 10.1177/0192513X04265950
- Aquilino, W. S. (2006). Family relationships and support systems in emerging adulthood. In *Emerging adults in America: Coming of age in the 21st century*. (pp. 193-217). Washington, DC, US: American Psychological Association.

- Archer, J. & Lamnin, A. (1985). An investigation of personal and academic stressors on college campuses. *Journal of College Student Personnel*, 26, 210-215.
- Arnett, J. J. (1999). Adolescent storm and stress, reconsidered. *American Psychologist*, 54(5), 317-326. doi:[10.1037/0003-066X.54.5.317](https://doi.org/10.1037/0003-066X.54.5.317)
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469-480. doi:[10.1037/0003-066X.55.5.469](https://doi.org/10.1037/0003-066X.55.5.469)
- Arnett, J. J. (2001). Conceptions of the transition to adulthood: Perspectives from adolescence through midlife. *Journal of Adult Development*, 8(2), 133-143. doi: 10.1023/A:1026450103225
- Arnett, J. J. (2003). Conceptions of the transition to adulthood among emerging adults in American ethnic groups. *New Directions for Child and Adolescent Development*, 2003(100), 63-76.
- Arnett, J. J. (2006). The psychology of emerging adulthood: What is known, and what remains to be known? In J. J. Arnett & J. L. Tanner (eds.), *Emerging adults in America: Coming of age in the 21st century*. (pp. 303-330). Washington, DC, US: American Psychological Association.
- Bahrassa, N. F., Syed, M., Su, J., & Lee, R. M. (2011). Family conflict and academic performance of first-year Asian American undergraduates. *Cultural Diversity and Ethnic Minority Psychology*, 17(4), 415–426. doi: [10.1037/a0024731](https://doi.org/10.1037/a0024731)

- Branje, S. J., van Doorn, M., van der Valk, I., & Meeus, W. (2009). Parent–adolescent conflict, conflict resolution, and adolescent adjustment. *Journal of Applied Developmental Psychology, 30*, 195–204. doi:10.1016/j.appdev.2008.12.004
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. doi:10.1191/1478088706qp063oa
- Bryant, A. N. (2003). Changes in attitudes toward women’s roles: Predicting gender-role traditionalism among college students. *Sex Roles, 48*, 131-142. doi: 10.1023/A:1022451205292
- Bucx, F., Van Wel, F., Knijin, T., & Hagendoorn, L. (2008). Intergenerational contact and the life course status of young adult children. *Journal of Marriage and Family, 70*(1), 144-156.
- Canty-Mitchell, J. & Zimet, G. D. (2000). Psychometric properties of the multidimensional scale of perceived social support in urban adolescents. *American Journal of Community Psychology, 28*(3), 391-400. doi: [10.1023/A:1005109522457](https://doi.org/10.1023/A:1005109522457)
- Chung, R H. (2001). Gender, ethnicity, and acculturation in intergenerational conflict of Asian American college students. *Cultural Diversity & Ethnic Minority Psychology, 7*(4), 376. doi: [10.1037/1099-9809.7.4.376](https://doi.org/10.1037/1099-9809.7.4.376)
- Chung, W. Y., Chen, C., Greenberger, E., & Heckhausen, J. (2009). A cross-ethnic study of adolescents’ depressed mood and the erosion of parental and peer warmth during the transition to young adulthood. *Journal of Research on Adolescence, 19*(3), 359. doi: [10.1111/j.1532-7795.2009.00592.x](https://doi.org/10.1111/j.1532-7795.2009.00592.x)

- Clarke, E., Preston, M., Raksin, J., & Bengtson, V. L. (1999). Types of conflicts and tensions between older parents and adult children. *Gerontologist*, 39(3), 261–270. doi: 10.1093/geront/39.3.261
- Collins, W. A. (1997). Relationships and development during adolescence: Interpersonal adaptation to individual change. *Personal Relationships*, 4(1), 1-14.
- Collins, W. A., & Russell, G. (1991). Mother-child and father-child relationships in middle childhood and adolescence: A developmental analysis. *Developmental Review*, 11(2), 99-136. doi:[10.1016/0273-2297\(91\)90004-8](https://doi.org/10.1016/0273-2297(91)90004-8)
- Collins, W. A., & van Dulmen, M. (2006). Friendships and romance in emerging adulthood: Assessing distinctiveness in close relationships. In J. J. Arnett & J. L. Tanner's (eds.), *Emerging adults in America: Coming of age in the 21st century*. (pp. 219-234). Washington, DC, US: American Psychological Association.
- Dahlem, N. W., Zimet, G. D., & Walker, R. R. (1991). The multidimensional scale of perceived social support: A confirmation study. *Journal of Clinical Psychology*, 47(6), 756-761. doi: [10.1002/1097-4679\(199111\)47:6<756::AID-JCLP2270470605>3.0.CO;2-L](https://doi.org/10.1002/1097-4679(199111)47:6<756::AID-JCLP2270470605>3.0.CO;2-L)
- Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., & Mac Iver, D. (1993). Development during adolescence: The impact of stage-environment fit on young adolescents' experiences in schools and in families. *American Psychologist*, 48(2), 90-101. doi:[10.1037/0003-066X.48.2.90](https://doi.org/10.1037/0003-066X.48.2.90)
- Ellis-Schwabe, M., & Thornbug, H. D. (1986). Conflict areas between parents and their adolescents. *Journal of Psychology*, 120(1), 59.

