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College Student Parents: Stress, Role Conflict, and Coping

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COLLEGE STUDENT PARENTS:

STRESS, ROLE CONFLICT, AND COPING

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This study used survey data to describe demographic characteristics, stress, role conflict, coping, and resource use of undergraduate students who are parents (student parents) and compared student parents to non-parent students. Participants included 28 student parents and 28 non-parent students at a mid-sized university.

Results showed that student parents were predominantly Caucasian females, who were full-time students, cohabitating with a partner, and identified themselves developmentally as adults. They also reported low incomes, high rates of employment, and elevated levels of psychological distress. Few resources were available for parenting needs and of those available, use was low. Despite these stressors, role conflict and parenting stress were low, which may be explained by positive coping and high levels of social support and role enrichment. Age was an important distinction for student parents such that younger students reported having younger children and higher levels of parenting stress and school-family conflict. Marital status was also important; cohabitating student parents reported higher incomes and trends suggested they may also experience fewer depression symptoms and are more likely to be satisfied in romantic relationships.

Relationships between role conflict, stress, and coping were also revealed for student parents. Specifically, higher levels of parenting stress were positively related to general psychological distress, depression, and school-family conflict. Additionally, higher levels of school-family conflict were predictive of depression, while work-family conflict was positively

related to anxiety. Furthermore, problem-focused coping was predictive of lower levels of depression and general psychological distress. In contrast, emotion-focused coping was predictive of higher levels of depression and psychological distress. Student parents, however, reported using problem-focused coping least often and emotion-focused coping most often.

When compared to non-parents, student parents were generally older and more likely to be cohabitating, identify as an adult, be a part-time student, have a higher GPA, and be employed more than 20 hours per week than non-parents. Student parents also reported lower levels of psychological dysfunction and dysfunctional coping. This suggests that while student parents may have increased responsibilities than their non-parent peers, the parents who remain in college are generally functioning very well when compared to their non-parent peers.

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CHAPTER I

INTRODUCTION

It is clear that parenting is a stressful experience that can create distress and anxiety in addition to joy (Deater-Deckard, 2004). The responsibility of a child is often accompanied by changes in lifestyle, late nights taking care of sick or upset children, and the need to rearrange schedules in order to attend important events for a child. In fact, many people have suggested that parenting is like a full time job (DeMeis & Perkins, 1996). Attending college is also often a full-time job that includes changes to ones' lifestyle, such as staying up late to finish papers or other assignments, and rearranging schedules in order to attend class or important out-of-class activities. Given the high levels of responsibility involved in each of these roles, there is no question that being a college student and a parent concurrently can be extremely stressful. For college students who are parents (hereafter referred to as student parents), what is less clear is how each role contributes to their stress and how stressors are different from those experienced by both college students who are not parents, as well as parents who are not college students.

The small amount of available research regarding student parents has suggested that accommodations should be made for individuals balancing multiple roles. Examining the stress that student parents experience more closely, however, is essential for determining how this population can best be helped to navigate their multiple roles successfully. Given that an estimated 16 to 36% of undergraduate students are currently parents (Horn, Nevill, & Griffith, 2006; Horn, Peter, & Rooney, 2002; US Department of Education, 2009) and that this population may be more likely to discontinue schooling prematurely than peers without children (Anderson, 2001; Branscomb, 2006; Gerrard & Roberts, 2006; Horn et al., 2006), a better understanding of whom this population is comprised and how student parents fit into the general student population is necessary. The need to better understand this population may be particularly salient

for universities that need to maintain high levels of enrollment and should, therefore, help student parents to navigate their multiple roles in a way that will allow them to complete their education.

CHAPTER II

REVIEW OF THE LITERATURE

Who are Student Parents?

In order to begin to understand how to help student parents manage multiple roles, it is important to first gain a better understanding of the composition of this population. Research has suggested demographic factors that may help researchers to describe this population in a way that may help to differentiate the needs of this group.

Traditional versus Nontraditional Status

The available research regarding student parents typically examines adolescent parents or nontraditional college students who have children. Research regarding adolescent parents defines this population as individuals under the age of 17 who have children or are pregnant (Larson, 2004; Ketterlinus, Lamb, & Nitz, 1991). Adolescent parents are very likely to experience high levels of economic stress and parenting stress, typically at higher rates than the general population, and one study showed that over 40% do not have a high school diploma by the time their first child is 3.5 years old (Larson, 2004). Adolescent parents will not be a major focus of the current literature review, but are important to consider given that approximately 30% of adolescent parents may continue into higher education after high school (Larson, 2004) and thus, may be part of the "traditional" college student population that will be an important aspect of this review.

The outlook for nontraditional college students, in general, is in stark contrast to the dismal outcomes often reported for adolescent parents. Nontraditional students are generally defined as students over the age of 23 or 25 (Chartrand, 1990; Carney-Crompton & Tan, 2002; Home, 1998; Medved & Heisler, 2002; Morris, Brooks, & May, 2003; Quimby & O'Brien, 2006) and are frequently individuals who have families, consistent jobs, and other life

responsibilities aside from education (Chartrand, 1990; Donaldson & Graham, 1999; Giancola, Grawitch, & Borchert, 2009; Morris et al., 2003; Quimby & O'Brien, 2006). Traditional college students fall between the age ranges of adolescent parents and nontraditional students, typically between 18 and 23 years old (Branscomb, 2006; Carney-Crompton & Tan, 2002; Morris et al., 2003), and comprise a majority of the college population. These students may or may not be employed while in school and may or may not have significant responsibilities outside of their educational role. Identifying characteristics that distinguish these three groups, particularly traditional and nontraditional students, may provide helpful information toward understanding how the relationship between parenting and education impacts stress levels and coping.

Research regarding traditionally-aged student parents is lacking, though it is not clear if this is a result of difficulty identifying individuals who fit such criteria or a dearth of general research into this population. The few available studies suggest that approximately 10-11% of traditional students, defined as individuals 18-23 years old, are also parents (Horn et al., 2006; Horn et al., 2002). This information implies that there are a significant number of student parents who could be considered traditional students, though they may be difficult to identify for research purposes. While traditional students are generally believed to make up the majority of the college population, it is estimated that between 19% and 53% of undergraduate students are considered nontraditional (Chartrand, 1990; Donaldson & Graham, 1999; Giancola et al., 2009; Medved & Heisler, 2002; US Department of Education, 2008). Research suggests several distinctions between traditional and nontraditional students that could be quite significant in determining how to best assist and understand student parents.

Age. The first important distinction between traditional and nontraditional students is that nontraditional students are, by definition, older than traditional students. This difference in age is also likely to be linked to a difference in developmental stage, understanding of the world, and

responsibilities outside of the school setting. In fact, in a model used to explain the success of nontraditional students, it was suggested that prior life experience, adult cognition, having multiple roles through which to experience life, different psychosocial value orientations, and the use of the classroom as a "springboard" for further learning were important factors (Donaldson & Graham, 1999). These factors are likely to become more developed over time and have not been identified as important for or applicable to traditional undergraduate students. Additionally, research suggests that student age has a significant negative relationship with academic worry, such that older students are likely to report lower levels of concern about their academic performance (O'Leary, Hughes, & Salters, 2009). Despite lower levels of academic stress, older students may experience more overall stress than younger students, as older students are more likely than younger students to have multiple sources of stress, such as spouse, a family, and a job (Branscomb, 2006). This suggests that there may be important differences in stress between younger, traditional student parents and older, nontraditional student parents that should be further examined.

Developmental level. A construct that is related to age and also provides an important distinction between traditional and nontraditional students is developmental level. The theory of emerging adulthood that suggests that many individuals in Western cultures go through a stage in development that lasts from approximately age 18 to as late as age 29 that is characterized by exploration, instability, a self-focus, a feeling of being "in-between," and seemingly endless possibilities (Arnett, 2004, 2006). This group cannot be classified as "late adolescence" or "adulthood," as both adolescence and adulthood have connotations that may not apply to individuals in this developmental stage, and thus, is termed "emerging adulthood." The exploration of one's own identity is a central feature to this stage of development (Arnett, 2004). While identity exploration as a way of understanding one's own place in the world is an

important part of adolescence, identity exploration in terms of exploring various possibilities for one's life has been shown to continue through the late teens and into the early 20's for most individuals (Arnett, 2004; Arnett, 2006). Identity exploration in emerging adulthood often focuses on romantic relationships and work, both of which become more serious and focused during emerging adulthood as compared with adolescence. As a person moves from adolescence to emerging adulthood, the desire and need to support oneself financially and emotionally also becomes clearer and more salient. This exploration of identity and search for a significant other and a job in which one is happy is often wrought with stress and instability (Arnett, 2004). Such an exploration is completed by the time an individual reaches adulthood, as nontraditional students typically have done.

The theory of emerging adulthood suggests that this life stage is not experienced by all cultures and the length of time a person spends in emerging adulthood can vary drastically (Arnett, 2004). Additionally, unlike many other developmental stages, there is no one marker of the beginning or end of emerging adulthood. Instead, the change from emerging adult to adult is more of a personal feeling that may be marked by a variety of different events. The idea of emerging adulthood as a developmental stage is a fairly recent one because "the timing and meaning of coming of age – that is, reaching full adult status – is different today than it was 50 or 100 years ago, different in fact than it has ever been before" (Arnett, 2006, p. 4). In general, the age of marriage and the age of first childbirth have risen as individuals in Western cultures have begun to take more time for education (Arnett, 2006). The life of a traditional student, who is likely to be in emerging adulthood and thus exploring many possibilities, is going to be much different than the life of a nontraditional student who has already settled down and is not feeling like he or she is facing endless life possibilities.

For traditional student parents who do not yet feel like they have reached adulthood, merging raising a child with their own exploration, feelings of instability, and desire to explore possibilities could create unique difficulties that are not experienced by nontraditional students. In fact, researchers have suggested that some parents may experience higher rates of parenting stress as they cope with their own personal physical, social, emotional, and identity development during their transition from adolescence to adulthood (Deater-Deckart, 2004). The added responsibility of college in addition to parenting seems to compound the difficulties experienced during emerging adulthood, especially for students actively engaged in identity exploration, who experience more stress in trying to manage their multiple roles than students who are not exploring their identity (Branscomb, 2006). The same study found that students who felt as though they had reached adulthood, and thus were engaging in less identity exploration, were more likely to use strategies that help them to effectively navigate their multiple life roles and responsibilities with less stress, such as planning ahead, prioritizing, and setting aside family time. While this research shows that identity exploration in emerging adulthood is related to stress, it is also likely that attempting to manage multiple roles during emerging adulthood will limit the amount of identity exploration that is possible for individuals, including exploration of romantic relationships and education or employment (Lefkowitz & Gillen, 2006). This research suggests that extensive identity development during emerging adulthood and the demands of parenting and school may have a substantial impact on parenting stress for traditional college students, while having less of an impact on nontraditional students who may already feel like adults and adolescent mothers who may yet not be engaging in the extensive identity exploration involved in emerging adulthood.

Reasons for attending college. In addition to being in a different life stage, nontraditional students also attend college for a wider variety of reasons than do traditional

students. Both traditional and nontraditional students report use of extrinsic motivators, such as obtaining a higher paying job and advancing work positions, as reasons for completing their education (Carney-Crompton & Tan, 2002; Morris et al., 2003). Nontraditional students, however, also report intrinsic motivators, such as learning, personal growth, and enrichment, as major reasons for furthering their education (Chartrand, 1990; Morris et al., 2003; Sander, 2008; Taniguchi & Kaufman, 2007; U.S. Department of State, 2008; Wiebe & Harvey, 1997). For many traditional students, intrinsic motivation for higher education may be lower because the transition directly from high school to college may be a logical and seemingly natural transition accompanied by much extrinsic motivation, including family pressures and the prospect of getting a high paying job upon graduation. For nontraditional students, intrinsic motivation may be particularly important, as these students have more life roles, receive less financial and other tangible forms of support, such as child care and housing (instrumental support), and receive less emotional support than younger students in the same position (Branscomb, 2006; Carney-Crompton & Tan, 2002). This difference in motivation suggests that nontraditional students may be more likely to spend time on their education in order to maximize their learning, while traditional students may be more likely to do just enough to be successful. Despite the reason for their enrollment in higher education, nearly all research on nontraditional students suggests that they tend to have higher and more consistent grades than do traditional students (Carney-Crompton & Tan, 2002; Morris et al., 2003; O'Leary et al., 2009). This suggests that one's personal investment in his or her education has a significant impact on his or her achievement. The differences in motivation for college attendance between nontraditional and traditional students may also influence their stress and coping patterns.

Coping. Given potential differences in motivation, support, and lifestyle, it is not a surprise that nontraditional students appear to use more successful and varied coping strategies

than do traditional students (Morris et al., 2003). Task-oriented coping strategies focus on solving the problem causing stress, whereas emotion-focused strategies center on managing emotional responses to a problem causing stress. Relying solely on a few coping strategies, especially strategies that are emotion-focused rather than task-oriented, is significantly related to higher levels of stress in general and to parenting stress (Deater-Deckard, 2004). The tendency for nontraditional students to use more coping skills as compared to traditional students could be a result of age-related development, an increased need to develop appropriate coping strategies, or other factors related to being a traditional or nontraditional student. Such differences in coping, as well as levels of motivation, also suggest that there may be different mechanisms through which student parents of traditional versus nontraditional status manage and understand their college experience.

Summary. Overall, nontraditional and traditional students appear to differ in some very significant ways that may impact how they function as students and as parents. Nontraditional students are older than traditional students and are likely, therefore, to be in a different life stage and to have substantially more life experiences compared to traditional students. Nontraditional students are likely to be in the stage of adulthood in which they may have a family, have had full-time employment, and may have many other life roles. Additionally, nontraditional students are likely to have become comfortable with their own identity. In contrast, traditional students may be in the emerging adulthood stage, which is characterized by instability and exploration. Having a child and going to school in each of these developmental stages could lead to very different outcomes. Differences in life stages may also contribute to nontraditional students' intrinsic and extrinsic motivations for attending college, while traditional students may report only extrinsic motivations. Finally, nontraditional students tend to use a wider variety of coping skills than traditional students, which may be further associated with their development and age.

Such differences between nontraditional and traditional appear to be significant and could have implications for how they function within the academic and family roles.

Gender

In addition to traditional or nontraditional student status, a second important, but understudied, aspect of student parenthood is gender. Most research on student parents to date has focused on mothers, with little emphasis on student parent fathers. It is unclear if this focus is due to a lack of student parent fathers, given that females outnumber males in the student parent population at a rate of approximately 2 to1 (Horn et al., 2006), or to the general trend in parenting research of focusing on mothers. While it is important to continue to gather information on student mothers, as overall information is limited regardless of gender, the experience of student parent fathers may be unique from that of student parent mothers and should, thus, also be examined. In one study of married students, male students with children felt less successful than male students without children (Anderson, 2001). While the same significant effect existed for mothers, it was not as strong. Additionally, while student fathers had higher levels of parental distress the more hours they were involved in school each week, this effect was stronger for student mothers. At the same time, student fathers may feel less successful and more stressed overall as a function of time spend at school compared to student mothers. Student fathers' academic plan, however, may be impacted less by having children compared to student mothers. In the same study of married parents, 40% of mothers reported a change in graduation date after the birth of their child, while only 25% of fathers reported a change in their graduation date (Anderson, 2001). This suggests that male and female student parents may be impacted differently by parenting responsibilities and by parenting stress.

In the general parent population, mothers and fathers have equal levels of parenting stress and anxiety about parenting. Deater-Deckard and colleagues (1994; 1996) examined parenting

stress in married couples and found a clear similarity in levels of stress between both members of the couples. The authors point out that despite the similar levels of parenting stress among men and women in the same family, it is not clear if this stress has differential impacts on the coping strategies used by mothers and fathers for family related difficulties or how this stress might differentially impact the self-concepts and the daily life of mothers and fathers.

Gender differences have also been found among parents in general with regard to levels of support. Specifically, level of parenting stress in married mothers has a significant negative relationship with levels support from extended family members, while this is not the case for married fathers (Trute, Worthington, & Hiebert-Murphy, 2008). Among single parents, fathers tend to report more support of a higher quality than single mothers (Hilton, Derochers, & Devall, 2001), but single fathers' parenting behaviors may be more negatively impacted when they do not receive this support (Leinonen, Solantaus, & Punamäki, 2003). In addition, age may also impact gender differences in parenting stress. Overall parenting stress is elevated for both adolescent mothers and mothers over the age of 30, while fathers over the age of 30 report less stress than younger fathers report (Deater-Deckard, 2004), suggesting that traditional student parents may be at greater risk for parenting stress compared to nontraditional student parents.

Although non-student mothers and fathers may experience similar levels of parenting stress (Deater-Deckard et al., 1994, 1996), gender differences are apparent in other domains (Trute et al., 2008). Much research has focused on gender differences in learning strategies (Virtanen & Nevgi, 2010) and sexual behavior (Hittner & Kryzanowski, 2010; Randolph, Torres, Gore-Felton, Lloyd, & McGarvey, 2009), which may be relevant to student parents as they try to meet academic, family, and personal obligations. Research on college students without children has not found any gender differences in many areas that may be relevant to student parents and stress, including no differences in life-change stress, levels of college stress, use of coping

strategies, or depressive symptoms (Dyson & Renk, 2006). Given such research, it appears that overall, gender differences may exist within the student parent population that are unique as compared to the non-student parent population and the non-parent student population.

Additional Factors

Ethnicity, current year in school, and whether a student is a first generation college student are demographic factors that may help to differentiate groups of student parents with different needs. Branscomb (2006) found that parents who are ethnic minorities were less likely to receive instrumental support from their family of origin to support their college education. Stress may be further compounded for students who are in their first or second year of study, as these students are also still likely to be experiencing the stress related to adapting to college life. Such an adaptation may be particularly difficult for first generation students. Research has suggested that first generation students who are parents are less likely to receive support from their family and less likely to receive accurate factual information about the college experience. Additionally, these students are less likely to have a family that values the student role. This lack of support, lack of accurate information, and a devaluing of the student role can lead to guilt and more strain for students that are already experiencing significant levels of stress (Branscomb, 2006). Given the impact that each of these demographic factors appears to have on stress and the college experience, each factor is important to understanding student parents and their needs within the academic environment.

Summary

In order to study the student parent population, it is important to determine the composition of this group of people. Research has suggested that in attempting to identify and understand this population, it is important to examine traditional versus nontraditional status, gender, ethnicity, year in school, and whether a student is a first generation college student.

Traditional or nontraditional status has gotten much research attention with regard to differences in age, developmental status, and motivations among students. Each of these areas of study has provided useful information in understanding the student parent population, as well as the student population in general. Gender has shown further promise in helping to fully understand the student population and the complex differences that may exist within the student parent group. Finally, ethnicity, year in school, and generational status also may provide useful information about the population of student parents and the outlook that this group may have on college education and parenting. There appear to be multiple subpopulations of student parents that share some concerns and needs with the general student population and with the population of parents that are not students.

Stress and Role Strain

Sources of Stress

The types of stress that student parents experience and the way this stress impacts their lives may be unique in comparison to non-parent students and non-student parents. Understanding the nature and consequences of student parent stress may be difficult, however, as there are many different domains in which student parents can, and do, experience significant stress, including parenting, romantic relationships, education, and employment. Each of these domains represents an important aspect of the emotional, social, and professional lives of student parents, but each can also increase stress in unique ways. Stress is further compounded when the demands of the stressors in each domain are in conflict.

Parenting. One primary source of both stress and joy for student parents is family obligations. Parents are responsible for the physical needs of their children, as well as their emotional and psychological needs, on a daily basis. Each of these obligations creates a certain degree of stress that is important to explore.

Parenting stress. There is no doubt that being a parent can be a stressful experience. The "aversive psychological and physiological reactions arising from attempts to adapt to the demands of parenthood" (Deater-Deckard, 2004, p. 6) are defined as parenting stress. Experts agree that parenting stress involves a number of mechanisms and processes between a parent, a child, and outside sources. Specifically, parenting stress involves a stressor related to a child or the child-parent relationship, some degree of cognitive appraisal, the attempted use of coping mechanisms, and the final stress reaction that can be measured. It is also agreed that daily hassles, as well as larger stressors, can have a negative impact on parenting stress and the parent-child relationship (Deater-Deckard, 2004). Parenting stress does not, however, appear to be related to parenting behavior in general. Neither positive parenting behaviors, such as praise, nor negative parenting behaviors, such as punitive punishment, can predict parenting stress (Rothermel, 2006). Parenting stress is significantly related to the relationship between parent behavior and child behavior, suggesting that negative parenting behaviors may have a reciprocal relationship with negative child behaviors that could result from and compound parenting stress (Rothermel, 2006). Child misbehavior and attempting to meet the needs of a child are two of the major causes of parenting stress (Deater-Deckard, 2004). Reduction of parenting stress may be helpful in creating a healthier relationship between children and parents.

Among student parents, levels of parenting stress have been found to be elevated (Branscomb, 2006). Among the general population, approximately 10% of parents report similar levels of parenting stress (Abidin, 1995). In contrast, scores are at clinically significant levels for 23-30% of adolescent parents (Larson, 2004). Adolescent parents may become college student parents; therefore, this information suggests that parenting stress may be elevated among student parents, especially those who are traditionally-aged. Additionally, because younger parents are often unaware of the stress and responsibility involved in being a parent before they have

children (Ketterlinus et al., 1991), they may be at greater risk of developing significant parenting stress.

Child factors. While all children create some degree of parenting stress, child-related factors such as age, gender, and disability can create further difficulties for parents in coping with daily life. Younger children are more demanding and require more care and supervision, thus creating more stress within a family (Carney-Crompton & Tan, 2002; Deater-Deckard, 2004). For student parents of children under the age of five, family experiences had less of a positive impact on the student's academic development than it did for students whose children were six year old or older (van Rhijn, 2009). Child gender may also have an impact on stress, as one study showed that student parents of boys faced greater financial challenges than parents of girls and they approached instructors for help more often (Branscomb, 2006), although the reasons are unclear and no explanations have been suggested. It is possible that parents of boys may experience greater financial challenges as their children age because boys are often involved in a variety of extracurricular activities that may be expensive, while opportunities for girls may be more limited; however, there is no data to suggest that this is the case. It has been clearly established that a child's physical and/or emotional disabilities further increases stress within families (Deater-Deckard, 2004). For parents of young children, whether the child was a planned pregnancy makes a significant difference in a parent's stress, depression, and coping after the child is born (Deater-Deckard, 2004). Finally, the number of children in a household has an impact on parenting stress, such that the more children are in a home, the higher the levels of stress that are likely to be reported (Deater-Deckard, 2004). Given this information, it is clear that child factors can play a significant role in the levels of stress of student parents.