- Enders, C. K. & Bandalos, D. L. (2001). The relative performance of full information maximum likelihood estimation for missing data in structural equation models. *Structural Equation Modeling*, 8(3), 430-457. doi: [10.1207/S15328007SEM0803_5](https://doi.org/10.1207/S15328007SEM0803_5)
- Feldman, S. S. & Quatman, T. (1988). Factors influencing age expectations for adolescent autonomy: A study of early adolescents and parents. *Journal of Early Adolescents*, 8(4), 325-343.
- Frank, S. J., Avery, C. B., & Laman, M. S. (1988). Young adults' perceptions of their relationships with their parents: Individual differences in connectedness, competence, and emotional autonomy. *Developmental Psychology*, 24(5), 729-737.
- Fulgini, A. J., & Pedersen, S. (2002). Family obligation and the transition to young adulthood. *Developmental Psychology*, 38, 856-868. doi: [10.1037/0012-1649.38.5.856](https://doi.org/10.1037/0012-1649.38.5.856)
- Furukawa, T. A., Kessler, R. C., Slade, T., & Andrews, G. (2003). The performance of the K6 and K10 screening scales for psychological distress in the Australian National Survey of Mental Health and Well-being. *Psychological Medicine*, 33(2), 357-362. doi: 10.1017/S0033291702006700
- Freud, A. (1958). Adolescence. *Psychoanalytic Study of the Child*, 15, 255-278.
- Freud, A. (1959). Adolescence. In A. E. Winder & D. Angus (Eds.), *Adolescence: Contemporary studies* (pp.13-24). New York: American Book.

- Freud, A. (1969). Adolescence as a developmental disturbance. In G. Caplan & S. Lebovici (Eds.), *Adolescence: Psychosocial perspectives* (pp. 5-10). New York: Basic Books.
- Freud, S. (1962). *Three essays on the theory of sexuality* (J. Strachey, Trans.). New York: Basic Books. (Original work published 1905).
- Galambos, N. L., & Almeida, D. M. (1992). Does parent-adolescent conflict increase in early adolescence? *Journal of Marriage and Family*, *54*(4), 737-747.
- Galambos, N. L. & Kotylak, L. A. (2012). Transformations in parent-child relationships from adolescence to adulthood. In W. A. Collins & B. Laursen (Eds.), *Relationship pathways: From adolescence to young adulthood*, Thousand Oaks, CA: Sage Publications, Inc.
- Golish, T. D. (2000). Changes in closeness between adult children and their parents: A turning point analysis. *Communication Reports*, *13*(2), 79-97.
- Greenberger, E., & Chen, C. (1996). Perceived family relationships and depressed mood in early and late adolescence: A comparison of European and Asian Americans. *Developmental Psychology*, *32*(4), 707-716. doi: 10.1037/0012-1649.32.4.707
- Grimm, K. J., Ferrer, E. & McArdle, J. J. (2010). Session Q: Contemporary methods for dealing with unbalanced and incomplete data [Lecture notes]. Charlottesville, Virginia: University of Virginia.
- Grotevant, H., & Cooper, C. (1986). Individuation in family relationships. *Human Development*, *29*(2), 82-100. doi:[10.1159/000273025](https://doi.org/10.1159/000273025)

- Gutman, L. M. & Eccles, J. S. (2007). Stage-environment fit during adolescence: Trajectories of family relations and adolescent outcomes. *Developmental Psychology*, 43(2), 522-537. doi: [10.1037/0012-1649.43.2.522](https://doi.org/10.1037/0012-1649.43.2.522)
- Haider-Markel, D. P. & Meier, K. J. (1996). The politics of gay and lesbian rights: Expanding the scope of the conflict. *The Journal of Politics*, 58(2), 332. Retrieved from EBSCOhost.
- Hall, G. S. (1904). *Adolescence: Its psychology and its relation to physiology, anthropology, sociology, sex, crime, religion, and education* (Vols. I & II). Englewood Cliffs, NJ: Prentice-Hall.
- Hannum, J. W. & Dvorak, D. M. (2004). Effects of family conflict, divorce, and attachment patterns on the psychological distress and social adjustment of college freshmen. *Journal of College Student Development*, 45(1), 27-42. doi: [10.1353/csd.2004.0008](https://doi.org/10.1353/csd.2004.0008)
- Hanson, W. E., Creswell, J. W., Plano Clark, V. L., Petska, K. P., & Creswell, J. D. (2005). Mixed methods research designs in counseling psychology. *Journal of Counseling Psychology*, 52(2), 224-235.
- Henson, J. M., Reise, S. P., & Kim, K. H. (2007). Detecting mixtures from structural model differences using latent variable mixture modeling: A comparison of relative model fit statistics. *Structural Equation Modeling*, 14(2), 202–226. doi:10.1080/10705510709336744
- Hitlin, S., & Piliavin, J. A. (2004). Values: Reviving a dormant concept. *Annual Review of Sociology*, 30(1), 359-393. doi:[10.1146/annurev.soc.30.012703.110640](https://doi.org/10.1146/annurev.soc.30.012703.110640)

- Holt, J. L. & DeVore, C. J. (2005). Culture, gender, organizational role, and styles of conflict resolution: A meta-analysis. *International Journal of Intercultural Relations, 29*, 165-916.
- Jackson, R. W., Treiber, F. A., Turner, J. R., Davis, H., & Strong, W. B. (1999). Effects of race, sex, and socioeconomic status upon cardiovascular stress responsivity and recovery in youth. *International Journal of Psychophysiology, 31*(2), 111-119.
doi: 10.1016/S0167-8760(98)00044-0
- Juang, L. P., Syed, M., Cookston, J., & Wang, Y., & Kim, S.-Y. (2012). Everyday and acculturation-based family conflict among Chinese American parents and adolescents. In L. Juang & A. Umaña-Taylor (Issue Eds.), *Family conflict among Chinese and Mexican-origin adolescents and their parents in the U.S.. New Directions in Child and Adolescent Development* (L. Jensen & R. Larson, Eds.), San Francisco: Jossey-Bass.
- Juang, L. P., Syed, M., & Takagi, M. (2007). Intergenerational discrepancies of parental control among Chinese American families: Links to family conflict and adolescent depressive symptoms. *Journal of Adolescence, 30*, 965-975.
doi:10.1016/j.adolescence.2007.01.004
- Jung, J. (1995). Parent-child closeness affects the similarity of drinking levels between parents and their college-aged children. *Addictive Behaviors, 20*(1), 61-67.
- Jung, T. & Wickrama, K. A. S. (2008). An introduction to latent class growth analysis and growth mixture modelling. *Social and Personality Psychology Compass, 2*(1), 302–317. doi: 10.1111/j.1751-9004.2007.00054.x

- Kenny, M E. (1987). The extent and function of parental attachment among first-year college students. *Journal of Youth and Adolescence*, 16(1), 17. doi: [10.1007/BF02141544](https://doi.org/10.1007/BF02141544)
- Kenyon, D. B. & Koerner, S. S. (2009). Examining emerging-adults' and parents' expectations about autonomy during the transition to college. *Journal of Adolescent Research*, 24(3), 293-320. doi: 10.1177/0743558409333021
- Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S.-L. T., et al. (2002). Short screening scales to monitor population prevalences and trends in nonspecific psychological distress. *Psychological Medicine*, 32, 959-976.
- Knafo, A. & Schwartz, S. H. (2004). Identity formation and parent-child value congruence in adolescence. *British Journal of Developmental Psychology*, 22, 439-458. doi: 10.1348/0261510041552765
- Koerner, A. F. & Fitzpatrick, M. A. (2002). You never leave your family in a fight: The impact of family of origin on conflict relationships. *Communication Studies*, 53(3), 234-251.
- Laursen, B., Coy, K. C., & Collins, W. A. (1998). Reconsidering changes in parent-child conflict across adolescence: A meta-analysis. *Child Development*, 69(3), 817-832. doi:[10.1111/j.1467-8624.1998.tb06245.x](https://doi.org/10.1111/j.1467-8624.1998.tb06245.x)
- Laursen, B., Finkelstein, B. D., & Betts, N. T. (2001). A developmental meta-analysis of peer conflict resolution. *Developmental Review*, 21, 423-449. doi:10.1006/drev.2000.0531

- Lee, R. M., Choe, J., Kim, G., & Ngo, V. (2000). Construction of the Asian American family conflicts scale. *Journal of Counseling Psychology, 47*(2), 211-222. doi:[10.1037/0022-0167.47.2.211](https://doi.org/10.1037/0022-0167.47.2.211)
- Lee, R.M. & Liu, H.-T.T. (2001). Coping with intergenerational family conflict: Comparison of Asian American, Hispanic, and European American college students. *Journal of Counseling Psychology, 48*, 410-419. doi: [10.1037/0022-0167.48.4.410](https://doi.org/10.1037/0022-0167.48.4.410)
- Lefkowitz, E. S. (2005). “Things have gotten better”. *Journal of Adolescent Research, 20*(1), 40 -63. doi:[10.1177/0743558404271236](https://doi.org/10.1177/0743558404271236)
- Levitt, M. J., Silver, M. E., & Santos, J. D. (2007). Adolescents in transition to adulthood: Parental support, relationship satisfaction, and post-transition adjustment. *Journal of Adult Development, 14*, 53-63. doi: 10.1007/s10804-007-9032-5
- Lewis, P., Forsythe, G. B., Sweeney, P., Bartone, P., Bullis, C., & Snook, S. (2005). Identity development during the college years: Findings from the West Point longitudinal study. *Journal of College Student Development, 46* (4), 357-373. doi: 10.1353/csd.2005.0037
- Llabre, M. M., Spitzer, S., Siegel, S., Saab, P. G., & Schneiderman, N. (2004). Applying latent growth curve modeling to the investigation of individual differences in cardiovascular recovery from stress. *Psychosomatic Medicine, 66*(1), 29-41. doi:[10.1097/01.PSY.0000107886.51781.9C](https://doi.org/10.1097/01.PSY.0000107886.51781.9C)