Romantic relationships. Romantic relationships can be an area of family life that creates stress in some areas, while potentially reducing it in others. For student parents and for parents in

general, a partner can provide emotional and financial support (Branscomb, 2006; Hilton et al., 2001); however, when the marital relationship is wrought with stress or the partner does not support the student's academic pursuits, the marriage can have a negative impact on the stress of being a student parent (Branscomb, 2006). Marital relationships may be strained by both the stress involved in being a student, as well as the stress of being a parent (Coverman, 1989; Deater-Deckard, 2004). This suggests that having a partner may help to alleviate stress for student parents, but could be detrimental if the relationship is troubled.

Despite the mixed results regarding the impact of a steady partner on student parents, the impact of being a single student parent is very clearly negative. Single mothers in general report higher levels of overall stress, higher levels of distress, and poorer mental health than mothers in two-parent homes (Johner, 2007; Noor, 2004). For student parents, a lack of a partner to share childcare and household responsibilities may create even larger problems as students attempt to also fulfill their academic duties without the daily support from a significant other (Branscomb, 2006). In fact, in one study of student mothers, 75% of single mothers reported profound difficulties, especially with regard to finances, while only 12.5% of married student mothers reported similar difficulties (Gerrard & Roberts, 2006). Difficulties with finances and a lack of daily support with parenting and school make single parents, especially those of minority status, the group at greatest risk for dropping out of college or never beginning college (Mollenkopf, Waters, Holdaway, & Kasinitz, 2005). Single student parents also report higher levels of conflict between their school and family roles than partnered student parents, as well as lower levels of positive influences from their family roles on their work as students (van Rhijn, 2009). The stark differences suggested by research on single compared to partnered student parents, the general difficulties that single parents are well known to face, and higher rates at which divorced mothers tend to enter college as compared to married mothers (Taniguchi & Kaufman, 2007) suggests

that marital/partner status is an extremely important demographic factor to take into account when exploring the stress and needs of student parents.

Education/School. Part-time or full-time student status appears to make a difference in the experience of student parents in several ways. Part-time student parents are much more likely to be employed than are full-time student parents and over 60% report that their role as employee is more important than their student role (Branscomb, 2006). The same part-time students reported lower levels of conflict between school and family, but less overall involvement in school. Additionally, part time students report receiving less instrumental support from their families, but more help from instructors than full time students (Branscomb, 2006). Further, there is a positive relationship among nontraditional students between commitment to school and personal distress (Chartrand, 1990), suggesting that for nontraditional students, spending more time on academic endeavors may mean forgoing family activities and responsibilities, which may not be part of the experience of traditional students. This relationship is complicated, however, by personal life stressors being viewed as greater than school stressors among a sample of college students (Giancola et al., 2009). High levels of overall stress are significantly related to depression (Dyson & Renk, 2006) and to parenting stress specifically (O'Leary et al., 2009), both of which are detrimental to student parents.

Employment. For student parents, employment is significantly related to lower levels of conflict between school and family behaviors (van Rhijn, 2009). Among adult college students in general, however, more stress is attributed to work responsibilities than to school or family responsibilities (Giancola et al., 2009). van Rhijn (2009) suggested that the similarities between employment and school may help students to have an outlet for behaviors and stress that may cause conflict at home, but it may also simply compound an already stressful situation. The stress related to employment may manifest differently in women than in men. Among employed

women in general, household responsibilities remain the same as those of non-employed women. The amount of time in child-focused activities, however, is significantly lower for employed women compared to non-employed women, as they attempted to fulfill all of their obligations (DeMeis & Perkins, 1996). This research suggests that at least for women, having a role outside the home, such as that of a student or employee, can lead to further stress and difficulties fulfilling all obligations. During the past several decades, however, the gender roles have started to become less rigid (Cowan & Cowan, 2000; Tinklin, Croxford, Ducklin, & Frame, 2005), suggesting that for some mothers, the pressure to complete all of the household and childcare responsibilities may be lessened, while the pressure on fathers to take up this responsibility may be increased.

Economic stress. Many sources have suggested that socioeconomic status (SES) has a significant negative relationship with parenting stress and parent-child relationships, such that parents with lower SES experience higher levels of parenting stress and higher levels of dysfunction in parent-child relationships, regardless of factors such as geographic region or child temperament (Anderson, 2001; Chang & Fine, 2007; Chang et al., 2004; Fiore, 2008; Larson, 2004). Lower SES is also positively linked with poorer health, which can also have an impact on stress (Johner, 2007). Income has been shown to have a significant positive relationship with grade point average (GPA) and is negatively related to the need for instructor assistance (Branscomb, 2006). Among student parents, financial difficulties are reported to have a serious impact for 31% to 58.3%, depending on marital status and definitions for financial stress (Branscomb, 2006; Gerrard & Roberts, 2006). In fact, one study showed that general financial pressures impacted 91.7% of student parents and lead 41.7% of the student parents in the sample to consider discontinuing their education (Gerrard & Roberts, 2006).

Not only does it impact stress, low SES and financial strain has a negative impact on emotional state as well, through increases in both stress and distress (Branscomb, 2006; Gerrard & Roberts, 2006; Home, 1998). Student parents who receive financial aid may experience lower levels of distress (Anderson, 2001); however, receiving financial aid services that provide enough support for a student to continue school and support his or her family was a problem identified by student parents in several studies (Branscomb, 2006; Home, 1998; Wieber & Harvey, 1997). The literature clearly suggests that low SES and financial strain are serious issues for student parents leading not only to difficulties for the parent in obtaining a college education, but also contributing to children's long-term negative outcomes, including poorer diet, higher instances of some health difficulties, and lessened educational opportunities (Aktop, 2010; Beydoun & Wang, 2008; Cagney & Lauderdale, 2002; Darmon & Drewnowski, 2008; Koro, Anadan, & Quinlan, 2010). Student parents may be of lower SES while in school because of tuition costs and decreased time available for employment, and thus may be at greatest risk of income-related stress and problems coping with the multiple demands of school, family, and, in some situations, employment.

Summary. Student parents experience stress from a variety of sources. First, while family obligations and romantic relationships may be a significant source of stress, they may also reduce stress in some situations. Secondly, there is stress that is associated with academic obligations that can be significant, especially for full-time students and at specific times throughout the academic semester. For student parents, employment may be a necessity in order to help to keep their families financially stable; however, employment may contribute further stress. Related to employment is stress associated with financial strain, which may be particularly salient for student parents who are spending a large amount of money each semester on their education. Each of these sources of stress may wax and wane, so stress may not be

extremely high in all areas at one time, but attempting to cope with even moderate levels of stress in multiple domains could result in negative emotions and higher levels of psychological distress (Salters et al., 2009).

Role Strain

Role strain theory can help explain how different areas of stress may interact. According to this theory, each individual has certain roles in life, each of which encompasses certain responsibilities and obligations (Goode, 1960). For student parents, these roles include that of parent and student and may also include the roles of employee and significant other. Attempting to balance these roles can create strain, which includes role conflict, role overload, and role contagion. Role conflict occurs when the responsibilities and expectations of one role conflict with the responsibilities and expectations of another role (Goode, 1960; Coverman, 1989). When this occurs, a person must choose which role's expectations he or she will meet and which expectations he or she will not meet. For example, a student parent may be forced to choose between attending his or her child's band concert and studying for a final exam. This choice will inevitably cause stress before, during, and after the decision has been made. When roles conflict frequently, stress is more likely to occur. Related to role conflict is role overload, or the concept that one individual often cannot meet the demands of all of the roles he or she may hold at any given time, so "in general, *the individual's total role obligations are over-demanding"* (Goode, 1960, p. 485). This is especially likely to occur when a person has many roles, such as student, parent, spouse, employee, etc. Negative feelings are the likely result of an inability to meet all demands. Finally, role contagion occurs when a person is preoccupied with one role while performing another role, which can interfere with meeting the obligations of each role. Preoccupation with a former role leads to a lessened ability to meet expectations in the latter role. For example, the theory of role contagion posits that a parent who has a sick child and must

go to work is likely to perform more poorly at work due to preoccupation with the parent role. There is no question that such experiences may result in stress.

Role strain theory expands the idea of role conflict in ways that can be useful in understanding the lives of student parents. As applied to student parents, role strain theory suggests that several types of conflict can impact these individuals, including conflict from unpleasant role demands, such as studying for exams or calming screaming children; conflict between the resources needed for different roles, such as money needed for household items and for tuition and time needed for schoolwork and for making dinner; and conflict between the activities required for each role, such as working on a paper or cleaning the house (Goode, 1960). It has been suggested that various types of conflicts are the main contributors to role strain and role stress and that in situations of conflict, the most salient role will be fulfilled first, leaving other roles to be fulfilled less thoroughly (Stryker, 1968; Chartrand, 1990). In order to handle this conflict, individuals may utilize several coping strategies, including delegating tasks, eliminating roles, compartmentalizing roles and limiting the fulfillment of responsibilities of each role, creating barriers to the creation of new roles, and "extension," or expanding one role as a way to excuse commitments to another role (Goode, 1960). For student parents, options for role strain reduction such as eliminating roles and extension are not possible if they want to be successful at parenting and at being a student. If, for example, a student parent chooses to tend to her sick child and fails to turn in a class assignment, she may experience academic difficulties, putting her student role at risk. The societal push for individuals to reach for success in all roles and norms regarding which roles should be fulfilled first can also prevent student parents from using such coping strategies to effectively handle role strain and conflict. In fact, such societal pressures to be a good student and a good parent may create further stress.

Role conflict in student parents. Among student parents, the concept of role conflict has received some attention and research support. Most research with student parents focuses on the conflict between school and family responsibilities, which among working adult students with families, was identified as greater than the conflict between any other roles (Giancola et al., 2009). In fact, one study found that student parents estimated that school takes up approximately 100 hours per week, while family commitments take up 200 hours per week (van Rhijn, 2009). This total 300 hour estimate is well over the 168 hours that exist in one week, providing evidence that student parents feel overwhelmed with school and family obligations. Additionally, entering the student role after becoming a parent has been shown to cause significant stress and conflict among other life roles for some mothers (Wiebe & Harvey, 1997).

Several factors have been found to predict the level of role conflict between family obligations and school obligations (school-family conflict), including lower levels of financial aid, lower income, hours spent away from home each week to fulfill school obligations, a less supportive school environment, and maternal depression and worry (Anderson, 2001; Gonchar, 1995; Home, 1998; Salters, Hughes, & O'Leary, 2009). Researchers have suggested that the strong emotional involvement in parenthood, coupled with the clear, and often demanding, requirements of an education, could be related to this school-family conflict (Salters et al., 2009; Wiebe & Harvey, 1997).

Another area of potential role conflict that has received minimal attention for student parents is the conflict between family and work obligations (family-work conflict). It is likely that many student parents will be employed as a way to support their family while they are in school. There may be some differences between family-school conflict and family-work conflict because school is temporary and school obligations end after receiving a degree, while employment is generally considered more long-term and often has no large end goal (van Rhijn,

2009). While family-school conflict has a clear negative impact on student parents, family-work conflict does not have a comparable impact on working adults who are not students. Some sources suggest that there is no relationship between this conflict and work satisfaction (Judge, Ilies, & Scott, 2006), while others suggest that conflict has a negative impact on job satisfaction (Noor, 2004). Still other sources suggest that an increased workload, and thus higher levels of conflict, does not have an impact on parenting skills (Leinonen et al., 2003).

Guilt at home may impact the degree of conflict that occurs between work and family (Judge et al., 2006). This may be related to the perception that for working parents, work tends to interfere with family more often than family interferes with work (Judge et al., 2006); however, family interference with work is more strongly related to psychological distress than work interference with family life (Noor, 2004). No research has suggested how this relationship between work and family might act within the context of being a student as well. It is also unclear what types of conflict might arise between the student, work, and family roles for individuals who have obligations in each of those realms. It is likely that conflict and role stress will be even higher and more problematic when all three roles intersect, as nearly 80% of student parents report that their greatest challenge is feeling overwhelmed by too many responsibilities and being unable to meet all of the obligations of each role (Branscomb, 2006). This suggests that when taken together, role conflict, role overload, and role contagion clearly create stress and distress among individuals who must play multiple roles.

Impact of Stress and Role Strain

High levels of stress are generally known to have a negative impact on individuals. Given the unique situation of student parents and the probable high degree of role strain, it appears that stress and role strain may impact student parents in a fairly severe and distinctive way.

Specifically, stress and role strain appear to have a negative impact on the emotions, psychological distress, and family relationships of student parents.

Impact on emotions. Many student parents report that the school- and finances-related stress they experience has a negative impact on their emotional state (Gerrard & Roberts, 2006). Specifically, depression, guilt, and anxiety were the most common reactions to stress and role strain among student parents. While depression and anxiety have long been recognized as common reactions to acute and chronic stress among people in general (American Psychiatric Association, 2000; Benjet, Borges, & Medina-Mora, 2010; Elizalde et al., 2010; Hammen, Brennan, Keenan-Miller, Hazel, & Najman, 2010; Hammen, Kim, Eberhart, & Brennan, 2009), student parents may experience these reactions in different ways compared to other individuals.

Depression and anxiety. Depression is widely recognized as being more common among college students than among the general population and may be increasing (Benton et al., 2003; Guthman, Iocin, & Konstas, 2010; Munsey, 2010). The rates of depression among college students in general have been estimated to be between 5-36% depending on symptom severity (Buchanan, 2012; Geiger & Kwon, 2010; Roberts, Glod, Kim, & Hounchell, 2010). This is higher than the estimated lifetime risk for depression in the general population of 5-25% (American Psychiatric Association, 2000). The higher rates of depression among undergraduate students may be related to the lifestyle changes and changes in family relationships involved in becoming a college student (Dyson & Renk, 2006). Depression and anxiety are often comorbid conditions (American Psychiatric Association, 2000) and may share some similar mechanisms, as they are often treated with the same medications (Julien, Advokat, & Comaty, 2008). Anxiety is a commonly experienced emotion that can be helpful in some situations, but is detrimental when it becomes excessive. It is clear that anxiety and depression are quite common among

undergraduate students (Benton et al., 2003) and information about both anxiety and depression can be found on most university and college websites.

Research regarding the rates of depression among student parents, as compared to students who are not parents, is mixed. Some studies suggest that depression is not related to parenting among students (Anderson, 2001). Additionally, for non-student mothers who return to work within 18 months of child birth, depression rates appear to be lower than for stay-at-home mothers (Cowan & Cowan, 2000), suggesting that having something to concentrate on other than their children may be beneficial to mothers' mental health. Other research suggests that over 58% of student mothers suffer from depression at some point during their undergraduate career (Gerrard & Roberts, 2006). This estimate of depression is extremely high when compared to rates of depression among women in the general population, which generally range from 10-25% (American Psychiatric Association, 2000), and it exceeds the upper estimate of depression prevalence among college students. Difficulty balancing parenting and academic role obligations, which do not exist among non-parent students, predicts depression and anxiety for student parents even after controlling for stressful life events (Salters et al., 2009). Although research regarding depression and anxiety among student parents has yielded mixed results, given the higher rates of depression among students in general, it is likely that student parents experience higher rates of depression and anxiety than their non-student counterparts.

Guilt. A significant portion of student parents report that guilt related to being away from their family while at school is a challenge to being a student parent (Branscomb, 2006; Weibe & Harvey, 1997). In studies of working adults, similar guilt was less frequently reported and was significantly related to both the work-family conflict itself, as well as hostility that seemed to be associated with such conflict (Judge et al., 2006). It is possible that fewer working adults may report guilt compared to student parents because financial troubles related to school are also

associated with guilt among student mothers (Gerrard & Roberts, 2006). Such a relationship with finances has not been reported for working parents, as work is typically associated with gaining money rather than spending it. Although research is sparse, preliminary data suggests that guilt could pose a significant challenge for student parents in navigating their daily roles.

Impact on family. In addition to having a personal impact on student parents, stress and role strain will have an impact on those around a student parent, especially his or her family. Many student parents report having to cut back on their family time, family outings, and holidays as a result of becoming a student and having less time to meet all obligations (Gerrard & Roberts, 2006). Such limiting of family time in addition to the stress involved with school may create difficulty within the child-parent relationship. Specifically, stress can have a negative impact on consistency of discipline and parenting behaviors, both of which could cause negative changes in a child's behavior, leading to more stress within a family and more parenting stress (Tein, Sandler, & Zautra, 2000). Stress from both negative life events and daily hassles is associated with an increase in negative parenting behaviors, such as complaining to a child about what he or she did and punishing a child for something one day and ignoring it the next day. These behaviors may then lead to child misbehavior and have a negative impact on child mental health (Tein et al., 2000). Parenting stress also negatively impacts children's cognitive and social development and increases overall stress within the family (Deater-Deckard, 2004; Fiore, 2008; Ketterlinus et al., 1991). Repetitive reciprocal negative interactions between parents and children lead to an increase in parenting stress, which serves to maintain the negative cycle of interaction (Patterson, 1982).

Impact on psychological distress. The impact of stress on psychological symptomology has been clearly established in the general population. High levels of stress are significantly associated with negative feelings, health problems, and vulnerability to illness (Ingram &

Trenary, 2005; Johner, 2007; U.S. National Library of Medicine, 2009). Little research has examined stress levels among student parents; however, one study found that levels of life stress and difficulty balancing life roles was positively related to several symptoms of psychological distress, including depression and worry, among student parents (Salters et al., 2009). Among working adults, role conflict is related to many aspects of psychological distress, including lower job satisfaction, lower marital satisfaction, and psychophysical symptoms (Coverman, 1989), suggesting that student parents who experience role conflict may also be similarly impacted.

Although high levels of stress appear to negatively impact psychological health, the ability to cope effectively with stress has been linked to positive affect. In fact, among married working women, the ability to manage stress through use of coping strategies aimed at managing role conflict is significantly related to feeling better about oneself and one's life (Cowan & Cowan, 2000). It appears that if student parents are able to effectively manage their levels of stress and role conflict, they feel more successful and have lower levels of psychological distress. It is also possible, however, that role conflict is not related to psychological distress (Coverman, 1989). Instead, for working adults, the positive impact multiple roles may be accounted for by simply time spent outside the home doing paid work (Coverman, 1989). It is unclear whether student parents may experience a positive impact of multiple roles or moderate levels of stress; however, it is possible that the role conflict and stress have a relationship with psychological symptomology and distress.

Impact on school. No research has been found to date on the impact of role conflict and stress on the school work of student parents. It is also not clear how the performance of student parents compares to that of non-parent students. The Yerkes-Dodson law suggests that at very low and very high levels of stress, performance of difficult tasks, including school work, will be lower (Yerkes & Dodson, 1908). With moderate levels of stress, performance at school may be

enhanced if the stress is well managed. This model has not been specifically applied to student parents, but may provide a way to begin to understand how stress and role conflict may impact school performance.

Summary. Overall, the impact of role conflict and stress appears to be negative. Student parents have been shown to be negatively impacted by role conflict and stress through changes in emotions. Additionally, role conflict and stress appear to negatively impact the family life of student parents, which may increase role conflict and stress, further compounding a stressful situation. The overall psychological distress of student parents may be differentially impacted by stress and role conflict, as the current research is not clear how student parents may react to different levels of role conflict and stress. Finally, the impact on school performance is unclear for student parents, as no research as addressed this issue, though it is an important aspect of the lives of student parents. No clearly positive impacts of stress and role conflict could be extrapolated from the current research literature.

Coping Strategies, Resources, and Support

No one coping strategy has been shown to work for every problem or for every person (Tein et al., 2000). Each individual must determine which coping strategies to use in which situations in order to reach the most positive outcome. For student parents, coping strategies may mediate the relationship between family life, stress associated with college life, and depressive symptoms (Dyson & Renk, 2006). The types of coping strategies that may be effective are varied and depend on the situation. Problem-focused, or active, coping involves doing something to try to change or remove a stressor, whereas emotion-focused coping involves changing the way that stress is experienced emotionally, without addressing the underlying problem (Deater-Deckard, 2004; Tein et al., 2000). Generally, problem-focused coping is more effective in situations where an individual has some degree of personal control, while emotion-focused coping is more

effective when an individual cannot change the situation. Emotion-focused coping has generally been found to be more effective than avoiding the problem as a method of coping, but may also be related to higher levels of parenting stress in situations where a parent has some degree of control (Deater-Deckard, 2004; Giancola et al., 2009). In general, the type of coping that is most effective will depend on the situation in which coping must take place.

Use of effective coping strategies is extremely important in attempting to handle the multiple demands of daily life. When coping strategies are used ineffectively, such as when an individual avoids a problem over which he or she has some control, not only does stress not decrease, it can actually be exacerbated and is related to psychological distress (Tein et al., 2000). Effective use of problem-focused coping is negatively related to psychological distress and positively related to desirable psychological outcomes and a variety of beneficial family behaviors, including reduced levels of stress, higher levels of life satisfaction, higher levels of overall well-being, consistency of child discipline, and being accepting of one's own children (Deater-Deckard, 2004; Giancola et al., 2009; Tein et al., 2000). Working adult students report more adaptive and effective coping than maladaptive coping (Giancola et al., 2009). Among college students in general, levels of stress also appear to predict both problem-focused and emotion-focused coping, with more coping strategies being employed as stress levels increase (Dyson & Renk, 2006). Studies have shown that student parents also engage in a variety of coping strategies as a way to handle their many obligations and that these coping strategies are generally adaptive. Specifically, successful coping strategies that are commonly used include planning ahead, prioritizing, using available resources, remaining focused on goals, setting aside family time, and asking for assistance when it is needed (Branscomb, 2006; Wiebe & Harvey, 1997). Use of avoidant coping strategies, such as procrastination, avoiding class, and using drugs or alcohol, leads to less effective studying and lower academic success (Benton, Schmidt,

Newton, Shin, Benton, & Newton, 2004; dePyssler, Williams, & Windle, 2005; Moneta, Spada, & Rost, 2007; Warner, 2004). While avoidant strategies tend to be less useful than active or emotion-focused, it is currently unclear what percentage of student parents are employing such strategies, the frequency of use, or how these coping strategies are related to levels of stress and role conflict.

Resources

A commonly described method of coping with stress is the use of available resources. There is no doubt that having access to appropriate resources can have a significant impact on stress levels for parents (Deater-Deckard, 2004). The same is also true for college students who may be struggling with many aspects of college life. Services provided by the college or university in which the student parent is in attendance are considered institutional resources, whereas publicly available services provided by the town or neighborhood in which the student parent lives are considered community resources.