- Lottes, I. L. & Kuriloff, P. J. (1994). The impact of college experience on political and social attitudes. *Sex Roles, 31*, 31-54. doi: 10.1007/BF01560276
- Marshall, S. K., Liu, Y., Wu, A., Berzonsky, M., & Adams, G. R. (2010). Perceived mattering to parents and friends for university students: A longitudinal study. *Journal of Adolescence, 33*(3), 367-375. doi: 10.1016/j.adolescence.2009.09.003
- Mayselless, O., & Hai, I. (1998). Leaving home transition in Israel: Changes in parent-adolescent relationships and adolescents' adaptation to military service. *International Journal of Behavioral Development, 22*(3), 589 -609.
doi:[10.1080/016502598384289](https://doi.org/10.1080/016502598384289)
- McLean, K. C., & Thorne, A. (2003). Late adolescents' self-defining memories about relationships. *Developmental Psychology, 39*(4), 635-645. doi:[10.1037/0012-1649.39.4.635](https://doi.org/10.1037/0012-1649.39.4.635)
- Morton, L C. & Markey, P. M. (2009). Goal agreement and relationship quality among college students and their parents. *Personality and Individual Differences, 47*(8), 912. doi: [10.1016/j.paid.2009.07.015](https://doi.org/10.1016/j.paid.2009.07.015)
- Muthén, B. (2004). Latent variable analysis: Growth mixture modeling and related techniques for longitudinal data. In D. Kaplan (Ed.), *Handbook of quantitative methodology for the social sciences* (pp. 345–368). Thousand Oaks, CA: Sage.
- Muthén, L. K. & Muthén, B. O. (2000). How to use a Monte Carlo study to decide on sample size and determine power. *Structural Equation Modeling: A Multidisciplinary Study, 9*(4), 599-620. doi: [10.1207/S15328007SEM0904_8](https://doi.org/10.1207/S15328007SEM0904_8)

- Nylund, K. L., Asparouhov, T. & Muthén, B. O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling, 14*(4), 535-569. doi: [10.1080/10705510701575396](https://doi.org/10.1080/10705510701575396)
- O'Connor, T. G., Allen, J. P., Bell, K. L., & Hauser, S. T. (1996). Adolescent-parent relationships and leaving home in young adulthood. *New Directions for Child and Adolescent Development, 71*, 39-52.
- Orrego, V. O., & Rodriguez, J. (2001). Family communication patterns and college adjustment: The effects of communication and conflictual independence on college students. *Journal of Family Communication, 3*, 175–189.
- Perry, W. G. (1999). *Forms of ethical and intellectual development in the college years: A scheme*. San Francisco: Jossey-Bass. (Original work published 1970).
- Phinney, J., Kim-Jo, T., Osorio, S., & Vilhjálmsdóttir, P. (2005). Autonomy and relatedness in adolescent-parent disagreements: Ethnic and developmental factors. *Journal of Adolescent Research, 20*(1), 8–39. doi: 10.1177/0743558404271237
- Pillemer, K., Suito, J. J., Mueller-Johnson, K., Sechrist, J., & Heidorn, J. (2006). Parent-adult child relations. In R.Schulz (Ed.), *Encyclopedia of aging*. New York : Macmillan.
- Portes, A., & Rumbaut, R. (2001). *Legacies: The story of the immigrant second generation*. Berkeley: University of California Press.

- Reese-Weber, M. (2000). Middle and late adolescents' conflict resolution skills with siblings: Associations with interparental and parent-adolescent conflict resolution. *Journal of Youth and Adolescence*, 29(6), 697-711.
- Reese-Weber, M., & Bartle-Haring, S. (1998). Conflict resolution styles in family subsystems and adolescent romantic relationships. *Journal of Youth and Adolescence*, 27(6), 735-752.
- Renk, K., Roddenberry, A., Oliveros, A., Roberts, R., Meehan, C., & Liljequist, L. (2006). An examination of conflict in emerging adulthood between college students and their parents. *Journal of Intergenerational Relationships*, 4(4), 43-61. doi: 10.1300/J194v04n04_04
- Repetti, R. L., Taylor, S. E., & Seeman, T. E. (2002). Risky families: Family social environments and the mental and physical health of offspring. *Psychological Bulletin*, 128(2), 330-366. doi: 10.1037//0033-2909.128.2.330
- Rhee, S., Chang, J., & Rhee, J. (2003). Acculturation, communication patterns, and self-esteem among Asian and Caucasian American adolescents. *Adolescence*, 38, 749-768. doi: [10.1037/1099-9809.14.1.47](https://doi.org/10.1037/1099-9809.14.1.47)
- Rice, K. G. & Mulkeen, P. (1995). Relationships with parents and peers. *Journal of Adolescent Research*, 10(3), 338. doi: [10.1177/0743554895103003](https://doi.org/10.1177/0743554895103003)
- Roberts, R. E. L., & Bengtson, V. L. (1996). Affective ties to parents in early adulthood and self-esteem across 20 years. *Social Psychology Quarterly*, 59, 96-106.
- Rossi, A. & Rossi, P. (1990). *Of human bonding: Parent-child relations across the life course*. New York: Aldine de Gruyter.

- Rutter, M., Graham, P., Chadwick, O. F., & Yule, W. (1986). Adolescent turmoil: Fact or fiction? *Journal of Child Psychology and Psychiatry*, *17*(1), 35-56.
doi: 10.1111/j.1469-7610.1976.tb00372.x
- Salovey, P. & D'Andrea, V. J. (1984). A survey of campus peer counseling activities. *Journal of American College Health*, *32*(1), 262–265.
doi:10.1080/07448481.1984.9939581
- Sessa, F. M. & Steinberg, L. (1991). Family structure and the development of autonomy during adolescence. *Journal of Early Adolescence*, *11*(1), 38-55. doi:
10.1177/02724316911111003
- Sheeber, L., Hops, H., Alpert, A., Davis, B., & Andrews, J. (1997). Family support and conflict: Prospective relations to adolescent depression. *Journal of Abnormal Child Psychology*, *25*(4), 333-344. doi:[10.1023/A:1025768504415](https://doi.org/10.1023/A:1025768504415)
- Shek, D.T. (1998). A longitudinal study of the relations between parent-adolescent conflict and adolescent psychological well-being. *The Journal of Genetic Psychology*, *159*(1), 53-67.
- Sillars, A., Canary, D. J., & Tafoya, M. (2004). Communication, conflict, and the quality of family relationships. In A. L. Vangelisti (Ed.), *Handbook of family communication* (pp. 413–446). Mahwah, NJ: Erlbaum.
- Smetana, J. G. (1989). Adolescents' and parents' reasoning about actual family conflict. *Child Development*, *60*(5), 1052. doi:[10.1111/1467-8624.ep9676106](https://doi.org/10.1111/1467-8624.ep9676106)
- Sneed, J. R., Johnson, J. G., Cohen, P., Gilligan, C., Chen, H., Crawford, T. N., Kasen, S. (2006). Gender differences in the age-changing relationship between

- instrumentality and family contact in emerging adulthood. *Developmental Psychology*, 42(5), 787-797. doi: [10.1037/0012-1649.42.5.787](https://doi.org/10.1037/0012-1649.42.5.787)
- Steinberg, L., & Morris, A. (2001). Adolescent development. *Journal of Cognitive Education and Psychology*, 2(1), 55-87. doi:[10.1891/194589501787383444](https://doi.org/10.1891/194589501787383444)
- Suitor, J., & Pillemer, K. (1988). Explaining intergenerational conflict when adult children and elderly parents live together. *Journal of Marriage and Family*, 54, 1037-1047.
- Thornton, A., Orbuch, T. L., & Axinn, W. G. (1995). Parent-child relationships during the transition to adulthood. *Journal of Family Issues*, 16(5), 538 -564.
doi:10.1177/019251395016005003
- Tubman, J. & Lerner, R. (1994). Continuity and discontinuity in the affective experiences of parents and children: Evidence from the New York Longitudinal Study. *American Journal of Orthopsychiatry*, 64, 112-125.
- Tucker, C. J., McHale, S. M., & Crouter, A. C. (2003). Conflict resolution: Links with adolescents' family relationships and individual well-being. *Journal of Family Issues*, 24, 715–736. doi:10.1177/0192513X03251181
- Turrisi, R., Jaccard, J., Taki, R., Dunnam, H., & Grimes, J. (2001). Examination of the short-term efficacy of a parent intervention to reduce college student drinking tendencies. *Psychology of Addictive Behaviors*, 15(4), 366-372.
- Umberson, D. (1992). Relationships between adult children and their parents: Psychological consequences for both generations. *Journal of Marriage and Family*, 54(3), 664-674.

- Walker, A. J., Acock, A. C., Bowman, S. R., & Li, F. (1996). Amount of care given and caregiving Satisfaction: A latent growth curve analysis. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *51B*(3), 130-142. doi:[10.1093/geronb/51B.3.P130](https://doi.org/10.1093/geronb/51B.3.P130)
- Wang, M. & Bodner, T. E. (2007). Growth mixture modeling: Identifying and predicting unobserved subpopulations with longitudinal data. *Organizational Research Methods*, *10*, 635-656. doi:[10.1177/1094428106289397](https://doi.org/10.1177/1094428106289397)
- Wijsbroek, S. A., Hale, W.W., Van Doorn, M.D., Raaijmakers, Q. A., & Meeus, W. H. (2010). Is the resolution style 'exiting statements' related to adolescent problem behavior? *Journal of Applied Developmental Psychology*, *31*(1), 60-69. doi: 10.1016/j.appdev.2009.08.002
- Wray-Lake, L., Crouter, A. C., & McHale, S. M. (2010). Developmental patterns in decision-making autonomy across middle childhood and adolescence: European American parents' perspectives. *Child Development*, *81*(2), 636-651. doi: 0009-3920/2010/81020017.
- Zane, N. W. S., Sue, S., Hu, L. & Kwon, J. (1991). Asian-American assertion: A social learning analysis of cultural differences. *Journal of Counseling Psychology*, *38*(1),63-70. doi: 10.1037/0022-0167.38.1.63
- Zhang, Y. B. (2004). Initiating factors of Chinese intergenerational conflict: Young adults' written accounts. *Journal of Cross-Cultural Gerontology*, *19*, 299-319. doi: 10.1023/B:JCCG.0000044686.61485.94

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment*, 52(1), 30-41.

APPENDIX A

Study 2 Additional Analyses: Latent Growth Curve Analysis for $N = 120$

The analyses below use the portion of the Study 2 sample that was measured twice during the data collection period (e.g., T1-T2, T1-T3, & T1-T2-T3). Descriptive statistics for the parent-child conflict variable and covariates, age, race, and generation status, were examined including means, standard deviations, and frequency distributions. Seven students were excluded from the below analyses because they did not clearly indicate generation status or identified as adoptees.

I examined one- to five-class models of the frequency of parent-child conflict. A similar procedure as described in Study 2 was used for the analyses. The one-class model demonstrated decreasing conflict over the three points of data ($M_{T1} = 1.69$, $M_{T2} = 1.62$, $M_{T3} = 1.57$). Table 11 shows the fit indices for the two- to five-class models. The four-class model was selected as the optimal result based on the fit statistics and the hypothesized growth trajectories. As seen in the table, the SSABIC values decreased as the number of classes increased to the fifth class. The entropy for the four-class model was slightly lower, but still very good (i.e., above .80) according to recommended guidelines (Muthén, 2004) as compared to the three-class model. Additionally, the BLRT indicated better model fit for the four-class model over the three-class model. The five-class model also demonstrated good fit, however in two classes, the number of individuals in each class decreased to under 10 (i.e., 4% & 8%). Additionally, when examining the growth trajectories of the five-class model, there was not a meaningful difference in the trajectory of change over time (i.e., when examining the trajectories

graphically, it seemed one of the four-class growth trajectories split into two in the five-class model; the initial levels of conflict were different, but the pattern of change was the same). Ultimately the four-class model was chosen, because it captured the different growth trajectories in a meaningful way and was consistent with past research (Aquilino, 1997; Lefkowitz, 2005; Rossi & Rossi, 1990).