Institutional resources. Among institutions of higher education, resources for student parents are often very limited. In a nationwide survey of 63 universities, only 25-30% offered any family-friendly space anywhere on campus or any child care subsidies for students at any level in the university (Springer, Parker, & Leviten-Reid, 2009). On campus child care is related to feeling more connected to a university and to feelings that college is a place for growth and stimulation (Gonchar, 1995). Mothers who are unable to get on-campus child care or are dissatisfied with this care view college as painful and less directly beneficial to themselves (Gonchar, 1995). Additionally, among graduate school programs at these universities, no formal accommodations were in place for student parents in any university documentation. Given that graduate students are generally more likely to have children than undergraduate students as a function of their age and level of development, it is extremely unlikely that any accommodations

would be in place for undergraduate student parents. With this lack of formal accommodations for student parents, it is also not a surprise that fewer than 15% of the universities sampled included any training on the needs of student parents (Springer et al., 2009).

Of added concern, however, is that even when institutional resources are available, they are often underutilized (Branscomb, 2006; Medved & Heisler, 2002; Springer et al., 2009). In one study of 15 universities that included 151 student parents, only 11 students reported using any campus services, including affordable childcare, affordable housing, early intervention, child care referral resources, counseling services, Head Start, drop-in sick child care, after-hours care, and parent-support groups (Branscomb, 2006). Only 13% of students in one study reported knowing about campus resources (Branscomb, 2006), suggesting that lack of awareness may account for underutilization of available resources. When students are aware of resources, it is possible that they are not used because the university schedule does not accommodate students with children, student parents lack the time to seek out resources, student parents perceive a social stigma in using such resources, student parents perceive negative stereotypes associated with being a young parent, or university personnel are uncomfortable dealing with needs of nontraditional students (Branscomb, 2006; Medved & Heisler, 2002; Wieber & Harvey, 1997). It is also possible that underutilization of services may account for the lack of available resources at some universities.

Community resources. In many places, there is a dearth of community resources that can provide assistance for student parents, such as food pantries and government programs that help with child health care. One major concern for student parents that is seldom addressed by community resources is affordable child care options. Given that on-campus child care is rarely available, student parents must turn to the community for care. Often, student parents are forced to rely on the support of family and friends as they work out elaborate schedules for who can

watch their child or children throughout the week (M. Cowles, personal communication, June 24, 2010). For others, this is not an option and a location that provides paid child care must be found. Some sources show, however, that even when child care is available in the community, it is sometimes not used (Medved & Heisler, 2002). This under use may be related to cost, making the affordability of community resources extremely important. It is important for student parents to obtain affordable child care, as child care can help support parents who feel stressed through providing information about child behavior and child needs and can provide a safe environment for the child so that the parent can meet other obligations (Fiore, 2008).

Support

Institutional and community resources can be used by student parents for support in addition to social or personal resources. In fact, some suggest that both institutional support and social support are essential if a student parent is to complete a degree program successfully (Wiebe & Harvey, 1997). Such support can come in several forms. For student parents, both emotional and instrumental support are important for success (Carney-Crompton & Tan, 2002). Emotional support can include things such as giving encouragement and praise, while instrumental support includes providing financial assistance, child care, and helping with household duties (Carney-Crompton & Tan, 2002). Sources of support may vary, but it is clear that such support is important (Carney-Crompton & Tan, 2002). In fact, the amount of support that nontraditional student mothers report can account for 6-11% of the variance in the self-esteem, psychological distress, and life satisfaction of the same mothers (Quimby & O'Brien, 2006). Support may also help to mediate the negative impact of parenting stress within a family (Ketterlinus et al., 1991). Such research suggests that support from outside sources can be extremely important in helping student parents to cope with stress.

Institutional support. Institutional support is most commonly provided by university personnel in the form of emotional support or instrumental support. Many student parents report, however, that they rarely approach faculty for assistance or accommodations because their requests are typically denied based on class rules or university policy aimed at fairness and/or equality (Medved & Heisler, 2002). Student parents who reported making requests to faculty for accommodations that were denied reported no other good option to solve their problem aside from accepting the negative consequences. It is possible that the students had exhausted all other options before approaching school personnel. Other students may not approach school personnel or other school resources because of an expectation of prejudice or lack of caring. In fact, one participant responded, "'I don't feel comfortable talking to professors or any other staff member about my family life because I don't think they really care'" (Medved & Heisler, 2002, p. 113). The lack of comfort in approaching instructors for support with conflicts between family and school has been echoed by other research on student parents as well (Branscomb, 2006). When student parents do seek out support from instructors, however, this support has a significant positive association with use of university resources, satisfaction with resources, and greater role management, and it has been linked with less role strain (Branscomb, 2006). Such expectations about the support that could be provided by available university resources and the indication that this support can be beneficial if used suggests that currently available sources of support may be seen as inadequate by student parents.

Social support. Social support has been examined more extensively than other types of support. It can also be extremely influential in the experience of stress and coping with the college experience. For parents, overall social support has been consistently linked with lower levels of parenting stress (Anderson, 2008; Leigh & Milgrom, 2008; Mulsow, Caldera, Pursley, Reifman, & Huston, 2002; Österberg & Hagekull, 2000; Viana & Welsh, 2010). The two

specific sources of social support that have been shown to make a significant difference are family and friends.

Family. Family support has consistently been linked with positive outcomes in a variety of settings. Among adolescent parents, higher levels of family support are significantly related to greater parenting satisfaction and better parenting skills (Ketterlinus et al., 1991). Increased parenting satisfaction and better parenting skills among young parents may act to decrease some parenting stress. For student parents, this support may be especially important as a source of both emotional and instrumental support. Specifically, family of origin can be, and often is, an important source of support for student parents through things such as child care, completing housework, and providing occasional financial assistance (Weiber & Harvey, 1997). This support has been found to be especially important in reducing stress among student parents during difficult times in school, such as during exams (Gonchar, 1995). Getting support from family has also been shown to improve retention in adult education programs and to promote adaptive coping (Giancola et al., 2009). Some research has found that the amount of support provided by a family is not as important as the perception of support that a student parent feels. This perception is related to lower levels of academic worry and lower levels of parenting stress (O'Leary et al., 2009). While family support is not essential for student parents to be successful, it can make a significant difference in the way that college and parenting are experienced.

Friends. Less research has been done on the impact of support from friends for student parents. The available research suggests that having support from friends can help student parents in coping with stress and multiple roles. Student parents identified personal friendship and social support as two of their most important coping strategies (Wieber & Harvey, 1997). Additionally, student parents who reported having friends who were also parents reported feeling significantly more satisfied with their lives (Branscomb, 2006).

Summary

There are a variety of coping strategies that may be useful for student parents and utilizing that a variety of coping strategies may be related to higher levels of success. The utilization of resources at the institutional and community level may also be related to student success and lower levels of psychological distress; however, student parents do not tend to use the few institutional resources that are available to them. It is unclear why this lack of usage exists, but it is a problem for student parents, as they are likely to be in need of such resources. Finally, use of support from an institution of higher education, from family, and from friends, has been related to lower levels of stress, less role strain, and psychological distress. It is possible, therefore, that by increasing use of appropriate coping strategies, resources, and support, student parents may be more able to adapt to and manage their multiple roles.

What do Student Parents Need?

Research has generally identified the need for more assistance or accommodations for student parents than is already available. Few articles, however, address what types of assistance and accommodations might be reasonable. It is important in considering the needs of student parents to also consider the financial and legal limitations of universities and the needs of students as a whole. When asked what they would like in order to help them cope with role strain and stress, student parents report wanting more flexibility for services and from instructors. They also report wanting a greater awareness for the challenges that they face and financial aid opportunities that allow them to support their family while attending school (Branscomb, 2006). It has been suggested that offering images of young students with children in addition to information about the strengths student parents, such as a unique perspective, on college websites, in informational literature about colleges, and in instructor training, might be helpful in altering some of the stigma this group may perceive or experience (Branscomb, 2006). This may

also help to promote a more accepting and tolerant attitude towards the special needs of student parents, their multiple roles, and their high levels of stress. At this time, however, extensive research regarding the way that student parents can be assisted most appropriately is not available.

Conclusions

Given available research, it is clear that student parents currently experience stress and role strain as a result of their multiple life roles. It is also clear that this stress and role strain can have a negative impact on their psychological symptoms and performance as a parent. It is not clear who makes up the student parent population or how this population may be different from students without children or parents who are not students. Certain demographic factors, such as traditional versus nontraditional status, age, developmental level, gender, marital status, and SES, may be important in understanding this population and the way that multiple roles impact their functioning. It is unclear, however, what impact these factors may have on the experience of stress and role strain for student parents. The coping strategies, resources, and support sources that are utilized by student parents to manage such stress and role strain are varied, but for some student parents, are not enough to help them to be maximally successful at home and at school. For those individuals, changes must be made; however, it is currently unclear what changes may be most helpful to student parents.

Research on student parents is currently limited. While research addresses some aspects of the student parent experience, a thorough understanding of this population, their experience of stress and role strain, their use of coping mechanisms, and their perceptions of support is far from complete. No single piece of research has addressed the demographic factors of this group as a whole. Instead, research has examined specific subpopulations among student parents, including emerging adults, nontraditional students, and low-income students. In order fully

understand this population, it is important to look at all types of student parents. Additionally, a small number of studies have examined stress and role strain among student parents, but it remains unclear how the amount of and types of stress and role strain student parents experience is unique. All college students and all parents are likely to experience some degree of stress and role strain at some points in time. Understanding the ways in which student parents differ from and are similar to the general parent population will help to identify ways in which interventions directed at parents may be adapted to meet the needs of student parents. Coping mechanisms have also not been thoroughly examined among student parents. The available research regarding coping strategies, resources, and support is very specific to certain types of support or coping, with no broad understanding of how the use of these ways of managing stress may affect the student parent population. It is necessary to examine different areas of stress and role strain management in order to fully understand how student parents function within their multiple roles and how they might be best understood.

Much of the research on student parents includes small sample sizes, which is problematic in trying to gather an accurate understanding of a population. Furthermore, the limited research on student parents has focused almost exclusively on student parent mothers. The reasons for a lack of inclusion of student parent fathers have not been addressed and thus, the available literature may be ignoring a significant population. Mothers and fathers often have different experiences with regard to childrearing, so it is possible that the experience of student parent fathers may be quite different from the experience of student parent mothers. Finally, a limitation of all student parent research is that student parents are not compared to similar peers, including non-student parents and non-parent students, which hampers efforts to understand similarities and differences among these groups. It is important to determine if the stress and role strain experienced or the coping strategies used by each of these groups is different or if student

parents are sufficiently similar to peer groups to benefit from the same interventions that have been shown to be effective with those populations. Without this research, a complete understanding of student parents and how they fit into the general population is impossible. The current study seeks to address each of these limitations in order to gather a more thorough understanding of student parents.

CHAPTER III

CURRENT INVESTIGATION

The current investigation adds to the literature on student parents while addressing the limitations of previous research with this population through two primary goals. First, this study examined demographic and descriptive information from student parents at Indiana University of Pennsylvania (IUP) in order to thoroughly describe this population at this location. Specifically, factors such as traditional versus nontraditional status, gender, age, developmental status, marital status, number of children and other factors that have been shown to be important to the experience of student parents were studied. In addition to demographic information, this study aimed to describe the resources and support used by student parent and the resources they need. Resources and services available to and utilized by student parents have been shown to be limited at other universities (Branscomb, 2006; Medved & Heisler, 2002; Springer et al., 2009). At IUP, the "Center for Health and Well-being" was recently established and offers counseling services for students, as well as a quiet feeding room for student parents. No other resources are available specifically for the unique needs of student parents. In an interview with Malinda Cowles, the interim executive director of the Center for Health and Well-being, she stated that it can be very difficult and time consuming for student parents to find the services they need at the university, including housing, healthcare, and appropriate financial assistance (Personal communication, June 24, 2010). Some university personnel can be helpful in this process, but Ms. Cowles stated that student parents often report resistance from faculty and staff when any accommodations are requested. As of the spring semester 2011, no housing is available for students who are married or have children. In fact, all housing agreements specifically state "eligibility to occupy the premises is limited to students who are officially registered for IUP course work" (Indiana University of Pennsylvania, 2010, p. 1). Finding affordable housing for a

family outside of the university can pose a difficulty and increase stress on student parents and their families.

Finding affordable childcare can also be challenging for student parents. While there is a day-care on campus, the waiting list to get a child enrolled is often quite long and the cost can be too much for students to afford (M. Cowles, personal communication, June 24, 2010; W. Swingle, personal communication, July 1, 2010). In fact, based on the rates listed on the website for the local on-campus childcare location, the minimum cost per month for an infant or toddler is $646.80; the cost for a pre-school age child per month is $587.40; and the cost for a school-age child during the school year ranges from $106.80 to $213.60 per month depending on how often care is needed (IndiKids, 2012). Affordable on-campus child care is important for student parents, as it is related to feeling more connected to a university and to feelings that college is a place for growth and stimulation. Conversely, having no access to on-campus child-care is related to dissatisfaction and a view of college as painful and less directly beneficial (Gonchar, 1995). This suggests that the lack of availability to the on-campus child care at the current university could be detrimental to student parents.

Finally, Ms. Cowles noted that there are minimal physical resources available for students on campus, such as some baby changing tables and a quiet room for nursing; however, the availability of these resources is not widely known and there is no easily accessible way for students to identify the existence or location of such resources. It is necessary for student parents to have resources to help them care for their children and be successful students and to have knowledge of resources when they are available. This study aimed to determine which resources student parents are accessing both on- and off- campus, which resources they use most frequently, and which resources might be most beneficial for student parents. Previous research and information from Ms. Cowles suggested that this exploration would find that there are few

resources available for student parents and of those available, on average less than 20% of student parents utilize each of the resources.

In describing student parents, it was also a goal of this study to gather a more complete understanding of levels of parenting stress, role conflict, depression, anxiety, and overall psychological distress, in addition to coping skills and ways in which roles compliment and enrich each other for student parents. The relationships between coping, resources, stress, and mental health were also explored for student parents. Given previous research, several hypotheses were made. First, previous research suggested that it was likely that role conflict would be positively related to parenting stress, depression, anxiety, and overall psychological distress. Additionally, it was predicted that role conflict and use of adaptive coping strategies would be negatively related for student parents. It was expected that some within-group differences would emerge for the student parent group, specifically regarding to coping and parenting stress across domains of traditional or nontraditional status, gender, marital status, full-time or part-time status, employment status, financial status, and other demographic variables. Some of these variables, such as marital status and financial status, may be related, which could lead to the identification of groups of student parents who may be in need of specific resources or services. Specifically, previous research suggested that student parents who are unmarried and student parents of lower SES may be in need of more financially-based services and more child care options. By addressing such hypotheses and gathering other descriptive data about student parents, this study began to describe the mental health of student parents and provide clues to how they may be experiencing their current life situation.

In addition to describing the student parent population, it was also important to determine how student parents are different from students who are not parents (non-parent students). For this reason, the second goal of this study was to examine how student parents differ in

demographic variables, stress, coping, and resources, from non-parent students. Prior to this study, no available research had compared levels of stress among student parents and non-parent student. This comparison can give researchers and college administrators a better indication of how the mental health of student parents compares to that of their peers and may suggest where limited university resources could be directed to provide the most benefit for student parents and the university as a whole. Due to the fact that previous research had not addressed this comparison, there was little indication regarding whether or not differences might emerge between these two groups or what these differences may be.

By addressing limitations in resources, examining the need for resources through understanding stress, role conflict, and coping, and by exploring who comprises the student parent population, it was hoped that suggestions for reasonable accommodations could be offered. An understanding of how these student parents are different from their non-parent student peers helped to begin to identify some the unique needs of this population. This exploration also furthered the understanding of student parents as a whole and may open the dialogue about student parents and how to help them to successfully complete their college education.

CHAPTER IV

METHOD

Participants

Participants in this study included 56 undergraduate students enrolled at IUP during the Fall 2010 or Spring 2011 semesters. Of the participants, 28 were parents and 28 were non-parents. According to information provided through the Free Application for Federal Student Aid (FAFSA), there are at least 308 undergraduate student parents enrolled at IUP during the fall 2010 semester (P. C. McCarthy, personal communication, August 06, 2010); therefore, 28 student parents represents approximately 9.09% of the known student parent population. Participant recruitment occurred through the General Psychology Subject Pool, a message posted on a weekly student newsletter, announcements made in psychology and child development courses, and referrals made by campus staff and faculty at the Center for Applied Psychology and through the Child Care Access Means Parents in School grant. Flyers were posted in academic buildings, the campus library, the Center for Applied Psychology, and several off-campus locations, including laundromats, recreational areas, a local mall, and daycares. Attempts were made to gather data from as many student parents as possible and to match student parents and non-parent students on variables of age, sex, and class standing. All non-parent students were enrolled in a General Psychology course and research participation was not required; therefore, older non-parent students and non-parent students of sophomore, junior, and senior status were difficult to obtain.

Student Parents

Among student parents, age ranged from 20 to 47 years (M = 29.50, SD = 8.16). The student parent sample was predominantly composed of Caucasian (75.0%) females (75.0%) who were full-time students (78.6%, 12-18 credits per semester) and were either married or living

with a partner (64.3%; See Table 1). Among student parents, freshman accounted for 28.6% of the sample, sophomores comprised 14.3%, juniors comprised 17.9%, and seniors comprised 32.1% of the sample. Additionally, 7.1% of student parents identified themselves as "other" with regard to student standing, some stating they were continuing education students who had already received a bachelor's degree, but were returning for further undergraduate education. A minority of student parents (28.6%) reported being first generation college students and GPA ranged from 2.30 to 4.00 (n = 25, *M* = 3.24, *SD* = 0.54). A majority of student parents reported being employed (71.4%) with an average of 1.3 (*SD* = 0.48) jobs (See Table 2). A large percentage of student parents reported working one job (46.4%), while an additional 21.4% reported working two jobs. Furthermore, over 21% of student parents reported working more than 30 hours per week in addition to attending classes. Despite this level of employment and number of hours worked per week, almost 43% of student parents reported household incomes of $0 to $19,999 annually and none reported income at $80,000 or higher.

Student parents were also asked to supply information regarding their child(ren). One student parent did not provide information regarding her child; therefore, data is based on 27 student parents (see Table 3). The number of children per student ranged from 1 to 7 (*M* = 1.81, *SD* = 1.27), with the majority of student parents reporting only 1 child (51.9%). Only one parent indicated having more than 3 children. This parent was statistically considered an outlier. Mean number of children for this sample when this individual was removed was 1.62 (*SD* = .75). All parents reported being biological parents to his or her children. The ages of the children ranged substantially from 4 months to 22 years (*M* = 7.75, *SD* = 6.13); all parents had at least one child under the age of 18. Given this wide age range, the ages of the children were condensed for the purposes of analysis using categories implemented by the United States Census Bureau. Most of the student parents reported having young children. In fact, over half of parents reported having

at least one child under the age of 5 and over 48% reported having at least one child between the ages of 5 and 13. Additionally, over 22% of parents had at least one child between the ages of 14 and 17 and nearly 15% of parents reported having one or more children age 18 or older. Almost half of student parents reported that none of their children were the result of a planned pregnancy, while over half reported that one or two of their children had been planned. Furthermore, three parents (11.1%) reported having a child with disabilities. All three parents reported diagnoses of Attention-Deficit/Hyperactivity Disorder and Oppositional Defiant Disorder, while "autistic traits," a learning disability, and Bipolar Disorder were each listed once by different parents.

Non-Parent Students

A sample of students who were not parents (non-parent students) was also gathered for comparison purposes. Among the 28 non-parent students, ages ranged from 18 to 39 years old (M = 21.82, SD = 5.49) with 78.6% female participants and 21.4% male participants. The non-parent student sample was also predominantly Caucasian (89.3%) and single, not currently living with a partner (89.3%). All non-parent students who provided information regarding student status indicated that they were full-time students (n = 27) and the majority of non-parents students (77.8%) were not first generation college students. Freshman accounted for 60.7% of the sample; 32.1% were sophomores, 7.1% were juniors, and none were seniors. Among these students, GPA (n = 25) ranged from 1.81 to 4.00 (M = 2.88, SD = 0.56). It should be noted that for freshman students who completed study participation in the fall, GPA was not yet applicable.

Less than half of non-parent students reported employment (46.4%), with the majority reporting current unemployment (53.6%). Students who were employed reported an average of 1.23 jobs (SD = 0.44) with 35.7% (n = 10) of the sample working one job and 10.7% (n = 3) working two jobs. Among these students, 14.3% (n = 4) reported working up to 10 hours per

week, 21.4% (n = 6) worked up to 20 hours per week, 3.6% (n = 1) worked up to 30 hours per week, and 7.1% (n = 2) reported working up to 40 hours per week. Given a high unemployment rate, it is not a surprise that nearly 43% of non-parents reported a yearly income between $0 and $19,999 and an additional almost 22% reported a yearly income between $20,000 and $39,999. It is possible, however, that some non-parents included parent or guardian income given that almost 18% reported yearly income of $80,000 or more, which is unlikely for a full-time college student.

Measures

Demographic Questionnaire

For descriptive purposes, participants answered questions regarding age, developmental status, biological sex, current level of employment, marital status, marital satisfaction, ethnicity, fulltime or part-time student status, year in school, whether the participant is a first generation student, current GPA, and household income. Parents also addressed questions regarding the number of children he or she has, ages of children, disability status of children, whether each child was planned, and current child care arrangements. Demographic questions were developed by the primary researcher based on previous research and questions from the US Census (2010). The question regarding developmental level was taken directly from a questionnaire used in the development of the theory of emerging adulthood to identify the qualities of emerging adulthood (Arnett, 1998). See Appendix A for a copy of the demographic questionnaire.

Parenting Stress Index-Short Form, 3rd Edition (PSI-SF)

The PSI-SF (3rd ed.; Abidin, 1995) is a 36-item self-report measure for parents of children aged 1 month to 12 years used to examine stress in relation to parenting and the parent-child relationship. For all items, parents are asked to rate their experiences on a five-point Likert scale (ranging from strongly agree to strongly disagree). This inventory yields a Total Stress

Index, a measure of defensive responding, and three subscale scores: Parental Distress (PD), Parent-Child Dysfunctional Interaction (P-CDI), and Difficult Child (DC). Raw scores on the total stress index above 90 are considered clinically significant, as are subscale scores at or above the 85th percentile. According to Abidin (1995), reliability is within the acceptable range. Internal consistency measures ranged from .70 to .95, depending on the scale or subscale examined in the normative sample. Test-retest reliability ranged from .63 to .96 across various intervals, with the total stress score being the most reliable. Abidin (1995) also reported that this scale has been found to have sufficient construct and predictive validity in studies of child behavior difficulties, family difficulties, and disabilities and illness. Furthermore, this measure has been validated across a variety of different cultural groups and is widely recommended for use in practice. In this study, all parents completed the PSI; scores were used for descriptive purposes and to examine the relationship between parenting stress and other variables. Copies of this inventory can be obtained through PAR, Inc.