Table 11

Fit indices for two- to five- class growth trajectories for parent-child conflict

	2 Class	3 Class	4 Class	5 Class
SSABIC	523.47	486.27	457.98	423.43
Entropy	0.95	0.95	0.93	0.94
Posterior Probabilities	.97, .99	.99, .98, .91	.93, .98, .99, .96	.91, .96, .97, .99, .97
% count in class	77, 23	75, 7, 18	16, 10, 14, 73	15, 4, 9, 8, 63
BLRT	<0.001	<0.001	<0.001	<0.001

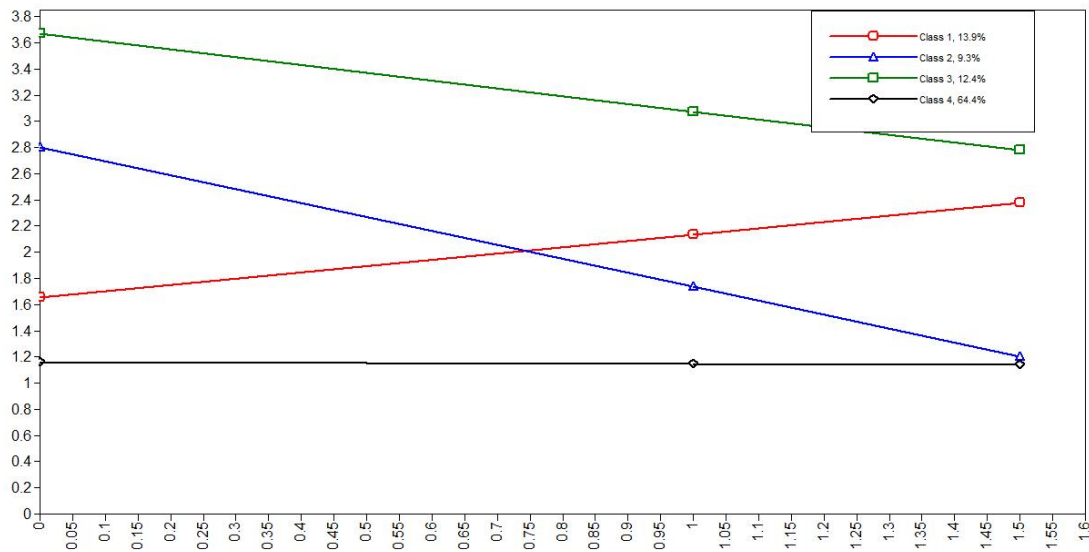
Note. Covariates included in model were age, race (White = 0, All other = 1), and generation status (3+ generation = 0, 1st/2nd generation = 1).

As seen in Figure 3, the four-class model revealed four distinct growth trajectories: 1) low stable parent-child conflict (class 4), 2) increasing parent-child conflict (class 1), 3) moderate to low decreasing parent-child conflict (class 2), and 4) high to moderate decreasing parent-child conflict (class 3). The largest portion of the sample ($n = 75$, 66.4%) fell into the low stable parent-child conflict category ($M = 1.16$) with a pattern of stable growth over time (slope = -0.02, n.s. different from zero). The second largest portion of the sample ($n = 17$, 13.9%) fell into the increasing parent-child

conflict category ($M = 1.65$) with a pattern of significantly increasing growth over time (slope = 0.48, $p < .01$). The third largest portion of the sample ($n = 14$, 12.4%) fell into the moderate to low decreasing parent-child conflict category ($M = 2.78$) with a pattern of significantly decreasing growth over time (slope = -1.06, $p < .01$). The final portion of the sample ($n = 10$, 9.3%) fell into the high to moderate parent-child conflict category ($M = 3.67$) with a pattern of significantly decreasing growth over time (slope = -0.59, $p < .01$).

Figure 3

Four-class model of parent-child conflict growth trajectories for college students ($n = 113$)



The model results also revealed the influence of the covariates (age at T1, race, and generation status) on individual class membership in the four latent growth trajectories. Generation status was not a significant influence on individual class membership in the latent trajectories using class 4 as a reference group. Race significantly predicted individual class membership in latent class 2 ($\beta = 1.91$, $p < .05$)

using class 4 as a reference group and age marginally predicted individual class membership in latent class 2 ($\beta = -0.32, p = .05$) using class 4 as a reference group. In terms of odds ratios, individuals classified as non-White were more likely to fall into class 2 (OR = 6.74) and those who were older were less likely to fall into class 2 (OR = 0.73⁵) than class 4.

Post-hoc analyses with latent classes

Once latent class memberships were established, I could explore how these different growth trajectories related to family and psychological well-being variables. In order to corroborate the results from the LCGA, I first tested group differences on the parent-child conflict variable at T1. One-way ANOVAs with Bonferroni-corrected post-hoc tests were performed, and as expected, significant group differences were found ($F[3] = 198.48, p < .01$). All latent classes significantly differed from each other in terms of parent-child conflict levels at T1. See Table 12 for effect sizes and means.