School-Family Conflict Scale (SFCS)

The SFCS (van Rhijn, 2009) is an 18-item self-report questionnaire designed to measure the degree to which a person's academic and parenting roles conflict. It was adapted from the Work-Family Conflict Scale (Carlson, Kacmar, & Williams, 2000). Each item in this questionnaire is scored on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree), with higher scores indicating more conflict. This measure consists of six subscales, including time-based school interference with family (TB SIF), time-based family interference with school (TB FIS), strain-based school interference with family (SB SIF), strain-based family interference with school (SB FIS), behavior-based school interference with family (BB SIF), and behavior-based family interference with school (BB FIS). According to the initial validation study, the Cronbach's alphas for the subscales ranged from .71 to .86 and both convergent and construct

validity were adequate. For this study, this measure was used to examine multiple aspects of the conflict that can be created for student parents when school and family obligations are incompatible in order to begin to describe role conflict among student parents. See Appendix B for a copy of this scale.

School-Family Enrichment Scale (SFES)

The SFES (van Rhijn, 2009) is an 18-item self-report questionnaire designed to measure the degree to which a person's academic and parenting roles complement and enhance each other. It was adapted from the Work-Family Enrichment Scale (Carlson, Kacmar, Wayne, & Grzywacz, 2006). Items are scored on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree) with higher scores indicating higher degrees of enrichment. The three domains in which school benefits family life (school-family enrichment) are personal development (skills, knowledge, behavior, and perspective), affect (mood and attitude), and psychosocial capital (fulfillment, self-esteem, and security). These domains are measured by three subscales: school-to-family development (STF D), school-to-family affect (STF A), and school-to family capital (STF C). This measure also examines three domains in which family benefits school, including development (acquisition or refinement of skills, knowledge, behavior, and perspective), affect (positive emotional state and attitude), and efficiency (a sense of focus or urgency). The subscales used to measure these domains are: family-to-school development (FTS D), family-to-school affect (FTS A), and family-to-school efficiency (FTS E). According to the van Rhijn (2009), the Cronbach's alphas for these subscales range from .81 to .92 and both convergent and construct validity were established for this measure. This measure was used for descriptive purposes to examine the potentially positive aspects of maintaining both family and student roles at the same time. See Appendix C for a copy of this measure.

Work-Family Conflict Scale (WFCS)

The WFCS (Carlson, Kacmar, & Williams, 2000) is an 18-item measure that examines the degree of inter-role conflict between work and family pressures. Each item on this scale is measured on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). Carlson, Kacmar, and Williams developed this scale by compiling items from eight other measures of work-family conflict that did not individually address all of constructs that are measured by the final WFCS scale. This scale examines three areas in which work interferes with family obligations, including time obligations (time-based interference), emotional and physical strain of work (strain-based interference), and behaviors that are appropriate at work, but not at home (behavior-based interference). Similar domains are included for areas in which family life interferes with work obligations, including time obligations (time-based interference), emotional and physical strain of family (strain-based interference), and behaviors that are appropriate at home, but not at work (behavior-based interference). According to the initial validations studies, this measure shows good discriminant validity, content validity, and construct validity. Additionally, coefficient alpha ranged from .79 to .87 for each of the content scales for the measure, suggesting adequate reliability. This measure examined conflict between the work and family roles in order to explore the potentially negative experiences employed student parents may encounter. A copy of this measure is available in Appendix D.

Work-Family Enrichment Scale (WFES)

The WFES (Carlson, Kacmar, Wayne, & Grzywacz, 2006) includes 18 items on a five-point Likert-type scale (1 = strongly disagree to 5 = strongly agree) that measures the ways that work and family benefit each other. This measure examines the ways that work benefits family (work-family enrichment) and the ways that family benefits work (family-work enrichment) through the domains of personal development, affect, and psychosocial capital. The subscales

that examine these domains are work to family development (WTF D), work to family affect (WTF A), work to family capital (WTF C), family to work development (FTW D), family to work affect (FTW A), and family to work efficiency (FTW E). According to initial validation studies, content validity, convergent validity, divergent validity, and discriminant validity are adequate for this measure and the overall Cronbach's alpha for the WFES is .92, with the alpha levels for subscales ranging from .73 to .90. The potentially positive impacts of the relationship between work and family were examined through this measure as a method of better understanding how the employee and parent roles may complement each other for student parents. See Appendix E for a copy of this measure.

Brief Symptom Inventory (BSI)

The BSI (Derogatis, 1993) is 53-item measure designed to examine a variety of psychological symptoms. Each question presents a possible symptom and individuals are asked to rate how much they have been distressed by that symptom in the last two weeks using a Likert scale ranging from 0 (not at all) to 4 (extremely). This measure includes three global indices of functioning, including a measure of overall psychological distress (Global Severity Index; GSI), a measure of the intensity of symptoms (Positive Symptom Distress Index; PSDI), and a measure of the number of reported symptoms (Positive Symptom Total, PST). Additionally, nine symptom scales can be calculated: somatization (SOM), obsessive-compulsive (O-C), interpersonal sensitivity (I-S), depression (DEP), anxiety (ANX), hostility (HOS), phobic anxiety (PHOB), paranoid ideation (PAR), and psychoticism (PSY). This measure is widely used (Derogatis & Savitz, 1999) and the reliability and validity of this measure have been well established in terms of both test-retest reliability and internal consistency (Derogatis & Melisaratos, 1983; Derogatis & Savitz, 1999). Construct validity has been established across multiple ethnic groups (Hoe & Brekke, 2009). This measure was used to examine overall

psychological distress, in addition to specific undesirable symptoms of anxiety, depression, hostility, and other psychological difficulties as a way of better understanding student parents and how the mental health of this population compares to that of the general college population. Copies of this inventory can be obtained through Pearson Education, Inc.

Perceived Social Support Scale (PSSS)

The PSSS (Procidano & Heller, 1983) is a 40-item, two-scale measure that examines the degree to which individuals feel that their needs for support, information, and feedback are fulfilled by friends (PSS-Fr) and by family (PSS-Fa). Each of the scales includes 20 items to which participants can respond "Yes," "No," or "Don't Know." For each question, one response is indicative of perceived support and has a one-point value. Total scores on each scale range from 0 (no perceived support) to 20 (maximum perceived support). Good reliability estimates have been reported for this measure, with Cronbach's alpha ranging from .88-.90 (Procidano & Heller, 1983). According to the initial validation studies, this measure also shows good convergent, divergent, and construct validity. This measure was used for descriptive purposes and to examine differences in perceived support between student parents and non-parent students. A copy of the PSSS can be found in Appendix F.

Brief COPE (B-COPE)

The B-COPE (Carver, 1997) is a 28-item scale derived from the 60-item full COPE (Carver, Scheier, & Weintraub, 1989). It was initially designed to examine coping after a single stressful event, but can be adapted to examine dispositional coping style (Carver, Scheier, & Weintraub, 1989). For the current study, this measure was adapted to examine general coping styles. Responses to items are on a Likert scale ranging from 1 (I don't do this at all) to 4 (I do this a lot). This measure examines 14 different types of coping or coping strategies, including active coping, planning, positive reframing, acceptance, humor, religion, using emotional

support, using instrumental support, self-distraction, denial, venting, substance use, behavioral disengagement, and self-blame. Reliability for each of the subscales is acceptable and alpha scores range from .50 to .90. The subscales of the B-COPE can also be condensed into three composite subscales examining emotion-focused coping, problem-focused coping, and dysfunctional coping. This method of scoring was developed using factor analysis and conceptually reasonable groupings, has been used in multiple published studies examining coping with long-term stresses, and has been shown to have Chronbach's alpha between 0.72 and 0.84 (Carver, 1989; Cooper, Katona, & Livingston, 2008). Validity of the full COPE has been established (Carver, Scheier, & Weintraub, 1989) and concurrent, convergent, and content validity have been supported for B-COPE (Cooper, Katona, & Livingston, 2008; Kapsou, Panayiotou, Kokkinos, & Demetriou, 2010). The B-COPE was used in this study as a way of describing coping strategy use among student parents and to compare the use of different types of coping strategies between student parents and non-parent students. Appendix G contains a copy of this measure.

Resources

In order to gather a full understanding of available resources for student parents on the IUP campus and an understanding of which resources these students are using, a two-part measure of resources was developed for this study. First, all participants were presented with a list of available resources both on and off campus and asked to check the resources with which they were familiar, as well as resources they have used. Secondly, participants were asked a series of open-ended questions about their use of campus and community resources, resources that they found most helpful, and resources that are not available that would be helpful. This measure helped to address the awareness of resources among student parents, the use of these resources, and student parents' beliefs about needs in order to assess current resource use by

student parents, as well as to suggest possible areas for future resource development. Furthermore, this measure was used to compare awareness and use of campus and community resources between student parents and non-parents. See Appendix H for the resources measure.

Procedure

After participants were recruited through the General Psychology Subject Pool, flyers, internet and e-mail advertisements (see Appendix I and J for a copy of the flyer and e-mail announcement), and referrals, they were contacted by the primary researcher to receive basic information about the study and schedule a research session. Study participation took place during the Fall 2010 and Spring 2011 academic semesters in Uhler Hall on the main campus of Indiana University of Pennsylvania (IUP). Free childcare was provided by the primary researcher and a fellow graduate student in Uhler Hall for the children of participants, if desired.

All measures were administered through the secure internet-based survey program "Qualtrics," a program supported by the university, with the exception of the PSI and BSI, which were administered in paper format due to copyright restrictions. Qualtrics presented participants with only those questions relevant to him or her (e.g., only parents received questions about children) and, therefore, created a more efficient administration process. Before beginning participation, the researcher or her assistant explained informed consent to the participants, asked the participants to read the informed consent form, and provided an opportunity for participants to ask questions (See Appendix K for a copy of the informed consent form). Students indicated their agreement to take part in the study digitally by checking an "agree" button to start the Qualtrics program. Unique subject numbers were assigned to each participant based on parenting status. These subject numbers allowed the researcher to associate online data with the PSI and/or BSI data, but were not linked to participant identity in any way, thus making data anonymous. Each participant completed the demographic questions first, followed by the SFCS, SFES,

WFCS, WFES, PSSS, Brief COPE, and resources measure, as relevant to the participant. The data provided through this survey was automatically entered into a database that was accessible only to the primary researcher.

After the completion of the online questionnaire, participants indicated through the last survey question whether they were to receive credit for the General Psychology subject pool for participation. If a participant indicated that he or she was not a General Psychology student, he or she was given the opportunity to be entered into a drawing to win one of two $50.00 Visa gift cards. If a participant chose to be entered into the drawing, he or she was directed to an independent Qualtrics survey requesting contact information. The drawing for the two $50.00 gift cards was done after the completion of data collection and the winning participants were contacted through e-mail in order to arrange for distribution of the gift card.

Following completion of the Qualtrics measures, each student parent was asked: "Are you willing to be contacted for future studies?" If a participant chose "yes," he or she was directed to another independent survey requesting contact information. All participants were then administered a paper versions of the BSI and student parents were administered the PSI. The administration sequence of the PSI and BSI was counterbalanced for student parents, as it is possible that these measures may impact each other. Specifically, these measures examine potentially negative aspects of parenting and difficult mental health issues, which may prime more negative or more positive responses on whichever measure is given second depending on responses to the first measure. After completing all measures, each participant was thanked and provided with a debriefing form that included information about the purpose of the study and a list of campus resources. Student parents were also provided with a list of community resources relevant to children and parenting. Finally, each participant was given an opportunity to ask any

remaining questions about the study. The debriefing form can be found in Appendix L and the resource sheets can be found in Appendix M.

CHAPTER V

RESULTS

Descriptive Information

PSI-SF

All student parents completed the PSI-SF. The Defensive Responding (DR) subscale indicated that 78.6% (n = 22) of respondents provided responses that were considered valid. The remaining six participants (21.4%) obtained very low scores, suggesting that they responded in an unusually positive, potentially defensive, manner. According to the PSI manual, there are multiple reasons for a low score, including a person wanting to portray a positive image, a parent not invested in the parenting role, and a parent who is very competent (Abidin, 1995). It should be noted that the current study used non-clinical sample. None of the scores on the remaining subscales for low-scoring respondents were outliers and an analysis of variance (ANOVA) calculation revealed that these respondents did not have significantly different scores from respondents who provided definite valid protocols on either the Parent-Child Dysfunctional Interaction (P-CDI; $F = 0.84$, $p > 0.05$) or the Difficult Child (DC; $F = 1.78$, $p > 0.05$) subscales. The Parenting Distress subscale (PD) and the overall parenting stress score were significantly different ($F = 12.24$, $p < 0.01$; $F = 6.55$, $p < 0.05$, respectively); however, both of these scores also include the questions on the DR scale. Furthermore, of the six respondents with very low scores, 50% had scores on the DR subscale that were at the cut-off for validity concerns, while the remaining three respondents were within 30% of the cutoff for defensive responding. All of these participants indicated in open-ended responses that they felt like competent parents and a majority of the participants reported having partners with whom they could share parenting responsibilities. Furthermore, all of these participants indicated having high levels of emotion-focused coping skills (M = 31.17, SD = 4.31) and problem-focused coping skills (M = 20.50, SD

= 3.51) and low levels of dysfunctional coping (M = 18.50, SD = 3.78) on the B-COPE. Additionally, the dysfunctional coping scale for these six parents as compared to parents providing a definitely valid PSI-SF was significantly lower (M = 21.91, SD = 4.42) at a $p < .10$ level. Given this information, it seems reasonable to assume that the six participants with low DR scores are managing the parenting role well, as opposed to responding defensively. For this reason, all student parents PSI-SF data were included in the analyses.

The average raw score for Total Stress (PSI-Tot) on the PSI-SF was 70.86 (SD = 18.41), at approximately the 55th percentile. Raw scores on the Total Stress scale above 90 are considered clinically significant. In the current sample, four participants (14.3%) reported clinically significant total parenting stress. Results of a one-sample t-test showed that overall parenting stress was not significantly different between student parents and the general parent population, as represented by the standardization sample of the PSI ($t(27) = 0.53$, $p > .05$). On average, the student parent score on the PD subscale was 25.54 (SD = 8.18), at approximately the 50th percentile, and 17.9% (n = 5) obtained raw scores suggesting clinically significant levels of parental distress. A one-sample t-test showed that parental distress was not significantly different from the general parent population ($t(27) = 0.35$, $p > .05$). The average score on the P-CDI subscale, which measures distress as related to the parent-child relationship, was at approximately the 45th percentile (M = 18.21, SD = 6.67). Six participants (21.4%) had scores suggesting clinically significant levels of distress with regard to their interactions with their child(ren). P-CDI scores were also not significantly different from the general parent population, as shown by a one-sample t-test ($t(27) = -0.62$, $p > .05$). Finally, the average raw score for the DC subscale of the PSI, examining a parent's distress as related to child behavior, approached the 60th percentile at 26.75 (SD = 8.93), with eight participants (28.6%) indicating clinically

significant distress in this area. No differences between student parents and the general parent population were found using a one-sample t-test ($t(27) = 1.04$, $p > .05$).

For the current sample, the internal consistency for the PSI-Tot scale was in the excellent range ($\alpha = .90$, $n = 27$). The Cronbach's alpha coefficients for the individual subscales were all within the good range and are as follows: PD was .85, P-CDI was .85, and DC was .87. These scores are consistent with internal reliability scores as reported in the PSI administration manual (Abidin, 1995).

SFCS

The SFCS was administered to all student parents to assess the level of conflict experienced between roles as students and as parents. One student parent did not complete this measure and an additional student parent did not answer one question on one of the subscales. Therefore, the following data is based on 27 participants, with the exception of the Time-based Family Interference with School subscale, which is based on 26 respondents. For each subscale, scores can range from 3 to 15, with higher scores indicating higher levels of role conflict. Scores for the composite scale (hereafter referred to as SFCS), determined by adding all subscale scores together, can range from 18 to 90. No normative data or cut-off scores could be found for this measure.

For this sample, mean scores on three scales approached the scale midpoint and no scores exceeded it. The highest mean score was obtained on the Time-Based School Interference with Family scale, indicating that for student parents, the highest level of conflict was related to the interference of time spent at school or on school-related activities with family life or family activities. Conflict regarding school-related stress or anxiety interfering with family life and parent functioning was somewhat lower (Strain-Based School Interference with Family), as was conflict related to the way that time spent on family obligations interfered with school

functioning (Time-Based Family Interference with School). For the purpose of efficiency and to preserve statistical power due to small sample size, only the overall score for school-family conflict was used for further analyses. Mean scores and standard deviations for all scales are presented in Table 4.

Overall reliability for the measure was in the excellent range ($\alpha = .93$, $n = 25$). Cronbach's alphas for the subscales ranged from .72 (Behavior-Based School Interference with Family) to .93 (Strain-Based School Interference with Family). Internal consistency for all scales fell in the acceptable range and was generally consistent with scores reported in the initial validation study (van Rhijin, 2009).

SFES

The SFES was also administered to all student parents to examine the positive relationship between school functioning and family life. Scores on each subscale range from 3 to 15, with higher scores indicating higher degrees of positive interaction between student and family roles. Total scores on the SFES can range from 18 to 90. No normative data or cut-off scores are available for this measure. For all except the School-to-Family Capital and Family-to-School Affect subscales, the number of respondents was 27. On these two subscales, only 26 student parents completed all questions necessary to provide a score.

All subscale mean scores were above the midpoint, suggesting a clear positive relationship between family and school roles. Specifically, student parents reported a moderately high ability to use skills, knowledge, or behaviors learned at school to improve functioning within the family (School-to-Family Development) and to apply skills learned through their family role (i.e. managing multiple role demands at once or using strategies to decrease stress) in an academic environment or while accomplishing academic activities (Family-to-School Development). The impact of any positive emotional states or attitudes gleaned from school or

school-related activities also did, to a mild degree, positively impact functioning in the family role (School-to-Family Affect). Similarly, positive affect related to family functioning reportedly had a positive impact on functioning as a student (Family-to-School Affect). The highest score on this scale indicated that many student parents felt strongly that the psychosocial resources they developed through their education (e.g. feeling accomplished or fulfilled) positively impacted their ability to feel as though they were a good family member (School-to-Family Capital). Finally, scores indicated that student parents in this sample felt that having a family and wanting to spend time with their family moderately increased their ability and drive to be more focused on schoolwork in order to complete it more efficiently (Family-to-School Efficiency). As with SFCS, only the total score for school-family enrichment was used for further analyses in this study in order to preserve statistical power due to small sample size (see Table 4).

Overall, reliability for this measure was in the excellent range ($\alpha = .93$, $n = 24$). Cronbach's alpha for subscales ranged from .73 (Family-to-School Efficiency) to .95 (Family-to-School Development and Family-to-School Affect), with all other subscales exceeding .85, which is consistent with scores reported by van Rhijn (2009).

WFCS

The WFCS is similar in format and content to the SFCS, but is used to assess the level of conflict employed student parents experience between their roles as employees and as parents. Data is generally based on 19 student parents who reported employment. Several student parents did not answer all questions, so the Strain-Based Work Interference with Family scale is based on 18 respondents and the Behavior- Based Work Interference with Family scale results are based on 17 respondents. For each subscale, scores range from 3 to 15, with higher scores indicating higher levels of role conflict. Total scores for the WFCS can range from 18 to 90. No normative data or cut-off scores are currently available for this measure.

No mean subscale scores met or exceeded the midpoint on this scale, suggesting that employed student parents experience minimal conflict between work and family roles. The Time-Based Work Interference with Family subscale did approach the midpoint, suggesting some possible conflict created between the time required for employment and time commitments required for the parenting role. Table 4 contains the means and standard deviations for all subscales.

Overall reliability for this measure was in the good range ($\alpha = .84$, $n = 16$). Cronbach's alpha ranged from .49 (Behavior-Based Work Interference with Family) to .89 (Strain-Based Family Interference with Work). Half of the subscales had an alpha that exceeded .84, while two of the remaining three subscales had alphas that exceeded .62 (Time-Based Family Interference with Work and Behavior-Based Family Interference with Work). Overall reliability and the reliability of the subscales with alphas above .84 are consistent with the alpha scores reported by Carlson, Kacmar, and Williams (2000), while the remaining reliability estimates were lower than expected. For this scale, only the composite of all subscales was used for further analysis due to low reliability for many of the individual subscales.

WFES

The WFES is comparable to the SFES in content and in format; however, it examines the positive relationship between work functioning and family life. All scores are based on the responses of 19 student parents who also reported employment. Possible scores on all six subscales range from 3 to 15, with higher scores indicating higher degrees of positive interaction between employee and family roles. Scores for the composite scale, WFES, can range from 18 to 90. No normative data or cut-off scores are available for this measure.

Mean scores on all subscales exceeded the midpoint. The highest score was on the Family-to-Work Affect subscale, suggesting that positive emotions related to family life

positively impact emotions surrounding work and work performance. The Family-to-Work Development and Work-to-Family Development subscale scores were similar and were the second and third highest scoring subscales, respectively. These scores suggest that skills and knowledge procured through the family role positively impact functioning in the employee role and vice versa. Scores on the Family-to-Work Efficiency subscale suggest that student parents viewed learning to be efficient at home as increasing their efficiency at work. The Work-to-Family Capital suggests a similar, but less pronounced, positive relationship between the resources, self-esteem, and security gained from work and positive functioning in the family role. Finally, the lowest mean scores were obtained on the Work-to-Family Affect scale, suggesting that while positive emotions gleaned from a student parent's role as employee are viewed as positively impacting functioning in the parent role, this relation is not as strong as those measured by other scales on the WFES. In all further analyses only the total WFES score was used (see Table 4).

Overall reliability for the WFES was in the excellent range ($\alpha = .98$, $n = 19$), as was reliability for all subscales. Subscale reliability ranged from .91 (Family-to-Work Efficiency) to .98 (Work-to-Family Affect). The reliability scores for this measure all met or exceeded the Cronbach alphas provided in the original validation study (Carlson, Kacmar, Wayne, & Grzywacz, 2006).

BSI

The BSI was administered to all participants to examine psychological functioning in multiple domains. Higher scores all on subscales, including the GSI, indicate higher levels of psychopathological symptoms. T-scores above 70 indicate a clinically significant score, while T-scores between 60 and 70 are in the "at-risk" range. One question regarding suicidality was

omitted for the purposes of this study and the Depression subscale was calculated without this question.