Table 12

Effect sizes (Cohen's d) and means for the four latent classes on parent-child conflict

	1	2	3	4
1. Latent class 1	--			
2. Latent class 2	2.85	--		
3. Latent class 3	3.10	1.37	--	
4. Latent class 4	1.20	6.15	4.48	--
<i>Mean</i>	1.66	2.86	3.63	1.17

Note. All latent classes significantly differed from each other at the $p < .01$ level.

Using chi-square tests, group differences on demographic variables at T1 were also tested with the latent classes. Table 13 provides a summary of the results. No

⁵ Marginally significant ($p = .05$).

significant group differences were found on age ($\chi^2 [3] = 3.43, p > .05$), class standing ($\chi^2 [12] = 13.04, p > .05$), gender ($\chi^2 [3] = 6.85, p > .05$), or by patterns of missing data ($\chi^2 [6] = 8.43, p > .05$). Significant group differences were found for race ($\chi^2 [3] = 27.53, p < .01$), such that White students were less likely than expected to fall in latent class 1 (ASR = -2.7) and 3 (ASR = -3.8) and more likely than expected to fall in latent class 4 (ASR = 5.1). The opposite pattern was found for students of color. In terms of generation status, significant group differences were found ($\chi^2 [3] = 36.86, p < .01$) such that students who were third-generation or greater were less likely than expected to fall in latent class 1 (ASR = -2.7) and 3 (ASR = -5.0) and more likely than expected to fall in latent class 4 (ASR = 5.0). The opposite pattern was found for students who were 1st or 2nd generation.

Table 13

Results of chi-square analyses to test group differences of the 4-class latent growth trajectories by demographic variables

	χ^2 (df)	ASR	Group Differences
Age	3.43 (3)	--	--
Class Standing	13.04 (12)	--	--
Gender	6.85 (3)	--	--
Race	27.53 (3)**	-2.6, -3.8 5.0	White < SOC in class 1, 3 White > SOC in class 4
Generation Status	36.86 (3)**	-2.7, -5.0 5.0	3+ gen < 1/2 gen in class 1, 3 3+ gen > 1/2 gen in class 4
Patterns of Missing Data	8.43 (6)	--	--

Note. ** indicates $p < .01$. Comparison for patterns of missing data include T1-T2, T1-T3, & T1-T2-T3.

Using one-way ANOVAs, group differences on psychological distress and perceived family support at T1 were tested with the latent classes. Table 14 provides a

summary of the results. Significant group differences were found on psychological distress at the overall model level ($F[3] = 3.33, p < .05, \eta_p^2 = .08$), but not at the post-hoc group comparison level. Significant group differences were found on perceived family support ($F[3] = 7.47, p < .01, \eta_p^2 = .17$). Students in latent class 4 ($M = 4.15$) reported more perceived family support than students in latent class 2 ($M = 3.15, d = 1.05$) and 3 ($M = 3.16, d = 1.05$).

Table 14

Results from one-way ANOVAs for psychological distress and perceived family support

Outcome Variable	<i>F</i>	<i>p</i>	η_p^2	Group Comparisons	Means	Cohen's <i>d</i>
Psychological Distress	3.33	.02	.08	1 vs. 2	--	--
				1 vs. 3	--	--
				1 vs. 4	--	--
				2 vs. 3	--	--
				2 vs. 4	--	--
				3 vs. 4	--	--
Perceived Family Support	7.47	<.01	.17	1 vs. 2	--	--
				1 vs. 3	--	--
				1 vs. 4	--	--
				2 vs. 3	--	--
				2 vs. 4	3.2 vs 4.2	1.05
				3 vs. 4	3.2 vs 4.2	1.05

APPENDIX B

Qualitative Coding Manual

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CODING MANUAL

This is intended for use in coding open-ended responses for students' perceived differences in values with parents. This manual was developed specifically for responses from College of Liberal Arts (CLA) students surveyed during the CLA Experience Survey in Spring 2009 (Wave 2, common questions, age < 30, $N = 2,495$). They were responding to the following prompt: "Describe a situation in which differences in values occurred between you and your parent(s). Be sure to mention who was involved, what values were different, and how the situation ended."

Types of conflict

For each response, assign only one of the following sub-themes.

Sub-Themes:

Politics and Social Values (Code # 1)

Responses in this sub-theme capture conflict centered around differing political beliefs and social values. The reason for the conflict may be directly stated as political or social values, or may describe conflicting belief systems using language related to politics such as "conservative," "moderate," "liberal," "right wing," or "left wing."

Example: “My dad and I bump heads a lot about politics. He is very conservative, and I am more moderate on certain issues.”

Financial (Code # 2)

Responses in this sub-theme capture conflict stemming from differing financial priorities. Responses directly mention conflict over finances, expenses, and earnings. Academic conflict is also included in this sub-theme only if the responder states that the academic difference was directly related to money (eg., “a steady paycheck,” “accumulating debt,” “salary”).

Examples: “My parents have different ideas about what I should do after school. I would like to travel, and beginning a career is less important to me than it is to them. They seem to be more interested in how much I will earn than I am.”

“I moved to MN from MI and my parents wanted me to come home for summers because they couldn’t afford to pay my rent, but I found a job and was able to stay.”

Educational (Code # 3)

Responses in this sub-theme capture conflict due to academic decisions. These responses may include, but are not limited to differences over major in college, choice of college, taking time off before continuing education, studying abroad, or coursework. The main stated conflict does not include finances as part of the conflict over academics as these responses would belong in the financial sub-theme.

Example: “Father thinks I should do business, may look down on CLA degree.”