Overall reliability for the BSI was generally within the excellent to good range. For the whole sample, the GSI internal consistency coefficient was 0.97 (n = 55). The subscale alpha coefficients ranged from .71 to .93, with the exception of the Psychoticism subscale, which had a coefficient alpha of .65. These coefficients are consistent with those reported in the manual (Derogatis, 1993).

Student parents. First, BSI data was examined for outliers. One student parent obtained an unusually low score on the GSI when all participants were considered, but did not differ significantly from the student parent sample. Next, one-sample t-tests were used to compare student parent scores on the BSI to those of the standardization sample for the BSI. Results of these t-tests showed that student parents reported significantly higher scores than the standardization sample on the following subscales: GSI ($t(27) = 3.95$, $p \leq .001$), Obsessive-Compulsive ($t(27) = 5.82$, $p < .001$), Interpersonal Sensitivity ($t(27) = 2.82$, $p < .01$), Hostility ($t(27) = 4.40$, $p < .001$), Paranoid Ideation ($t(27) = 2.70$, $p < .05$), and Psychoticism ($t(27) = 3.16$, $p < .01$). Scores on the Somatization subscale also showed a trend suggesting that student parents may report higher scores on that subscale as well ($t(27) = 1.80$, $p = .08$). No differences were found with regard to Depression ($t(27) = 0.92$, $p > .05$), Anxiety ($t(27) = 0.93$, $p > .05$), or Phobic Anxiety ($t(27) = 0.91$, $p > .05$). The means and standard deviations of the BSI subscales for student parents can be found in Table 5.

Reliability for the GSI among student parents was also excellent ($\alpha = .94$, $n = 27$). Five of the nine subscale scores were in the acceptable to excellent range; however, the remaining four were in the poor range. Cronbach's alpha scores for the subscales are as follows: Somatization was .75, Obsessive-Compulsive was .82, Interpersonal Sensitivity was .73, Depression was .91,

Anxiety was .86, Hostility was .52, Phobic Anxiety was .65, Paranoid Ideation was .64, and Psychoticism was .63. The poor reliability of the Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism subscales is inconsistent with previous research that has shown the reliability of all of the subscales to be in the acceptable to excellent range (Derogatis & Melisaratos, 1983; Derogatis & Savitz, 1999). While the norms for this measure did include adult nonclinical samples, it is designed for use at an intake session or for tracking symptomology during treatment (Derogatis, 1993) and, therefore, its reliability has not been as well established for use with a nonclinical sample. As the reliability coefficients for the Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism subscales were poor, these scales should be interpreted with caution. For the purposes of the current study, only the GSI, Anxiety subscale, and Depression subscale scores, all of which had excellent internal consistency, were used for analyses. Additionally, concerns with anxiety and depression have higher base rates than many of the difficulties suggested by the other scales, and past research has suggested that these variables may be the most valuable to examine among student parents.

Non-parents students. For all subscales, non-parents scores were compared to the standardization sample for the BSI using one-sample t-tests; on each scale, non-parents reported significantly higher levels of psychopathological symptoms (GSI, $t(27) = 5.90$, $p < .001$; Somatization, $t(27) = 3.09$, $p < .01$; Obsessive-Compulsive, $t(27) = 7.03$, $p < .001$; Interpersonal Sensitivity, $t(27) = 4.93$, $p < .001$; Depression, $t(27) = 4.18$, $p < .001$; Anxiety, $t(27) = 3.06$ $p < .01$; Hostility, $t(27) = 4.66$, $p < .001$; Phobic Anxiety, $t(27) = 3.88$, $p \leq .001$; Paranoid Ideation, $t(27) = 5.84$, $p < .001$; Psychoticism $t(27) = 5.15$, $p < .001$). Means and standard deviations can be found in Table 5.

For non-parents, reliability of the GSI was also in the excellent range (α = .97, *n* = 28). The remaining subscale coefficient alpha scores ranged from .71 to .92, with the exception of the Psychoticism scale, which was .63.

PSSS

The PSSS was administered to all participants and is a measure of social support as perceived by participants. Two participants had scores much lower than the sample on the Perceived Social Support from Friends scale (PSS-Fr); however, these scores did not significantly change the mean scores on the PSS-Fr, internal consistency measures, or the outcome of further analyses. Therefore, all participants were included in analyses.

Scores on both the PSS-Fr and Perceived Social Support from Family (PSS-Fa) range from 0 to 20 and overall PSSS scores can range from 0 to 40, with higher scores indicating that participants feel more strongly that their needs for support, information, and feedback are being met by friends or family, respectively. Overall reliability was measured using Cronbach's alpha. For the complete PSSS scale, alpha was .75 (*n* = 51); PSS-Fa alpha was .54 (*n* = 54) and PSS-Fr alpha was .65 (*n* = 53).

Student parents. The average raw score for PSS-Fr was 12.00 (*SD* = 2.94), while the average score for PSS-Fa for student parents was slightly higher at 13.64 (*SD* = 2.35). The overall PSSS score was 25.64 (*SD* = 4.45). Average scores on all scales exceeded the midpoint, suggesting that student parents felt at least somewhat supported by their family and friends. For student parents, alpha for the entire scale was .75 (*n* = 25), alpha for the PSS-Fr scale was .60 (*n* = 27) and for PSS-Fa it was .65 (*n* = 27).

Non-parent students. For non-parents, the average score on the PSS-Fr subscale also indicated some support from friends at 12.25 (*SD* = 2.37). Scores on the PSS-Fa were slightly lower at 11.78 (*SD* = 3.33), indicating a perception of support from family members that may be

somewhat less than that of friends. The average overall PSSS score was 24.15 (*SD* = 4.74). All average scores exceeded the midpoint on this scale, suggesting that, in general, non-parents felt at least somewhat supported by family and friends. Among non-parents, reliability for the PSSS was .75 (*n* = 26), while reliability for PSS-Fr was.45 (*n* = 28) and for the PSS-Fa it was .66 (*n* = 26).

Reliability estimates for all scales of the PSSS are considerably lower than those provided by Procidano and Heller (1983) and only the complete PSSS scale meets the minimum standards for acceptable reliability for student parents, non-parent students, and the sample as a whole. For this reason, only the complete PSSS subscale will be used in subsequent analyses. Given that the reliability for the overall PSSS scale is, however, still low, results using this measure should be interpreted with caution.

B-COPE

The B-COPE yields 14 subscale scores that can be combined into three subscales, as suggested by Carver (1989): Emotion-Focused Coping, Problem-Focused Coping, and Dysfunctional Coping. While the 14 subscale scoring is often utilized, research has shown the three subscale scoring to be valid and reliable (Carver, 1989; Cooper, Katona, & Livingston, 2008), as well as more parsimonious. Furthermore, the aggregated subscale scores were generally consistent with the scores of the original 14 subscales for this sample and the aggregation of the subscales did not change the overall differences in scores between parents and non-parents. Therefore, the three-subscale scoring method was used for this study. The Emotion-Focused Coping (EFC) subscale is comprised of items assessing acceptance, use of emotional support, humor, positive reframing, and use of religion as coping mechanisms. The Problem-Focused Coping (PFC) subscale is calculated by adding together items assessing active coping, instrumental support, and planning. Finally, the Dysfunctional Coping (DC) subscale is

comprised of items assessing behavioral disengagement, denial, self-distraction, self-blame, substance use, and venting.

The EFC possible score range is 10 to 40, with higher scores indicating more frequent use of emotion-focused coping techniques. Possible scores on the PFC subscale range between 6 and 24, with higher scores indicating more frequent use of problem-focused coping techniques. Finally, the possible score range for DC is 12 to 48, with higher scores indicating greater use of coping strategies generally considered to be unhelpful, especially in situations that often involve long-term stressors, such as balancing multiple life roles. Overall reliability for this measure was in the acceptable to good range for this sample. Coefficient alphas were .73 for EFC, .71 for PFC, and .84 for DC. These scores are generally consistent with reliabilities reported by Carver (1989) and Cooper, Katona, and Livingston (2008).

Student parents. For student parents, the average EFC score was 29.00 (*SD* = 4.62), suggesting fairly high levels of coping focused on strategies to reduce emotional discomfort without changing the situation. The average score for PFC was 18.89 (*SD* = 3.07), suggesting that student parents also engage in a number of coping strategies focused on altering undesirable and stressful situations. Finally, the average score for DC was 21.18 (*SD* = 4.46), suggesting generally low use of dysfunctional coping strategies. Among student parents, coefficient alphas were slightly lower than those obtained for the overall sample at .65 for EFC and .70 for both PFC and DC.

Non-parent students. Results of the B-COPE revealed that non-parents also engaged in a variety of coping strategies. For this sample, the mean EFC score was 26.89 (*SD* = 5.76) and the mean PFC score was 18.14 (*SD* = 3.47). Two participants were identified as having scores that were lower than those of most non-parents on this scale; however, these scores were not extreme enough to be considered outliers and did not change the mean score enough to impact

other analyses. Finally, the mean DC score for non-parents was 27.96 (*SD* = 7.41). Non-parent reliability was consistent with the overall reliability for the scale; coefficient alphas were .77 (EFC), .71 (PFC), and .84 (DC).

Resources

All participants were asked to indicate which campus and community resources they had heard of and which resources they had used. Among campus resources, participants were presented with a list of nine possibilities, such as the Center for Applied Psychology, The Writing Center, and the Advising and Testing Center. The 21 resources in the community included services such as the Indiana County Head Start, the Housing Authority of Indiana County, the Indiana County Goodwill, and the Indiana County Transit Authority. For each of these groups of resources, participants were also provided with an "Other" category in which they could include other resources that were not listed.

Student parents. Student parents reported being aware of between 3 and 10 (*M* = 7.25, *SD* = 2.35) of the 10 campus resources listed, including an "other option." In contrast, they reported using a mean of only 1.61 (*SD* = 1.87) of the 10 resources, with a range from 0 to 8. Student parents also reported being aware of between 4 and 22 (*M* = 14.96, *SD* = 5.94) of 22 relevant community resources and using a mean of 4.11 (*SD* = 3.30) resources, with a range from 0 to 12. See Table 6 for more information regarding campus resource awareness and use and Table 7 for community resource awareness and use.

Student parents were also asked to describe personal resources they used during difficult times. The most commonly identified source of personal support for student parents was a significant other or spouse (50.0%). Additionally, a large number of student parents indicated receiving support from family of origin, including parents and siblings (32.1%). The third most common response was that the student "dealt with it" on their own (21.4%; see Table 8). In fact,

one participant went so far as to state, “There is nowhere to turn for help. There is not enough time, and there really isn't a solution to that issue…”

When asked about resources considered to be most helpful, many student parents spontaneously reported resources related to childcare. In fact, three of the top four most helpful resources listed by student parents involved childcare, with the second most helpful resource being family members. The on-campus day care, IndiKids, was listed by six of the twenty four participants that provided responses to the question of most helpful resources (25%). Only eight participants reported ever using IndiKids and 50% of these respondents reported it as the most helpful resource, suggesting that availability of on-campus day care is extremely important for student parents. Furthermore, four participants (16.7%) reported Child Care Information Services of Indiana County (CCIS) as a very helpful resource. Given that this organization frequently provides financial child care assistance, it is clear that obtaining and paying for child care services play an important role in the lives of student parents (See Table 9).

The importance of child care services was further reflected in the responses of student parents regarding resources they desired. Of the five student parents who provided codeable responses, two indicated the desire to have access to IndiKids services on campus and two other parents indicated the desire for financial assistance with child care costs to be subsumed under a financial aid program. Additional responses included counseling services (n = 1) and more use of the Center for Health and Well-being (n = 1). The desires of student parents can also be seen in the endorsement of interest in a number of possible resources. Of particular note, 50.0% (n = 14) indicated interest in an on-campus playground and 39.3% (n = 11) indicated interest in on-campus day care services. Additionally, 42.9% (n = 12) indicated interest in a student parent support group, parent-child play groups, and on-campus family housing. Percentages for resources presented can be found in Table 10.

Non-parent students. Non-parents reported an average awareness of 6.68 (*SD* = 1.94) campus resources, with a range of 4 to 10, and an average use of 1.54 (*SD* = 1.48), with a range of 0 to 4. They reported an average awareness of 7.79 (*SD* = 6.65) of the community resources listed (range 0-22) and an average use of 0.86 (*SD* = 1.44; range 0-4). Many of the possible resources were targeted toward a parenting population, so high levels of use were not expected among non-parent students (see Tables 6 and 7).

Non-parent students provided similar responses to student parents regarding personal resources, rating friends (53.6%, *n* = 15) and family of origin (39.3%, *n* = 11) as important resources. Similar to student parents, the third most commonly given response was relying on oneself to handle problems (32%, *n* = 9; see Tables 8 and 9).

Other Descriptive Variables

Several additional variables were examined that have been suggested or shown by previous research to be important in understanding student parents.

Developmental status. Jeffery Arnett (2004) proposed a life stage unique to Western or Westernized countries known as “emerging adulthood” that involves a search for one's identity and a feeling of being in-between adolescence and adulthood. Although college students often endorse being in this stage, for student parents, being in this life stage while caring for a child is associated with higher levels of stress (Branscomb, 2006). For this reason, participants were asked if they felt they had reached adulthood, had not yet reached adulthood, or had reached adulthood in some ways, but not others (i.e., emerging adults). They were also asked to provide rationale for their response. Open-ended responses were then coded independently by the main researcher and the faculty research advisor. Codes were compared and any discrepancies were discussed and agreed upon by both parties.

Student parents. Among student parents, 78.6% (*n* = 22) identified themselves as adults and 21.4% (*n* = 6) identified themselves as emerging adults. No student parents identified themselves as adolescents. Many student parents rating themselves as adults indicated that this was due to managing adult responsibilities, such as the day-to-day maintenance of a household, having a professional career, and paying bills (67.9%, *n* = 19). The majority of student parents (57.1%, *n* = 16) also endorsed financial independence as a reason for adulthood, defined as paying for items on their own, holding a job, or supporting a family financially. Of respondents, 32.1% (*n* = 9) identified being married as a reason for adulthood. A significant portion of student parents (25.0%, *n* = 7) also indicated that caring for other individuals, including children, a spouse, and/or parents, was an important part of what made them an adult. Several student parents indicated that both acting responsibly (7.1%, *n* = 2) and life experience/maturity also made them feel like adults (7.1%, *n* = 2). For the purposes of this study, acting responsibly was considered to encompass a number of acts, such as planning for the future and staying at home to care for family instead of going out with friends. Some participants indicated that their life experiences or maturity made them feel like an adult, including reasons for adulthood such as feeling mature or learning from past experiences. Finally, one student parent (3.6%) reported age as the reason for adulthood.

Student parents describing themselves as emerging adults provided a variety of justifications, with no common theme. Sample responses included feeling young at heart, having more to learn, lacking independence, and sometimes acting irresponsibly.

Non-parent students. When non-parents were asked about developmental status, 35.7% (*n* = 10) identified themselves as adults and 10.7% (*n* = 3) identified themselves as adolescents. A majority (53.6%, *n* = 15) identified themselves as emerging adults.

The most common reason for adulthood among non-parents was financial independence (32.1%, *n* = 9). Life experience/maturity was also endorsed by a significant number of non-parents (25.0%, *n* = 7), followed closely by the importance of acting responsibly (21.4%, *n* = 6) and other adult responsibilities (17.9%, *n* = 5). Finally, caring for others, age, and being married were each listed by one participant (3.6%) as reasons for adulthood.

The most commonly given response among non-parents for not being an adult was a lack of independence (*n* = 9, 32.1%), including relying on family financially. A lack of adult responsibilities, such as not yet having a career or family, were reasons indicated by 17.9% (*n* = 5) of non-parents. Finally, age and lack of maturity/experience were both reasons given by one non-parent (3.6%) each as a reason for not being an adult.

Relationship satisfaction. Among student parents, 82.1% (*n* = 23) reported being satisfied with their current relationship. The remaining 17.9% (*n* = 5) reported being dissatisfied with their current relationship. Among non-parent students, 75.0% (*n* = 21) indicated satisfaction with his or her relationship. In contrast, 25.0% (*n* = 7) of non-parent participants were not satisfied with their relationship.

Employment information. All participants were asked to provide information regarding current employment status, number of jobs, and place of employment.

Student parents. Of the 19 student parents who provided employment information, a majority (68.4%, *n* = 13) reported their primary employment was off campus and not affiliated with the university. An additional 21.1% (*n* = 4) reported primary employment on campus, though not through a federal work study program. Two participants (10.5%) reported working on campus through a federal work study program. Five participants also reported working a second job, none of which were on campus or affiliated with the university. Of the primary employment

positions, 63.2% (*n* = 12) were permanent positions, while 36.8% (*n* = 7) were temporary. Of secondary positions, 40.0% (*n* = 2) were also permanent and 60.0% (*n* = 3) were temporary.

Non-parent students. Most non-parents who reported employment also had primary employment off campus (84.6%, *n* = 11), while one participant (3.6%) endorsed working on-campus not through work study and one (3.6%) endorsed working on-campus through a federal work study program. Three participants reported working a second job, all of which were off campus. A majority of participants reported that their primary employment was temporary (61.5%, *n* = 8), while fewer reported permanent employment (38.5%, *n* = 5). Of secondary employment positions, one participant reported a permanent position and two reported that their secondary job was a temporary position.

Childcare arrangements. Twenty-seven participants provided information about their childcare arrangements. Of these participants, 22.2% (*n* = 6) reported using on-campus childcare services and an additional 22.2% (*n* = 6) reported using off-campus childcare services. Three participants (11.1%) reported that their significant other typically cares for their child(ren) and four participants (14.8%) reported that other family members provide childcare. An additional 11.1% (*n* = 3) reported using a combination of childcare options and 18.5% (*n* = 5) reported that their child(ren) no longer need childcare due to age.

Understanding Student Parents

Relationships among Demographic Data and Survey Measures

It was hypothesized that role conflict would be positively related to parenting stress, depression, anxiety, and general psychological distress. Additionally, it was predicted that student parents reporting higher levels of role conflict would endorse use of fewer adaptive coping strategies. Exploratory analyses were also conducted to examine the relations between demographic variables and survey measures considered to be theoretically related based on

research with college students and/or parents in general. Given the small sample sizes in this study and, thus, low statistical power, trends in the data are reported in addition to significant results.

Before any hypotheses regarding student parents were addressed, the results of the BSI and PSI were examined using a multivariate analysis of variance (MANOVA) based on which measure was given first. On the subscales used in further analyses, no significant differences in scores were found. Specifically, no differences were found based on which measure was given first for BSI Depression ($F(1, 26) = 2.37$, $p > .05$, partial $\eta^2 = .08$), BSI Anxiety ($F(1, 26) = .37$, $p > .05$, partial $\eta^2 = .01$), general psychological distress as measured by the BSI (GSI; $F(1, 26) = 2.67$, $p > .05$, partial $\eta^2 = .09$), or overall parenting stress ($F(1, 26) = 1.15$, $p > .05$, partial $\eta^2 = .04$). Given this information, no statistics were necessary in further analyses to control for the order in which these measures were administered.

Correlations. Relationships between continuous variables were examined using Pearson Product-Moment correlations. For all variables, skew and kurtosis of the sample distribution was examined. When skew and/or kurtosis was significantly different from a normal distribution, Spearman's r_s correlations were used, as noted below.

Parenting stress and psychological distress. Parenting stress, as measured by the PSI Total Score (PSI-Tot), was correlated with multiple other variables that are consistent with previous research. The PSI-Tot was positively correlated with general psychological distress as measured by the BSI ($r(28) = .48$, $p < .05$). Similarly, the PSI-PD subscale was also positively correlated with general psychological distress ($r(28) = .61$, $p < .01$) and depression as measured by the BSI ($r(28) = .48$, $p < .01$), while being negatively correlated with age ($r(28) = -.44$, $p < .05$). Additionally, while not significant, results suggested that parents with higher levels of

overall parenting stress showed a trend toward higher levels of both BSI Depression and Anxiety ($r(28) = .25$, $p = .07$; $r(28) = .34$. $p = .08$, respectively; see Table 11).

Role conflict and enrichment. As predicted, the total conflict between school and family life was positively related to parental distress (PSI-PD; $r(27) = .62$, $p < .01$) and general psychological distress ($r(27) = .45$, $p < .05$). There was also a trend in the data suggesting the overall conflict between school and family life may decrease with age ($r(27) = -.38$, $p = .05$). Similarly, a trend suggested that the age of a student parent's youngest child is negatively related to school-family conflict ($r(270) = -.35$, $p = .07$). Contrary to the hypotheses, school-family conflict was not significantly related to depression, anxiety, any type of coping, or the number of children a student parent reported having in his or her care (see Table 12). Enrichment related to the relationship between school and family roles was, however, related to lower levels of anxiety ($r_s(27) = .51$, $p < .01$) and psychological distress ($r_s(27) = -.51$, $p < .01$). School-family enrichment was also negatively related to PSI-Tot ($r_s(27) = -.40$, $p < .05$) and PSI-P-CDI ($r_s(27) = -.38$, $p < .05$, and the negative correlation with PSI-PD approached significance ($r_s(27) = -.36$, $p = .07$). All of the correlations that include the School-Family Enrichment Scale total were measured using the Spearman r_s correlation.

The relationship between work and family roles also revealed several significant results. Specifically, as predicted, higher levels of anxiety were significantly associated with higher levels of work-family conflict ($r(19) = .48$, $p < .05$) and lower levels of work-family enrichment ($r(19) = -.48$, $p < .05$). The age of a student parent's youngest child was also significantly related to higher levels of work-family conflict ($r(19) = -.46$, $p < .05$). Additionally, the data showed a trend toward a negative relationship between parents' rating of how difficult his or her child was (PSI-DC) and levels of enrichment between the work and family roles ($r(19) = -.41$, $p = .09$).

Contrary to predictions, however, no relationship was found between work-family conflict and PSI-Tot, any type of coping, depression, or general psychological distress (see Table 12).

Coping strategies, resources, and support. Despite a theoretical relationship between coping and levels of conflict and enrichment, no significant relationships were found. Furthermore, coping was unrelated to the number of campus resources or community resources used (see Table 12). The data revealed a trend toward a negative relationship between age and number of community resources used ($r(28) = -.34$, $p = .08$), suggesting that younger parents tended to use more community resources than older parents.

Perceived social support was related to multiple other variables. Specifically, a higher level of perceived support was related to lower levels of PSI-P-CDI ($r(28) = -.46$, $p < .05$), PSI-DC ($r(28) = -.50$, $p < .01$), and PSI-Tot ($r(28) = -.54$, $p < .01$). Perceived social support was also negatively related to BSI-reported anxiety ($r(28) = -.44$, $p < .05$) and general psychological distress ($r(28) = -.40$, $p < .05$). In contrast, perceived social support was not related to depression or PSI-PD (see Table 11).