Lifestyle (Code # 4)⁶

Responses in this sub-theme capture conflict caused by different beliefs about lifestyle. Lifestyle decisions include priorities that are not academic or financial, but based on other values (eg., concern about the environment, alcohol consumption, living situations).

Example: “My parents are very conservative, and think drinking is horrible, and so when they ask me if I drink I feel like I have to say no even though I believe once you are in college it’s not a big deal.”

Romantic Relationships (Code #5)

Responses in this sub-theme include conflict stemming from romantic relationships. This category encompasses conflict due to sexual activity, living with a romantic partner, or current romantic situation of the responder.

Example: “ My significant other and I have been dating for over 4 years and would like to live together to save on rent; however, my parents are STRONGLY opposed to this.”

Religion (Code # 6)⁷

Responses in this sub-theme encompass conflict due to religious beliefs. This sub-theme also includes conflict over religious practices such as prayer or attendance of religious services.

⁶ The following “trump rule” should apply to the data when several categories are mentioned in one response: Lifestyle > Educational > Financial.

⁷ The following “trump rule” should apply to the data when several categories are mentioned in one response: Religion > Politics & Social Values

Example: "My father and I do not see eye to eye about religion; He is a Christian, and I am an atheist."

No Conflict Reported (Code # 7)ⁱ

Responses in this sub-theme contained no reported conflict with parents for various reasons such as parental absence, or a reported familial relationship with little to no conflict.

Example: "I am very fortunate that my parents and I agree on most things."

Uncodeable (Code # 8)

Responses in this sub-theme did not directly or clearly answer the prompt.

Examples: "I'm not sure this is an appropriate question."

"I'm an adult, I haven't lived with my parents for 20 years."

Did not respond (Code #9)

Responses in this sub-theme were left blank.

Other (Code #10)

Responses in this sub-theme did not adequately fall into other categories due to various reasons.

Example: "Differences in how to deal with conflict. I am more flexible than my mother and am more willing to compromise than she is. When I get in arguments with my friends, my mother takes my side while I try to see where they are coming from. The situation is still up in the air."

GLBT orientation (Code #11)

Responses in this sub-theme include conflict stemming from GLBT orientation only.

Student must explicitly state value differences in sexual orientation between themselves and their parents. If student mentions other political and social values along with sexual orientation, there response should be coded under the politics and social values sub-theme.

Example: "I'm gay, they weren't a fan of that, now we don't talk about it."

Categories/Themes:

The above sub-themes were organized into four themes and two categories according to the following chart:

Categories	Themes	Sub-themes
<i>Information</i>	<i>Social Issues</i>	<i>Political/Social Beliefs</i>
		<i>Religious Values</i>
	<i>Future Success</i>	<i>Financial Priorities</i>
		<i>Academic-related decisions</i>
	<i>Lifestyle</i>	<i>Substance use</i>
		<i>Romantic Relationships</i>
<i>Life Choices</i>		
<i>No Information</i>	<i>Not Enough Information</i>	<i>Did not directly/clearly answer prompt</i>
		<i>Blank</i>
		<i>No conflict</i>

Resolution Status of Conflict

For each response, assign only one of the following five sub-themes.

Sub-themes:

Ongoing (Code # 1)

Responses in this sub-theme contain those stating that the student did not change their behavior to what the parent(s) wanted, and because of this, the aforementioned conflict is still ongoing and no solution has been reached. Responses that state or imply student is ignoring or avoiding conflict should be coded in this sub-theme.

Examples: "My parents think that the earth is flat because it says so in the bible, but I think the earth is spherical. It is hard to get past this."

"When applying for the National Student exchange, my family told me it would be too expensive. I valued the experience so I applied anyway and now I'm going to Hawaii without their help."

Resolution (Code # 2)

Responses in this sub-theme contain those that state the student and parent(s) who were involved in the conflict found some type of resolution which resulted in the ending of said conflict. Responses that in which student and parent(s) have decided to "agree to disagree" should be coded in this sub-theme.

Examples: "My parents weren't supporting when I chose to study abroad. However, I made the decision and decided to stick by it. I eventually brought them around to my point of view."

"I developed more liberal social and political values than my parents. The first few years my mom and I would argue about them nearly every time I came home to visit. I think we finally learned that our differences weren't going to change in the near future, and so we are more diplomatically discussing contentious topics that may arise."

Conformed (Code # 3)

Responses in this sub-theme contain those where the student decided to change their current behavior to be consistent with the parent(s) values.

Example: "My parents did not want me to come home on weekends so often. I took in their advice and came home less."

Status not specified (Code # 4)

Responses in this sub-theme contain those that did not specifically state what was currently happening in regards to the conflict.

Example: "Helping organize a bisexual conference whereas my parents have no idea about the GLBT community and were concerned how it would affect me."

Not applicable (Code # 5)

Responses in this sub-theme contain those that did not answer the prompt.

Examples: "I'm not sure this is an appropriate question."

"Nothing that was too important."

Categories/Themes:

The above sub-themes were organized into four themes and two categories according to

the following chart:

Categories	Themes	Sub-themes
<i>Information</i>	<i>Resolved</i>	<i>Resolution</i>
		<i>Conformed</i>
	<i>Unresolved</i>	<i>Ongoing</i>
<i>No Information</i>	<i>Unknown</i>	<i>Not applicable</i>
	<i>Not specified</i>	<i>Status Not Specified</i>

ⁱ When Theme 1 is coded as #7 or #8, Theme 2 and 3 should automatically be coded as #5.