Summary of significant correlations. As expected based on prior research, results of the current study show that parents reporting higher levels of parenting distress tended to be younger and to also experience more symptoms of depression and general psychological distress, as well as higher levels of conflict between school and family roles. Furthermore, as hypothesized, student parents reporting increased conflict between school and family roles also reported higher levels of general psychological distress, as measured by the BSI. Also, as hypothesized, anxiety was positively associated with conflict related to the interplay between work and family roles, and negatively correlated with enrichment gained from the interactions between work or school and family roles and school and family roles. Additionally, those parents reporting higher levels of enrichment between school and family roles also reported significantly lower levels of general

psychological distress and overall parenting stress, as well as fewer dysfunctional interactions with their children. Finally, perceived social support was negatively related to parent-reported dysfunctional parent-child interactions, child difficulty, total parenting stress, anxiety, and general psychological distress. These correlations suggest that younger student parents who are employed and experiencing conflict between their multiple life roles and who feel as though they have low levels of social support are at a higher risk for psychological distress and parenting stress related to the parenting role.

Differences among student parents. It was expected that within-group differences would emerge for the student parent sample in various domains, such as traditional versus nontraditional status, developmental status, marital status, coping, psychological distress, and parenting stress, though the exact nature of these differences was unknown given a lack of prior research in this area. Both categorical and continuous variables were used to examine these differences. Categorical variables were examined using chi-square analyses. When sample sizes for the groups involved in each analysis were too small and, thus, violated the assumptions of the chi-square analyses, comparisons for the student parent sample were completed using a two-sided Fishers Exact Test (FET) as noted below. When a difference was examined using a categorical and a continuous variable, a Multivariate Analysis of Variance (MANOVA) was used. The statistic used for each analysis is indicated below. For MANOVAs, the significant *p* value was adjusted using a Bonferroni correction in order to account for the number of variables in the analysis and control for the accumulation of Type I error. Adjusted *p* values are provided below.

Traditional versus nontraditional status. For the sample as a whole (i.e., including non-parent students), non-traditional students were more likely to endorse adulthood as opposed to emerging adulthood or adolescence, while traditional students identified themselves as emerging

adults or adolescents ($\chi^2(1, N = 56) = 7.11, p < .01$). Among student parents, however, traditional or non-traditional student status was not related to self-identification as an adult or emerging adult ($n = 28$, $P = .174$, FET).

It was expected that non-traditional student parents would be more likely to be employed than traditional students; however, there was no difference in employment between these groups ($n = 28$, $P = 1.000$, FET), nor was either group more likely to work more than 20 hours per week ($n = 19$, $P = 1.000$, FET). In contrast, although data revealed a trend toward non-traditional students more likely to be part- time students than traditional students ($n = 28$, $P = .055$, FET), part-time students were not any more likely to be employed than full-time students ($n = 28$, $P = .43$, FET).

It was also predicted that nontraditional students would be more likely to be married or cohabiting with a long-term partner; however, this was not the case for student parents. In fact, there were no differences in married/cohabiting status for student parents across traditional or nontraditional status ($\chi^2(1, N = 28) = 0.00, p < .05$). A one-way ANOVA revealed, however, a significant difference between the mean age of the youngest child of traditional student parents ($M = 2.43$ years, $SD = 1.57$) and the youngest child of nontraditional student parents ($M = 7.19$ years, $SD = 5.02$; $F(1, 25) = 9.14, p < .01$).

A MANOVA comparing traditional and nontraditional student parents revealed no differences in PSI-Tot or general psychological distress as measured by the GSI (see Table 14). While the results showed that traditional student parents reported significantly higher levels of school-family conflict ($M = 49.00$, $SD = 10.80$) than non-traditional ($M = 37.56$, $SD = 12.63$) student parents ($F(1, 25) = 5.99, p < .05$, partial $\eta^2 = .19$), the result became non-significant when using the Bonferroni correction to account for the accumulation of error, making the significant p-value .01. In contrast, the MANOVA revealed a possible trend suggesting that

traditional student parents may engage in more dysfunctional coping (M = 22.73, SD = 5.06) than nontraditional student parents (M = 19.69, SD = 3.38; $F(1, 25) = 3.52$, $p = .07$, partial $\eta^2 = .12$), though this must be interpreted with extreme caution given the lower p-value after the Bonferroni correction. See Tables 13 and 14 for more information.

***Gender*.** Multiple variables were examined in the context of gender using a MANOVA; however, no significant differences emerged. See Tables 13 and 14 for more information.

***Student status*.** Although MANOVA analyses revealed no significant differences between part-time and full-time students, results suggested several trends. Specifically, differences between scores for full-time and part-time student parents on the School-Family Conflict Scale (SFCS) approached significance (F (1, 25) = 3.36, $p = .08$, partial $\eta^2 = .12$), such that full-time students (M = 44.32, SD = 12.97) may experience higher levels of conflict between school and family roles than part-time students (M = 33.00, SD = 9.46), though this should also be interpreted with extreme caution given that the significant p-value is .01 after the Bonferroni correction. No significant differences or substantial effect sizes were found with regard to full- or part-time student status on PSI-Tot, perceived social support, or general psychological distress (See Tables 13 and 14).

***Marital status*.** In this study, the categories for marital status were condensed to living with a partner and not living with a partner due to the small sample size. This division was deemed reasonable given that research regarding marital status often describes unique difficulties for single parents as opposed to parents who have daily support from a partner in the home (Gerrard & Roberts, 2006; Johner, 2007; Noor, 2004).

Results showed that student parents who were either married or living with a partner were significantly more likely to have a household income above $20,000 per year than were student parents who were not living with a partner (n = 28, P = .005, FET), but were no more or less

likely to be employed (n = 28, P = 1.000, FET) or to work more than 20 hours per week than student parents who were not living with a partner (n = 19, P = 1.000, FET).

Additionally, among student parents, those who reported living with a partner were significantly more likely to be satisfied with their romantic relationship than those in non-cohabiting relationships (n = 28, P = .041, FET). Given this information, it is logical to assume that living with a partner has a positive impact on psychological distress; however, a MANOVA revealed no significant differences in general psychological distress or depression between student parents who were living with a partner versus those who were not, after a Bonferroni correction resulted in a significant p-value of .01 (see Table 14). There was, however, a trend suggesting that marital status may impact depression (F (1, 25) = 4.44, p = .05, partial η^2 = .15), such that student parents who were cohabitating (M = 48.17, SD = 8.89) reported fewer symptoms of depression than those who were not (M = 56.56, SD = 11.38). Moreover, no differences were found between groups on measures of anxiety, overall parenting stress, or school-family conflict (see Tables 13 and 14). These results show that living with a partner did not appear to have a significant impact on mood, stress, or role conflict, contrary to the hypotheses.

Employment and income. Finally, the potential impact of financial strain was examined with regard to possible differences among student parents. MANOVA results showed neither employment status nor having income above or below the current poverty line of approximately $20,000 yearly for a family of at least 2 (U.S. Census Bureau, 2011) had an impact on general psychological distress, overall parenting stress, or school-family conflict. The MANOVA examining employment status also showed no differences in perceived social support (see Tables 13 and 14). In a separate one-way ANOVA, no differences were found with regard to work-family conflict (F (1, 17) = .15, p > .05) across income level.

Summary of differences among student parents. Trends emerged within the student parent population that were consistent with expectations, but must be interpreted cautiously, as *p*-values were not significant after correction. First, traditional student parents were more likely to be full-time students than non-traditional student parents and have higher levels of school-family conflict. Second, a trend suggested that student parents who were married or living with a partner may have fewer symptoms of depression as compared to student parents not married or living with a partner. In contrast, no differences were found in this group with regard to gender, employment status, or yearly income. Additionally, no differences were revealed for self-identified developmental status or marital status across traditional versus nontraditional students. The only significant difference among student parents was that those who were cohabitating were more likely to have household incomes above $20,000 than those who were not cohabitating and they were more likely to report being satisfied with their romantic relationships.

Overall, student parents represent a very heterogeneous group. In general, traditional student parents tended to be full-time students with younger children and higher levels of school-family conflict when compared to nontraditional student parents. Cohabitation was not related to student status; however, among student parents who were cohabitating, income tended to be higher, symptoms of depression tended to be lower, and reports of relationship satisfaction were more common than among those not cohabitating.

Predicting Parenting Stress, Role Strain, Psychological Distress and Coping

Several multiple regression analyses were conducted to identify predictors of parenting stress, role conflict, psychopathology, and dysfunctional coping. Predictors were chosen based on theory and prior research conducted with the general student and parent populations, in addition to student parents.

Parenting stress. In the multiple regression model used to examine total parenting stress, the predictor variables were the total score on the Perceived Social Support Scale (PSSS), BSI General Symptom Inventory score (GSI), and marital status, defined as married or living with a partner or not living with a partner. The PSSS was chosen because the total score was strongly correlated with the PSI-Tot, which is consistent with prior research demonstrating that higher levels of social support are associated with lower parenting stress (McConnell, Breitkreuz, & Savage, 2011). The GSI was chosen because of a strong correlation with the PSI-Tot and because of an established link between general psychological distress and parenting stress (Deater-Deckard, 2004). Finally, marital status was chosen because not having a partner has consistently been linked to higher levels of stress and negative psychological outcomes (Johner, 2007; Noor, 2004; van Rhijn, 2009). This model significantly predicted levels of parenting stress (F (3, 24) = 4.78, $p \leq .01$) and the model explained 29.5% of the variance (Adjusted R^2 = .295). PSSS was a significant predictor in this model (β = -.43, $p < .05$), while GSI (β = .30, $p > .05$) and marital status (β = .05, $p > .05$) were not.

School-family conflict and enrichment. Previous research has shown that school-family conflict can be predicted by lower levels of financial aid, lower income, and hours spent away from home each week to fulfill school obligations (Anderson, 2001; Gonchar, 1995; Home, 1998; Salters, Hughes, & O'Leary, 2009). This study attempted to partially replicate these results by using income, part-time versus full-time student status, traditional versus nontraditional student status, and age of a student parent's youngest child in a regression to predict SFCS. For the purposes of this regression, part-time versus full-time status was used to examine time spent to away from home to fulfill school obligations because part-time students should, by definition, spend less time on school on a weekly basis than full-time students. Traditional versus nontraditional student status was included in this analysis because of the strong relationship this

variable has with SFCS shown in this study. Finally, age of the youngest child was used in this regression because younger children have been shown to increase demands among families more than older children (Carney-Crompton & Tan, 2002; Deater-Deckard, 2004) and levels of conflict should increase as demand increases. The model created using these variables did not significantly predicted conflict between school and family roles (F (4, 22) = 2.16, $p > .05$) and explained 15.1% of the variance (Adjusted R^2 = .151). None of the variables were significant nor provided predictive value for this model (income, β = .14, $p > .05$; traditional versus non-traditional status, β = -.29, $p > .05$; part-time versus full-time status, β = -.29, $p > .05$; age of youngest child, β = -.19, $p > .05$).

While little research has been done regarding enrichment between school and family roles, the theory of role enrichment suggests that feelings of enrichment are related to the positive outcomes of each of the roles and positive emotions associated with these roles (van Rhijn, 2009). Additionally, lower levels of stress or distress are likely to be important in order for individuals to recognize or appreciate enrichment between roles. Furthermore, as previously stated, SFES was negatively correlated with general psychological distress and total parenting stress. For these reasons, the GSI and PSI-Tot were chosen as predictors for the SFES. Traditional versus nontraditional student status was also chosen because of research that shows that nontraditional student parents are more likely to attend college for personal growth and enrichment (Morris et al., 2003; Sander, 2008; Taniguchi & Kaufman, 2007; U.S. Department of State, 2008); thus, it is possible that they may seek and report higher levels of enrichment. This model significantly predicted scores on the SFES (F (3, 23) = 3.08, $p < .05$) and explained 19.4% of the variance (Adjusted R^2 = .194). The GSI (β = -.45, $p < .05$) was a significant predictor in the model, while student status (β = -.12, $p > .05$) and PSI-Tot (β = -.18, $p > .05$) were not.

Anxiety, depression, and general psychological distress. For student parents, attempts were also made to identify factors that may impact psychopathological symptoms. The regression used to predict depression included the PSI-Tot, the SFCS, and traditional versus nontraditional student status. Both trends in the data and previous research (Deater-Deckard, 2004) suggested a link between depression and parenting stress, therefore, PSI-Tot was chosen a predictor in this model. The SFCS was chosen as a result of previous research showing that difficulty balancing parenting and academic roles can predict depression (Salters et al., 2009). Traditional versus nontraditional status was used as the third variable in the model to predict depression as a result of research that suggests that traditional students may experience higher levels of psychological distress related to their academic roles (O'Leary, Hughes, & Salters, 2009) and use more dysfunctional coping skills as compared to nontraditional students (Morris et al., 2003); there is also well-established link between traditional college students and depression (Buchanan, 2012) that is not as well-researched or documented for nontraditional students. Finally, given that use of effective coping skills has been shown to be related to positive mental health (Deater-Deckard, 2004; Giancola et al., 2009; Tein et al., 2000), both emotion-focused and problem-focused coping were included in this regression as well. Using this model, depression was significantly predicted (F (5, 21) = 2.90, $p < .05$) and 26.7% of the variance was explained (Adjusted $R^2 = .267$). SFCS ($\beta = .50$, $p < .05$), emotion-focused coping ($\beta = .51$, $p < .05$), and problem-focused coping ($\beta = -.71$, $p < .01$) were all significant predictors, while PSI-Tot ($\beta = .06$, $p > .05$) and student status ($\beta = .20$, $p > .05$) were not.

The model used to predict anxiety also included the PSI-Tot because of the trend in the data suggesting that parenting stress is related to anxiety, as well as previous research showing the negative psychological impact that parenting stress can impart on parents (Deater-Deckard, 2004). The same research that showed that depression can be predicted by school-family conflict

also showed that anxiety can be predicted by such conflict (Salters et al., 2009), so SFCS was used as a predictor in this model as well. The SFES was used in the model to predict anxiety due to the strong correlation between SFES and anxiety found in this study and the theory that suggests that school-family enrichment may have a positive impact on mental health (van Rhijn, 2009). Finally, as with depression, problem-focused and emotion-focused coping were used as a result of research showing the positive impact that effective coping has on mental health (Deater-Deckard, 2004; Giancola et al., 2009; Tein et al., 2000). Anxiety could not be predicted by this proposed model (F (5, 21) = 1.33, $p > .05$). A total of 5.9% of the variance was explained (Adjusted $R^2 = .059$) using this model. While none of the variables were significant in predicting anxiety, SFES did show predictive value ($\beta = -.45$, $p = .05$). Beta values for the remaining predictor values were: PSI- Tot $\beta = .01$, $p > .05$, SFCS $\beta = .06$, $p > .05$, emotion-focused coping $\beta = -.02$, $p > .05$, and problem-focused coping $\beta = -.12$, $p > .05$.

Finally, the SFCS, PSSS, and B-COPE dysfunctional coping, emotion-focused coping, problem-focused coping were entered as predictors in a model to predict GSI. The SFCS was chosen as a predictor because of the previous research suggesting that school-family conflict can have a negative impact on psychological functioning (Salters et al., 2009) and the significant correlation found in this study between the SFCS and the GSI. The PSSS was chosen because of consistent patterns in the research showing the positive impact of social support on psychological functioning and distress (Anderson, 2008; Branscomb, 2006; Gonchar, 1995; Giancola et al., 2009; O'Leary et al., 2009). All three types of coping were included in this model due to research that shows that use of ineffective coping skills is related to higher levels psychological distress (Tein et al., 2000) and use of effective coping skills is related to lower psychological distress (Deater-Deckard, 2004; Giancola et al., 2009; Tein et al., 2000). This model was significant (F (5, 21) = 8.26, $p < .001$). Using this model, 58.3% of the variance could be

explained (Adjusted R^2 = .583). All predictor variables, with the exception of dysfunctional coping, were significant (SFCS β = .56, p < .001; PSSS β = -.36, p < .05; emotion-focused coping β = .51, p < .01; problem-focused coping β = -.64, p < .001) and dysfunctional coping showed a trend suggesting that it had some predictive value (β = .27, p = .06).

Coping. Given the importance of identifying student parents who may be in need of intervention or assistance, an attempt was made to predict dysfunctional coping using information that is either already available to universities or could be easily obtained. No models were developed to predict either emotion-focused or problem-focused coping in order to minimize the number of analyses completed with the small sample size in this study. In order to predict dysfunctional coping, the GSI, PSI-Tot, and traditional versus nontraditional status were used. For this analysis, traditional versus nontraditional status was chosen because of the possible trend in the data suggesting that nontraditional student parents may engage in less dysfunctional coping and use more successful coping strategies than traditional student parents, which was also supported by previous research (Morris et al., 2003). The GSI and PSI-Tot were both chosen as predictors due to the link between general psychological distress, parenting stress, and use of effective coping skills (Deater-Deckard, 2004). This model was not significant (F (3, 24) = 2.14, p > .05) and was only able to explain 11.2% of the variance for dysfunctional coping (Adjusted R^2 = .112). In terms of individual variables, the GSI (β = .37, p > .05), PSI-Tot (β = -.02, p > .05), and student status (β = -.23, p > .05) were not significant in terms of predicting dysfunctional coping.

Summary of regression analyses. As expected, overall parenting stress was significantly predicted by the PSSS. Additionally, the GSI was significantly predicted by the proposed model, including SFCS, PSSS, dysfunctional coping, problem-focused coping, and emotion-focused coping. In the model, all predictors were either significant or showed a strong trend toward

significance. These results showed that high levels of school-family conflict and higher levels of emotion-focused and dysfunctional coping were predictive of more psychological distress, while higher levels of problem-focused coping and perceived social support were predictive of less psychological distress. Problem-focused coping, emotion-focused coping, and the SFCS also showed similar relationships in a significant model predicting depression, but did not provide any predictive value for anxiety. The models for anxiety, school-family conflict, and dysfunctional coping were not significant.

Summary of Student Parent Analyses

The first goal of this study was to describe student parents. Results showed that the student parent population is quite heterogeneous, as expected, with wide ranges in age, year in school, age of children, marital status, income, etc. The results, however, also showed some important commonalities, trends, and key characteristics for differentiating between different subpopulations of student parents. First, the results showed that the majority identify themselves as adults rather than emerging adults or adolescents. Furthermore, student parents report a high level of employment, often in a permanent position and often for more than 20 hours per week, which is consistent with reports of low income for the majority of student parents. Income was also related to cohabitation status, such that student parents who were cohabitating reported higher incomes. Students who were cohabitating also reported fewer symptoms of depression and were more likely to report being satisfied with their romantic relationship. Overall, student parents report generally average levels of parenting stress, though slightly more student parents reported elevated stress as compared to the 10% expected based on the standardization sample of the PSI. They also reported low levels of role conflict and high levels of role enrichment, low levels of psychological distress, fairly high levels of social support, high levels of emotion-focused coping, and lower use of problem-focused and dysfunctional coping. Student parents

also reported relatively high levels of awareness of campus and community resources, but low utilization, many reporting using family or friends for resources and support rather than resources on campus or in the community. When asked about needs, many report further need for childcare and financial assistance.

Several important results were also revealed with regard to the psychological experience of student parents. Specifically, results showed that parents reporting higher levels of parenting distress tended to be younger, to experience more symptoms of depression and general psychological distress, and to report higher school-family conflict. School-family conflict was also positively related to and predicted levels of general psychological distress. School-family enrichment was negatively related to parenting distress and general psychological distress, which also acted as a significant predictor for school-family enrichment. The relationship between work and family roles showed a similar pattern such that work-family conflict was positively correlated with anxiety and work-family enrichment was negatively correlated with anxiety. Furthermore, trends suggested that school-family conflict may be lower among part-time students, who are more likely to be nontraditional than traditional students. Finally, results showed that coping and perceived social support have an important positive impact on the experiences of student parents. Specifically, higher levels of problem-focused coping predicted lower general psychological distress, while higher levels of emotion-focused coping and dysfunctional coping predicted higher distress. Perceived social support was negatively related to parenting stress, anxiety, and general psychological distress and PSSS was predictive of parenting stress and general psychological distress, such that higher social support predicted lower stress. These results suggest that student parents who are younger, traditional students, and attending college full-time and report higher levels of role conflict are at higher risk for

difficulty, though having higher levels of problem-focused coping and perceived social support may help to mitigate these risk factors.

Differences between Student Parents and Non-parents

The second goal of this study was to determine ways in which student parents were different from non-parent students. Both demographic and survey data was compared across numerous domains.

Demographic and Descriptive Differences

Comparisons of demographic and descriptive information were conducted using chi-square analyses and one-way ANOVAs, as appropriate. The analysis used for each specific comparison is indicated when the comparison is discussed.

Demographic information. Comparisons of the demographic data for student parents and non-parent students revealed significant differences in multiple areas. First, student parents were significantly older (M = 29.50) than non-parents (M = 21.82; $F(1, 54) = 17.07$, $p < .001$, partial $\eta^2 = .24$). Secondly, marital status was significantly related to parenting status (χ^2 (1, N = 56) = 17.14, $p < .001$). Specifically, student parents were much more likely to report being married or living with a partner than non-parents and this was not due to the older age of the student parent sample, as marital status was not related to traditional or nontraditional status (χ^2 (1, N = 56) = 3.59, $p > .05$). Additionally, no significant differences in age were found when comparing all participants who were married or living with a partner (M = 27.14) and students not living with a partner (M = 24.77; $F(1, 54) = 1.19$, $p > .05$), nor were any differences found among student parents ($F(1, 26) = 1.49$, $p > .05$) or non-parents ($F(1, 26) = .03$, $p > .05$) when the age of those living with a partner and not living with a partner were compared. Neither racial background (χ^2 (1, N = 56) = 1.95, $p > .05$) nor gender (χ^2 (1, N = 56) = .75, $p > .05$) were significantly different between parents and non-parents.

Academic information. Results showed that parents were more likely to be part-time students (21.4%) than non-parents (0%; χ^2 (1, N = 55) = 6.49, $p < .05$). Additionally, the grade point average (GPA) of student parents (M = 3.24) was significantly higher than that of non-parents (M = 2.88; F(1, 48) = 5.63, $p < .05$, partial η^2 = .11). In contrast, there were no differences in first generation status (χ^2 (1, N = 55) = .29, $p > .05$) between student parents and non-parents.

Economic status and employment. Several trends also emerged with regard to the economic state of parents and non-parents. First, a trend suggested that student parents may be more likely to be employed than non-parents (χ^2 (1, N = 56) = 3.62, p = .057). Among those student who were employed, student parents were significantly more likely to work more than 20 hours per week than non-parents, (χ^2 (1, N = 32) = 6.35, $p \leq .01$). Additionally, no participants reported working more than two jobs and no significant differences or trends emerged between parents and non-parents regarding number of jobs (n = 32, P = .70, FET). In fact, in both groups, the number of students working two jobs was quite low, such that the expected number of non-parents working two jobs was only 3.7. For this reason, FET had to be utilized for this comparison. No differences between groups were found regarding primary place of employment being on- or off-campus (χ^2 (1, N = 32) = 1.08, $p > .05$) or permanent versus temporary employment status (χ^2(1, N = 32) = 1.05, $p > .05$). Finally, student parents were as likely as non-parents to have yearly income either above or below the poverty line (i.e., $20,000 for a family of 2-3; χ^2 (1, N = 56) = .00, $p > .05$).

Developmental status. Results showed that the relationship between parent status and self-identified developmental level was significant (χ^2 (1, N = 56) = 10.50, $p \leq .001$), such that student parents were more likely to identify themselves as adults (78.6%), rather than emerging

adults or adolescents (21.4%), while non-parents were more likely to identify as emerging adults or adolescents (64.3%), rather than adults (35.7%). When Fishers Exact Tests were used to examine developmental status for traditional students (n = 33, p = .09) and nontraditional students (n = 23, p = .09) independently, this relationship was not significant, but both showed a trend suggesting that student parents were more likely to identify as adults than non-parents. In these cases, a Fishers Exact Test was used because small sample size prohibited the use of a chi-square analysis.

Relationship satisfaction. Results of a chi-square revealed no significant differences in relationship satisfaction between student parents and non-parents ($\chi^2(1, N = 56) = .42, p > .05$).

Differences on Measures Completed by Student Parents and Non-Parents

Student parents and non-parents completed the BSI, PSSS, B-COPE, and resources measure. MANOVA, Analyses of Covariance (ANCOVA), and Multivariate Analyses of Covariance (MANCOVA) were used to compare groups on each of these measures. As stated previously, Bonferroni corrections were used in MANOVA and MANCOVA analyses to control for accumulation of error. Corrected p values are provided below.

BSI. Given that student parents carry responsibilities beyond those of non-parents, it was predicted that they may also experience higher levels of psychological distress, depression, and anxiety, all of which are linked with increased stressors, including child care (American Psychiatric Association, 2000; American Psychological Association, 2012b; Markou, 2012). Due to the significant difference in age between parents and non-parents, age was examined as a covariate. Results showed that it was not correlated with depression ($r(56) = -.12, p > .05$), anxiety ($r(56) = -.04, p > .05$), or psychological distress ($r(56) = -.20, p > .05$) for this sample. Further, there is no significant body of evidence to suggest that age should impact depression, anxiety, or general psychological distress for the age range in the sample (18-47); therefore, age

was not used as a covariate in MANOVA analyses. A Bonferroni correction was used to assist in controlling for Type I error, making the significant *p*-value .01, as opposed to .05. When using the corrected *p*-value, no differences between student parents and non-parents emerged in depression, anxiety, or general psychological distress. The difference between student parents (M = 52.00, SD = 11.57) and non-parents (M = 60.00, SD = 12.66) on scores for depression did, however, approach significance ($F(1,54) = 6.10$, $p = .02$, partial $\eta^2 = .10$), but in the opposite direction than was predicted, with a trend suggesting that non-parent students may be more likely to report depressive symptoms than student parents. A trend was also observed regarding psychological distress, such that non-parents (M = 62.64, SD = 11.35) may experience more general psychological distress than student parents (M = 57.39, SD = 9.90; $F(1,54) = 3.40$, $p = .07$, partial $\eta^2 = .06$). No differences or trends were revealed with regard to anxiety ($F(1,54) = 1.62$, $p > .05$, partial $\eta^2 = .03$; see Table 15).

PSSS. It was hypothesized that student parents and non-parents may differ in their degrees of perceived social support due to several significantly different life responsibilities and needs. An ANCOVA was used to examine possible differences in overall perceived social support with age as a covariate, given that there was a significant difference in age between the two groups. Results revealed no significant differences between student parents and non-parents ($F(1, 52) = 2.59$, $p > .05$, partial $\eta^2 = .05$). The means and standard deviations for the PSSS can be found in Table 15.

B-COPE. Given potential differences in lifestyle as a result of differing responsibilities, it was hypothesized that student parents may differ from non-parents in types of coping used. In order to examine coping strategies, a MANCOVA was used with age as a covariate because of the significant age difference between groups, as well as the age-related differences in approaches to coping shown in the literature (American Psychological Association, 2012a;

Brennan, Holland, Schutte, & Moos, 2012). As a part of the MANCOVA, a Levene test for equality of error variance was completed. This revealed a significant difference in error variances between student parents and non-parents for dysfunctional coping ($F(1, 54) = 11.19$, $p < .01$). In order to compensate for this difference, the *p*-value for significance was lowered to $p < .01$, as suggested by Tabachnick and Fidell (2007). Additionally, a Bonferroni correction was used, making the *p*-value for the dysfunctional coping analysis .003 and the *p*-value for the emotion-focused and problem-focused coping analyses .01. Even with a more stringent *p*-value, a significant difference was found between student parents ($M = 21.18$, $SD = 4.46$) and non-parents ($M = 27.96$, $SD = 7.41$), with non-parents using significantly more dysfunctional coping strategies than student parents ($F(2, 53) = 10.35$, $p < .001$, partial $\eta^2 = .28$). In contrast, no differences were found between these two groups for emotion-focused coping ($F(2, 53) = 1.25$, $p > .05$, partial $\eta^2 = .05$) or problem-focused coping ($F(2, 53) = .58$, $p > .05$, partial $\eta^2 = .02$; see Table 15).

Resource awareness and use. Resource awareness and use was hypothesized to differ between these two groups, with student parents expected to seek more resources to assist them in coping with their multiple role demands. A MANCOVA controlling for age was used for this analysis. It is likely that age has an impact on both the awareness and use of resources, given that as people age, they may accumulate more knowledge about and exposure to resources. Not surprisingly, there was a significant difference in error variance among the two groups for the number of community resources used ($F(1, 54) = 22.04$, $p < .001$). After using the *p*-value correction to manage this difference and correcting using Bonferroni to control for Type I error, the significant *p*-value was .001 for differences in the number of community resources used and .006 for the remaining resource variables. Results showed that the awareness of campus resources was not significantly different between the two groups ($F(2, 53) = 0.53$, $p > .05$, partial

$\eta^2 = .02$), nor was use of campus resources ($F(2, 53) = 1.21$, $p > .05$, partial $\eta^2 = .04$). In contrast, awareness and use of community resources did reveal significant differences, as expected. Student parents ($M = 14.96$, $SD = 5.94$) reported awareness of significantly more community resources that might be useful to parents than non-parents ($M = 7.79$, $SD = 6.65$; $F(2, 53) = 9.51$, $p < .001$, partial $\eta^2 = .26$) and reported using significantly more of these resources (student parents $M = 4.11$, $SD = 3.30$; non-parents $M = 0.86$, $SD = 1.04$; $F(2, 53) = 14.62$, $p < .001$, partial $\eta^2 = .36$). Table 15 contains more information about resource awareness and use.

Summary of Differences Between Student Parents and Non-Parent Students

Student parents and non-parents in this sample differ from each other in several ways. First, student parents were significantly older. They were also more likely to be married or living with a partner and working more hours each week than non-parents. The data also suggests that student parents may be more likely to be employed than non-parents. Despite this, however, student parents are not any more or less likely to report incomes above or below the poverty line than non-parents. Furthermore, student parents are more likely than their non-parent counterparts in this sample to be a part-time rather than full-time student and to have a higher GPA. These results suggest that student parents are generally living a lifestyle different from their non-parent peers in ways other than raising a child, including being employed, being married or cohabitating, attending school fewer hours each week, and supporting at least two individuals (themselves and a child) on incomes equal to those of non-parents. These differences are consistent with student parents' developmental views of themselves as adults, rather than adolescents or emerging adults. Given this view of their developmental stage, it is also not surprising that a trend suggested that student parents use fewer dysfunctional coping strategies to cope with the heightened responsibilities of their differing lifestyle. Both groups reported that they felt equally supported by family and friends. Given trends suggesting that student parents

may experience fewer symptoms of both depression and general psychological distress, it also appears that the coping done by student parents as opposed to non-parents may be more effective in managing multiple life roles Finally, student parents and non-parents are aware of and use campus resources at approximately the same rates, while student parents were more likely to be aware of and use community resources. It should be noted that community resources identified in this study were resources that would be helpful to student parents, though were not exclusively available or useful for this population. Overall, the results of this study showed that in general student parents are responsible for more life roles than non-parents, are coping more effectively with their responsibilities, and are living different lifestyles as a result of their multiple roles.

CHAPTER VI

DISCUSSION

The purpose of this study was two-told. First, given the paucity of research regarding student parents in general, this study aimed to describe the demographics and functioning of this population at a rural, mid-sized university. The second goal of this study was to compare student parents to their non-parent peers to identify ways in which these groups are similar and different. While previous research has addressed the student parent population, much of this research was very narrow in scope and none examined the differences between student parents and their non-parent counterparts.

Who are Student Parents?

In general, the student parents in this sample tended to be older students who identified themselves as adults with multiple life responsibilities. All student parents were actively engaged in parenting, as all had at least one child under the age of 14. Additionally, this group identified multiple stressors in their lives. Namely, student parents endorsed significant psychological distress in multiple areas, including general psychological distress. Additionally, this group reported low income and high rates of employment, which have been linked to stress (Branscomb, 2006; Gerrard & Roberts, 2006; Home, 1998). Finally, student parents in this sample reported low use of the already limited resources available to them. As predicted, 10 of the 14 resources identified were used by less than 20% of student parents, with only four on-campus resources used by more than 20% of the student parents. The highest rate of use was of the on-campus childcare center, with 28.6% of the sample endorsing use, though 39.3% reported interest in this resource. In fact, many called for assistance with affordable, convenient childcare services and housing for families, in addition to emotional support in the form of support groups and play groups for their children. Despite the stress and lack of resources, however, the student

parent group appears to be doing fairly well both academically and personally. The average GPA for this sample was good and they reported low levels of conflict between their life roles, as well as high levels of enrichment, with scores that were consistent with previous research (van Rhijn, 2009). Finally, this sample reported feeling supported by family members and using coping strategies considered to be adaptive. This suggests that while student parents in this sample reported feeling stress and desiring assistance, they are nevertheless coping well with their life demands.

Traditional versus Nontraditional Status

Previous research suggested that one key factor to understanding differences within the student parent population would be traditional versus nontraditional student status (Arnett, 2004; Branscomb, 2006; Carney-Crompton & Tan, 2002; Morris et al., 2003; O'Leary, Hughes, & Salters, 2009). Traditional college students have been described as students aged 18 to 23 years, while non-traditional students are identified as students aged 24 and over (Branscomb, 2006; Carney-Crompton & Tan, 2002; Morris et al., 2003). Despite these differences in age, however, the differences in life experiences are not as drastic as might be expected. Both groups reported employment at similar rates, were equally likely to be married and to report feeling like an adult rather than an emerging adult, and showed no differences in overall parenting stress or psychological symptomology. Significant differences were revealed between the two groups in two important areas, including age of the youngest child and school-family conflict, such that nontraditional parents had older children and experienced less school-family conflict than traditional student parents. Furthermore, older students reported lower levels of parental distress. Several trends also suggested some possible differences among student parents, though none were significant. Trends included nontraditional students reporting part-time student status and

less dysfunctional coping, as well as a correlational trend showing that school-family conflict decreases with parent age.

These results show that traditional student parents are typically working as much as nontraditional student parents, but may also be carrying a heavier course load, as well as having greater stress and parenting responsibilities as a result of having younger children (Carney-Crompton & Tan, 2002; Deater-Deckard, 2004; Larson, 2004). Therefore, it is not surprising that they are also experiencing more conflict related to balancing their many responsibilities. This is consistent with previous research showing that full-time students experience more conflict between school and family than part-time students (Branscomb, 2006), but is in contrast to previous research that shows that older students are more likely to have increased responsibilities (i.e. a home, spouse, full-time employment; Branscomb, 2006). Higher levels of conflict among traditionally-aged student parents is also consistent with a trend in the data suggesting that that traditional student parents engage in more dysfunctional coping strategies than nontraditional student parents, as higher levels of dysfunctional coping have been linked to negative outcomes (Benton, Schmidt, Newton, Shin, Benton, & Newton, 2004; dePyssler, Williams, & Windle, 2005; Moneta, Spada, & Rost, 2007; Tein et al., 2000; Warner, 2004). Furthermore, high use of dysfunctional coping had some predictive, though not significant, value for general psychological distress. Overall, these results support the hypothesis that younger, traditional student parents may be in need of more support than nontraditional student parents.

In addition to parent age, the significant difference in child age between traditional and nontraditional students also plays an important role in describing these two subpopulations of student parents. Child age was significantly related to parent age and work-family conflict, in addition to showing a trend toward a negative relationship with school-family conflict, such that parents of younger children reported higher levels of conflict. Given that traditional student

parents had younger children, this could help to explain some of the differences in school-family conflict between these two groups. This hypothesis is consistent with previous research showing that child age has negative relationship with stress and psychological symptomology (Carney-Crompton & Tan, 2002; Deater-Deckard, 2004; van Rhijn, 2009). However, the current study did not find that age of the youngest child had any predictive value for school-family conflict. Having young children is related to increased stress levels and role conflict, but other factors may play a more important role in the development of role conflict. It is also possible that in this study, child age was not predictive of conflict because of the large number of student parents who were partnered, so the other parent may take more of the child care responsibilities while the student parent continues his or her education. Given this information, it is clear that child age has an impact on stress and role conflict among student parents, though the nature of this impact is uncertain.

Finally, traditional versus nontraditional status was expected to be related differences in psychopathology, though no differences were found. This could be attributed to a lack of significant psychopathology in the student parent sample as a whole and to the nature of the parents who choose to become students. It is unlikely that parents would take on the extra burden of schooling if they were already experiencing significant distress. Thus, while differences between younger and older students may exist with regard to psychological distress in the general population (Larson, 2004), this is not the case for student parents.

Marital Status

An additional insight into the experience of student parents is the relationship that marital status has with other areas of functioning. Romantic relationships have been shown to have significant benefits for student parents, including emotional and financial support (Branscomb, 2006; Deater-Deckard, 2004; Gerrard & Roberts, 2006; Hilton et al., 2001; Johner, 2007; Noor,

2004; van Rhijn, 2009). Conversely, being a single parent has been associated with various negative outcomes, including increased stress and financial strain (Gerrard & Roberts, 2006; Johner, 2007; Noor, 2004). Among student parents in this sample, results were consistent with previous findings. Specifically, those who were married or cohabiting were significantly more likely to report household incomes above the poverty line than those who were not cohabitating. Additionally, while not significant, there was a trend suggesting that non-cohabitating student parents may experience more symptoms of depression. This trend, in addition to the greater satisfaction with their romantic relationships reported by cohabitating student parents, suggests that having a partner with whom to share financial and daily responsibilities provides substantial benefit for student parents. This is consistent with past research on single parents (Johner, 2007; Noor, 2004), and identifies a subgroup of student parents, namely those who are not married or cohabitating, who may be in need of additional support, especially financially and perhaps emotionally.

Role Strain and Distress Among Student Parents

Role Conflict and Enrichment

Results of the current study were contrary to previous research suggesting that student parents typically experience large degrees of stress and conflict related to the interplay between their life roles (Giancola et al., 2009; van Rhijn, 2009; Wiebe & Harvey, 1997), but were consistent with previously reported conflict and enrichment scores for student parents (van Rhijn, 2009). For student parents in this sample, average scores on both of the conflict scales were below the midpoint on the scale and, consistent with low levels of conflict, average enrichment scores were above the midpoint. In previous research, scores on this measure have not been thoroughly interpreted, nor has normative data been developed, because these measures were very recently created and the only previous research to use them was a validation study. For

this reason, interpretations made for this study were made based on scores relative to the midpoint and should be taken with caution.

Relative to the midpoints on the school-family conflict and enrichment scales, results revealed low conflict and high enrichment, suggesting that student parents in this study were managing multiple life roles quite well overall and were gleaning positive outcomes from this interplay of roles. Both enrichment and use of effective coping skills are thought to have a positive impact on role conflict (Dyson & Renk, 2006; van Rhijn, 2009), and given the high levels of enrichment and relatively high levels of coping skills reported in this study, it is not surprising that role conflict was low. Furthermore, school-family conflict was significantly positively related to general psychological distress, which was also low for student parents in this sample. It is possible that the high levels of enrichment, emotion-focused coping, and perceived social support reported by student parents, as well as low levels of conflict and dysfunctional coping, may help to explain the low levels of distress and psychopathological symptoms found among student parents in this study. Thus, engagement in healthy coping, feeling supported, and feeling positively about the relationship between life roles may serve to buffer student parents against the negative outcomes expected in this study.

Psychological Distress

Previous research has suggested that student parents may experience high rates of distress as a result of life roles and economic concerns (Anderson, 2001; Branscomb, 2006; Deater-Deckard, 2004). The results of this study partially supported previous research. Mean scores for a several specific types of psychological dysfunction and general psychological distress were significantly higher than would be expected in the general population. Mean scores for depression and anxiety, however, were not significantly elevated. Additionally, contrary to expectations that student parents would report higher levels of psychological distress than their

non-parent student counterparts, student parents reported less psychological concern when differences were revealed. These results contribute to a body of literature on psychopathology among student parents that has provided mixed results. Some research has suggested that psychopathology, specifically depression, is not related to parenting among students (Anderson, 2001), while other research suggests that student parents are likely to experience depression at very high rates (Gerrard & Roberts, 2006). The current research suggests that student parent status is related to depression, as suggested by Gerrard and Roberts (2006), but in the opposite direction as predicted, such that student parents reported relatively low rates of depression, especially when compared to the non-parent student population.

Given the significant negative impact that school-related stress has been shown to have on student parents' emotional functioning (Gerrard & Roberts, 2006) and the clearly established link between stress, depression, and anxiety (American Psychiatric Association, 2000; Benjet, Borges, & Medina-Mora, 2010; Elizalde et al., 2010; Hammen, Brennan, Keenan-Miller, Hazel, & Najman, 2010; Hammen, Kim, Eberhart, & Brennan, 2009), it was expected that a relationship between role conflict and depression would emerge. The results showed that school-family conflict significantly predicted depression despite a lack of significant correlation between these two variables. This suggests that while school-family conflict and depression may be related, this relationship is complex and only apparent when other variables are also controlled. It also suggests that student parents with higher levels of role conflict may also be at higher risk for depression, which is consistent with research showing the negative impact of conflict and stress on depressive symptoms (Ingram & Trenary, 2005; Johner, 2007; U.S. National Library of Medicine, 2009).

This study did not support research showing that school-family conflict was predictive of anxiety (Salters et al., 2009). In this study, school-family conflict was not related to anxiety in

any way, though work-family conflict did show a significant positive relationship. Thus, it appears that for student parents, conflict related to the interplay between school and family roles may be linked with psychological distress, but it does not manifest as anxiety, nor does it appear to increase anxiety. Rather, conflict between school and family appears to increase depression. Anxiety, in contrast, is significantly related to enrichment for both the school-family and work-family relationships, and school-family enrichment shows some value in predicting anxiety.

Several explanations may be offered for these results. First, conflict and enrichment between roles are separate constructs that are statistically unrelated (Greenhaus & Powell, 2006), so it is not surprising that distinct relationships emerged between these constructs and psychological symptomology. A second explanation is that for student parents, symptoms of anxiety could be somewhat adaptive, especially in situations where parents may worry more about their children or be more attentive to them. If the anxiety is helpful and assists in daily functioning, rather than increasing stress, it is unlikely to be related to conflict. Furthermore, anxiety symptoms often include individuals becoming more conscious of or oversensitive to their environment or other stimuli (American Psychiatric Association, 2000). For individuals whose psychological concerns are more anxious, rather than depressive, it is possible that their increased attentiveness to anxiety-provoking stimuli may also translate to an attentiveness to enrichment between roles, leading to positive emotions and possibly decreasing stress and anxiety. This hypothesis is consistent with research suggesting that anxiety leads to greater attentiveness (Raghunathan & Corfman, 2004) and given that levels of anxiety in this sample were nonclinical, this explanation is quite plausible.

Parenting Stress

In contrast to the high reported rates of various types of psychological symptomology, student parents' average levels of parenting stress were inconsistent with previous research

(Branscomb, 2006). While it is well established that daily stressors, such as school and employment, can have a negative impact on parenting practices and the parent-child relationship (Deater-Deckard, 2004), student parents do not appear to be experiencing this negative impact to a significant degree. Despite overall scores being within the average range, however, parenting stress does appear to be related to other constructs impacting student parents. Specifically, student parents who reported higher levels of overall parenting stress, which includes stress related to child behavior, parenting responsibilities, and the interaction between a parent and child, also reported significantly higher levels of general psychological distress and higher levels of school-family conflict. Additionally, higher distress related specifically to parenting responsibilities was significantly related to general psychological distress and depression. Similarly, a trend in the data suggested that overall parenting stress may have a positive relationship with both anxiety and depression. This information supports the idea that student parents who are experiencing stress related to parenting are likely to be experiencing psychological distress as a result and may also be experiencing increased role conflict, which, as previously discussed, can lead to further distress. Given that such distress can have a significant impact on functioning (Ingram & Trenary, 2005; Johner, 2007; U.S. National Library of Medicine, 2009), it is essential for student parents to be able to manage this stress and any symptoms of psychological distress in order to manage their multiple roles. By providing student parents with the opportunity to spend positive time with their children and to practice parenting skills, it is possible that the parenting stress that does exist among student parents could be decreased, thus possibly decreasing other psychological distress as well. These goals could be aided through the development of student parent support groups, accessible playground areas, parent-child play groups, and/or family-friendly housing that could provide a positive parenting environment, all of which were endorsed by over 40% of the sample as resources of interest.

Coping Strategies, Support, and Resources

Student Parent Coping Strategies

Overall, student parents appear to be coping well with their multiple life roles, which may to be related to their fairly high levels of emotion-focused coping and relatively low levels of dysfunctional coping. It was predicted that higher use of effective coping skills would be linked with lower levels of general psychological distress and role conflict. While there were no significant relationships between coping and role conflict or enrichment of any kind, the results did reveal that coping does impact psychological distress, in the forms of depression and general psychological distress. Consistent with previous research (Deater-Deckard, 2004; Giancola et al., 2009; Tein et al., 2000), higher use of problem-focused coping predicted lower levels of both depression and general psychological distress. Thus, it appears that for student parents, problem-focused coping is very useful and productive in managing their life responsibilities. Student parents in this sample, however, reported using problem-focused coping less often than any other type of coping. In contrast, emotion-focused coping was frequently used.

Previous research regarding emotion-focused coping is variable. Some previous research suggested that emotion-focused coping is useful in many situations (Dyson & Renk, 2006; Tein et al., 2000), while other research has suggested that use of emotion-focused coping rather than problem-focused coping can increase stress in situations where an individual has some degree of control (Deater-Deckard, 2004; Giancola et al., 2009; Tein et al., 2000). For student parents, many stressful situations are likely to include an element over which they have some control, such as completing schoolwork, performing well at work, and spending time with their child(ren). Thus, results of this study that show that higher levels of emotion-focused coping are predictive of higher levels of depression and general psychological distress are not surprising. It

does suggest, however, that for student parents, use of emotion-focused coping is not helpful and may, in fact, be even less helpful in some situations than some dysfunctional coping strategies.

Dysfunctional coping revealed only a trend suggesting that it may have some predictive value with regard to higher levels of psychological symptomology, despite previous research showing a clear relationship between dysfunctional coping and psychological distress (Deater-Deckard, 2004; Giancola et al., 2009; Tein et al., 2000). For student parents, this pattern of results could be due to several reasons, including low use of dysfunctional coping strategies, a recognition that emotion-focused strategies are generally more helpful than many dysfunctional strategies (i.e. drinking or avoiding problems), and/or the self-identification of many student parents as adults, which for many, is inconsistent with the use of some dysfunctional coping strategies. Given the previously established damaging effects of dysfunctional coping, further analyses were conducted in an attempt to better understand this type of coping approach, though these analyses revealed no significant results. While research suggested that general psychological distress, total parenting stress, and traditional versus nontraditional student status may predict dysfunctional coping (Deater-Deckard, 2004; Morris et al., 2003), in the current study, neither the overall model nor individual predictor variables were significant.

An alternative explanation for lack of results with dysfunctional coping is the lower levels of stress, psychopathology, and role conflict reported by participants in this study suggesting that student parents are using effective coping strategies and do not need to use dysfunctional strategies. This is supporting by the data showing that for student parents, use of dysfunctional coping strategies, which are obviously damaging to both the parent and child, is low. Alternatively, use of problem-focused and emotion-focused coping appear to provide more significant information into describing the functioning of student parents. These results also suggest that use of coping strategies that can be effective for student parents should be addressed

with an emphasis on increasing problem-focused strategies and limiting the use of emotion-focused strategies to situations in which they may be more helpful (i.e. situations in which the student parents have little control).

Social Support

Low levels of conflict and positive psychological health may also be related to relatively high levels of social support reported by student parents. Results showed that perceived social support was negatively related to overall parenting stress, parent ratings of difficult child behavior, difficult parent-child interactions, anxiety, and general psychological distress and it significantly predicted parenting stress and general psychological distress, such that higher levels of support predicted lower levels of stress and distress. These results, coupled with fairly high levels of perceived support and previous research that has found that feeling supported socially can help to mediate the negative impact of stressors like financial hardship and parenting stress (Ketterlinus et al., 1991; McConnell, Breitkreuz, & Savage, 2011), suggest that social support plays a key role in the lives of student parents, especially with regard to lowering stress levels. Additionally, student parents appear to be aware of the positive impact of social support on their functioning and are seeking ways to increase it, as shown by almost 50% reporting interest in a student parent support group. Such information suggests that for student parents, even those who may be coping quite well, as are many of those in this sample, social support plays an important role managing parenting stress and psychological distress and may help to explain low levels of psychological distress and conflict in this sample.

Resources and Needs of Student Parents

While most student parents reported being aware of many of the resources available to them, both on- and off-campus, they reported using few resources, as is consistent with previous research in this area (Branscomb, 2006; Medved & Heisler, 2002; Springer et al., 2009) and with

the hypothesis that resource use by student parents would be low. Possible reasons for this underutilization include student parents feeling too stressed or too busy to seek out the service(s), not qualifying for the service(s), embarrassment at seeking out resources, assumptions or beliefs that the services would not be helpful, a lack of convenience, a lack of need, or a lack of services that meet their needs. It is also important to note that when designing the resources measure for this study, the researchers attempted to seek out all available resources that might be helpful for students or parents in general within the university and surrounding community. As was predicted, availability of appropriate and helpful resources to assist in meeting the needs of student parents was low. In total, 30 possible resources for student parents were identified and 21 of them were not options on campus. None of the campus resources were designed specifically for student parents and only one resource had services available to student parents (i.e., a nursing room and a university staff member to assist student parents in locating outside resources). This suggests that resources are not currently available specifically for student parents to help them to manage their unique combination of life roles and provide support as they work towards gaining an education.

Although average scores on the conflict scales and scales examining psychological distress were low, open-ended responses suggest that student parents do experience stress and desire greater access to assistance, especially financial and childcare assistance. While many college students work, many more student parents reported employment than non-parents. Additionally, a significant percentage of student parents reported working more than 30 hours per week, in addition to continuing their education and parenting. This, coupled with a high rate of yearly income near or below the poverty line and the high cost of childcare, paints a picture of many student parents who are in significant financial distress. In fact, several of the student parents in this sample specifically stated the need for more financial aid and economic help,

underscoring the quantitative results of the study. Increased financial assistance, in the form of grants, scholarships, decreased fees for housing and/or childcare, and low-interest student loans, could lessen the necessity for employment, allowing student parents more time for academic and family concerns, which may lower stress levels and support student success.

A second source of distress for many student parents was childcare. Of those who were able to use on-campus childcare services, a majority reported this as the most helpful resource, and those student parents who were unable to access this childcare endorsed a desire to do so. Campus childcare differs from community childcare in that it is more likely to be available during class times and is in a convenient location that allows access to the child between classes. Student parents also must contend with the high cost of childcare, both on and off campus. Thus, to assist student parents in being optimally successful in school, the availability of cost-effective, convenient child care options is crucial. Unfortunately, however, financial aid and childcare may be cost-prohibitive for many universities.

Student parents also identified interest in resources to provide emotional or psychological support, such as parent training and support groups, as well as family housing on campus. Parent support groups and parent training have long been shown to be effective in helping parents to manage child behavior, as well as cope with their own emotions surrounding their life stressors (Moran, Ghate, & van der Merwe, 2004). Support groups could be set up through multiple avenues, including campus counseling centers, student health services, and academic departments focused on social sciences or family learning. Developing a playground and offering family housing are also alternatives that, while more difficult to arrange initially, could allow students to have more time to study and care for their families because they do not have to travel off-campus to access their residence and child recreation activities. This may also help student parents to feel more involved and invested in the community at their college, which has been

shown to increase success rates for student parents (Carney-Crompton & Tan, 2002; Wiebe & Harvey, 1997) and could also increase retention rates.

Summary of Student Parent Description

In sum, student parents, as measured by this study, are a heterogeneous group, specifically in the areas of age, number of children, coping, levels of stress, and distress. They do, however, share similarities, including self-identifying as adults, managing multiple roles effectively, using positive coping skills, and desiring further resources, especially in the forms of childcare and financial support. Additionally, some factors provide important distinctions within this group that can help to understand subpopulations of student parents. Specifically, traditional versus nontraditional student status appears to make a difference in stress levels, psychological symptomology, coping, role conflict, and employment. Cohabitation is also important, as it was related to both mood and household income. In sum, the overall results of this study showed that student parents who are traditionally-aged and not living with a partner are at the highest risk for role conflict and psychological concerns.

In general, student parents in this study appeared to be coping well with their multiple life roles. While role conflict, specifically between school and family roles, was linked with higher levels of stress and psychological distress and several domains of psychological distress were elevated, student parents reported generally low levels of parenting stress, and conflict, as well as high levels of perceived social support. They also reported relatively low levels of dysfunctional coping, which trends suggested is also linked to psychological distress. Additionally, student parents reported low levels of problem-focused coping, use of which was shown in this study to be significantly linked to lower levels of depression and general psychological distress. Furthermore, student parents reported high use of emotion-focused coping, which was shown to predict higher levels of depression and overall distress. The relative consistency of these results,

which suggest that student parents are doing well in their multiple life roles, are somewhat surprising given the large age range of this sample and the impact that age has been shown to have on parenting (Branscomb, 2006; Deater-Deckart, 2004; Larson, 2004; Lefkowitz & Gillen, 2006). It is possible that this consistency exists among student parents because nearly all student parents endorsed adulthood as their developmental status regardless of age. If student parents feel like adults, they are spending less time exploring their identities and have accepted their adult responsibilities, thus leading to more time to manage responsibilities and stress, as well as increasing positive coping.

Finally, few resources were found to help student parents to manage roles without the assistance of support from family and friends. Of the resources available, very few catered to the specific needs of student parents and utilization was quite low. Many student parents reported still needing assistance, specifically in the areas of finances and child care, in order to help to reduce their stress levels and allow them to function more effectively as students and as parents.

Student Parents versus Non-Parent Students: Similarities and Differences

The results of this study revealed that student parents differ in several significant ways from their peers, specifically with regard to age, self-identified developmental status, marital status, student status, employment, psychological symptomology, and coping. Such demographic differences reveal significant lifestyle differences based on parenting status. Specifically, when compared to non-parents, student parents are generally older and more likely to be married or cohabitating with a partner, part-time rather than full-time students, and employed 20 or more hours per week. It is the responsibilities that accompany individuals with these demographic characteristics, such as financial independence and caring for others, that are common reasons for student parents reporting that they feel like they are adults rather than emerging adults or adolescents. In contrast, even when age is controlled, non-parent students were less likely to

identify themselves as adults rather than emerging adults or adolescents, suggesting that student parents feel more responsible for their own well-being and care than non-parent students. This is in stark contrast to the theory of emerging adulthood, which states that traditional college students generally engage in significant identity exploration and, thus, tend to identify themselves as emerging adults, whereas older students may feel more stable in their identity formation and classify themselves as adults (Arnett, 2004). While there are no set ages for this stage of development, individuals generally transition into adulthood as they age and assume increased responsibilities. Therefore, while the theory of emerging adulthood may accurately describe non-parent students, when a college student is also a parent, the theory of emerging adulthood is not relevant to their development and experiences.

Non-parent students were also less likely to be employed more than 20 hours a week, suggesting that student parents also feel more responsible for providing for themselves. In contrast to differences with regard to employment, student parents and non-parents do not differ with regard to household income and a large portion of both groups reported incomes below the poverty line, suggesting that for student parents, continuing to work is extremely important in order to support a family. Furthermore, a significant minority of student parents were part-time versus full-time students, though student status was not related to likelihood of employment, while no non-parents reported part-time status. Given this information, the differences between the experiences of student parents versus non-parents becomes clearer. While the typical non-parent college student lives at a residential college, such as the current university, and may have a part-time job, their main role is that of a college student. For student parents, academic work and college are likely to take lower precedence over other responsibilities, as student parents generally are, or feel, more independent from their parents and fully responsible for their own

well-being and the well-being of their families, in addition to being a student and often an employee.

Fewer responsibilities for non-parents provides them with more freedom for the identity exploration that is a key part of emerging adulthood (Arnett, 2004). While this freedom may be pleasurable for many non-parents, it is also possible that this freedom and time spent engaging in significant exploration may be linked to lower the significantly lower GPA of this group. Given the number of responsibilities a student parent has, coupled with financial struggles that they report, they are unlikely to undertake the responsibility of attending college or continue to pay for tuition if they are not dedicated to their education. For non-parents, in contrast, the responsibility level is not as high and they often expect to engage in more exploration and recreation than student parents given their developmental stage. It is possible that with a more responsible outlook and need to balance life roles, student parents may be more focused on and productive in their school work because of the sacrifice in family time that it requires.

In addition to differences in terms of academic performance, a trend in the data also suggested that student parents experienced fewer symptoms of depression and less general psychological distress compared to their non-parent peers. Further, student parents were significantly less likely to report engaging in dysfunctional coping strategies, such as using alcohol or drugs or refusing to believe that a negative event has occurred, than non-parent students. Parents who chose to attend college may be more resilient, as well prepared for and able to cope with multiple demands, than those who do not choose to attend college, or may quickly develop more effective coping skills out of necessity as they continue their education. It is also likely that these differences exist because non-parents have fewer responsibilities and more time to manage academic and personal concerns, so engaging in dysfunctional coping strategies, such as excessive alcohol use, is possible, while student parents do not have this

option. Given that student parents use more effective coping skills, it is also expected that they would experience less distress (Deater-Deckard, 2004; Giancola et al., 2009; Tein et al., 2000). It is important to note, however, that in this sample, many of the non-parents were freshman and sophomores, while the student parents showed a more equal range with regard to year in school, so it is also possible that this characteristic had an impact on coping and distress and that many of the non-parents with higher levels of distress and dysfunctional coping will not continue their education.

It is also possible that the trend suggesting lower levels of psychological distress is related to the lifestyle of student parents. Specifically, student parents were significantly more likely to be married or cohabitating with a partner, which has been linked to many benefits (Branscomb, 2006; Gerrard & Roberts, 2006; Hilton et al., 2001; Johner, 2007; Noor, 2004). Additionally, by definition, student parents have children and despite the significant stress that children can cause, they also can be a significant source of pleasure (Deater-Deckard, 2004), which may have a positive impact on their psychological functioning. Furthermore, for student parents, having children can make some dysfunctional coping strategies more difficult or impossible. For example, coping by using alcohol or drugs can have serious negative ramifications when an individual is also caring for a child, including endangering the child's safety and the possible involvement of police or social services if this coping strategy is consistently used. Avoiding a problem as a means of coping can also be extremely difficult if the problem to be coped with is an immediate child-related difficulty, such as the child screaming in the grocery store or needing to pick the child up from daycare due to illness. For non-parents, use of dysfunctional coping strategies may result in negative outcomes for themselves, but is less likely to significantly impact others, whereas for parents, use of dysfunctional coping strategies

may put the safety of their child(ren) at risk. Thus, for student parents, dysfunctional coping skills and lower levels of psychological distress may be related to their role as a parent.

Summary of the Comparison of Student Parents and Non-Parents

Student parents and non-parents differ in several key ways. Demographic differences, such as developmental level, employment status, and marital status, reveal important differences with regard to the probable lifestyle and daily tasks of student parents versus non-parent students. Specifically, student parents have more responsibilities, even beyond those of parenting, than many non-parents do. It is possible that these differences in lifestyle are related to differences in motivation for attending and continuing in higher education, especially when the lack of difference in income between the two groups is taken into account, suggesting that student parents are likely to be struggling more financially than non-parents. It is also possible that this difference is lifestyle is related to the lower levels of dysfunctional coping and trends suggesting lower levels of psychological distress among student parents. These differences may also exist, however, as a result of which parents chose to attend college or as a necessity for student parents to manage multiple roles after beginning college.

Strengths and Limitations

Strengths

This study has various strengths that provide valuable information to the field. First, this study aimed to examine student parents comprehensively in order to more fully understand who student parents are. In previous studies, student parents were examined in terms of specific subpopulations, such as nontraditional students, mothers, or those considered "emerging adults." This study did not limit the student parents who participated in an attempt to better understand who comprises this population. Additionally, as a part of this study, various aspects of the functioning of student parents were examined in order to more fully describe what their lives

might be like. By including measures to examine psychological functioning, parenting stress, role conflict and enrichment, perceived social support, coping, and resource use, this study provides a more comprehensive view of the strengths of student parents as a whole, in addition to identifying ways in which this population may need additional assistance or resources.

Prior to this study, no published research could be located that compared student parents to their non-parent peers. Without such a comparison, interpretations of the data from the student parent population would be quite limited. For example, in order to examine levels of depression among student parents, it is important to first determine normative levels of depression for college students. Furthermore, such comparisons clarify the unique characteristics of the student parent population, thus allowing for a more accurate understanding of the strengths and needs of this group of students. In this study, differences, such as the higher GPA of student parents and their significantly lower levels of dysfunctional coping in comparison to their non-parent peers, were discovered. With such information, an understanding of who student parents are and how they may experience their consecutive roles as students and parents has begun to form.

Limitations

Despite significant strengths, this study also had several significant limitations, many of which resulted from population sampling concerns. First, despite efforts to recruit as many student parents as possible, only 28 student parents participated in this study. This sample represents less than 10% of the known student parent population at the current university. Most of the student parent participants were also self-selected. During recruitment, other student parents were identified; however, many declined to participate due to concerns related to time. Additionally, while 28 student parent participants represent a larger sample size than those reported in many other studies on student parents, this small number of student parents limited power for several statistical analyses. Specifically, several of the analyses had effect sizes that

were moderate, but were not significant. It is possible that with a larger sample of student parents, the results of these analyses may have been clearer. Furthermore, several of the analyses, specifically the regression and MANOVA analyses, had to be limited to fewer variables in order to prevent an extremely large accumulation of error. With a small sample size, it is also important to be very careful about interpreting the results that were gathered from this study. Despite searching for outliers, it is still possible for a small number of scores to significantly change mean scores with a sample size of only 28. The results of this study should be replicated and further investigated with larger sample sizes.

Sample size also impacted the analyses that were done in this study, such that several of the hypothesized relationships were not examined with regard to coping due to concerns related to sample size and statistical power. Specifically, problem-focused and emotion-focused coping were not examined for any demographics of student parents in order to minimize statistical error. Furthermore, some demographic variables, such as gender, were not examined due to the small number of males in the study. Sample size may also have impacted the reliability of multiple measures used in this study. Specifically, several of the subscales of the BSI and the subscales of the PSSS showed unacceptable reliability and were, therefore, not used in analysis. Low reliability may also have impacted results including the GSI, as it included all subscales of the BSI, though the overall reliability for this measure was acceptable. Furthermore, sample size limited variability, which could explain why several variables that were expected to impact stress and role conflict were not significant, such as the number of children a student parent had, cohabitation status, income, and employment.

A second limitation to this study is the manner in which the student parents were sampled for this study. It is likely that the student parents who volunteered to participate were the parents that were better able to manage their life roles and responsibilities so they had time to participate

in the study. Student parents who felt overwhelmed, had higher levels of stress and role conflict, and/or had few coping skills may have been less likely to participate. The researchers attempted to encourage all student parents to participate by offering drawings for gift cards, but it is possible that these incentives were not enough for student parents who felt extremely overwhelmed. Furthermore, this sampling did not include student parents who chose to discontinue their education and, thus, was not likely to include the students who were unable to manage both parenting and educational responsibilities.

In contrast to the sampling procedures for the student parents, all of the non-parents in this study were randomly chosen from the Psychology Department Subject Pool. While this was still not a true random sample, as all students were enrolled in General Psychology, less self-selection occurred for non-parents as compared to student parents. This difference in sampling is likely to account for some of the demographic differences between the two groups, including the fact that the student parents in the sample were generally older, had higher GPAs, and were more likely to be part time students than the non-parents. While attempts were made to statistically control for these differences when appropriate and the differences were closely examined, it is possible that if the demographic backgrounds of the student parent and non-parent groups were more similar, the results of the comparisons between the two groups may have been clearer.

A final possible limitation of this study was the survey design. While this allowed for the researcher to gather a large amount of data about many topics, gathering data using a survey has some risks, particularly with regard to participants misunderstanding questions, providing deceptive or inaccurate information, and the lack of ability for researchers to follow-up on questions. While the researchers in this study attempted to control for some of these confounds by giving the surveys in person and offering participants the opportunity to ask questions, it is still possible that errors may have occurred. Of particular concern for this study was possible

errors related to income reporting. For some of the non-parent students, reported household incomes were above 100,000 dollars per year. While this is possible, it is unlikely that a college student would have such an income. Rather, it is likely that for non-parents, who were primarily traditional, unmarried students, reported household incomes included parent earnings. For student parents, it seems more likely that reported household income did not include parent income, given that all reported household incomes were under $100,000. This is further supported by the fact that most student parents identified themselves as adults, which suggests significant financial independence from parents and a different interpretation of household income than that of some non-parent students. Despite this and other limitations, however, this study did reveal some interesting results and suggests avenues for future research.

Future Directions for Research

Future research regarding student parents should focus primarily on engaging in more targeted attempts to understand the stress levels, role conflict, and needs of student parents. This research should focus on gathering information from a very diverse range of student parents with a specific focus on comparing student parents who continue their education successfully to those who do not complete their degree program. It is also important to include as many student parents as possible in order to increase the variance within the student parent group. Efforts to remove barriers to participation for student parents who may have concerns related to stress or time would also be helpful in attracting a more representative sample. Similarly, larger sample sizes will increase power for statistical analyses and may help to provide a clearer picture of the experiences of student parents. Furthermore, normative data should be established for the role conflict and enrichment scales in order to make these scales more useful in such future research. Not only will this research assist in better understanding this group and their needs, it may also provide an empirical basis for the development of interventions or support programs for student

parents. Based on the reports from student parents in this study, support programs should include such aspects as assistance in role management and helping student parents to seek out affordable resources such as child care and housing.

Future research should also focus on exploring and comparing the subpopulations found within the student parent group as a whole. Given the results of this study, distinctions made based on marital status, part-time versus full-time status, and age or traditional versus nontraditional status may be of most use. Research into these subpopulations should include the examination of not only parenting stress and psychological symptoms, but also areas such as role conflict, given that a link between these experiences has now been established. Several specific relationships have been suggested by this research and should be examined. First, given differences in child age among traditional and non-traditional student parents and differences in conflict and parenting stress among student parents, future research should focus on the impact that child age may have on parenting stress and role conflict. Secondly, work-family conflict is an area in which further research is needed. In this study, the sample size of employed student parents was 19; thus, comparisons within this group were extremely limited. It may also be helpful to examine relationship satisfaction in combination with marital status, given that marital relationships have been shown to have differing impacts on levels of stress for student parents and could explain the lack of significant results with regard to marital status in this study. The current study measured relationship satisfaction as a dichotomous variable, leading to very limited variability and an inability to include this variable in analyses. Future research should include a measure of relationship satisfaction with Likert-type questions, allowing for variability in relationship satisfaction.

Next, patterns in this research revealed that school-family conflict and school-family enrichment have different impacts on psychological functioning, with enrichment potentially

being more strongly related to anxiety and conflict more strongly related to depressive symptoms. These relationships should be further explored, especially given the regressions in this study that showed that psychological distress can predict school-family enrichment and is correlated with school-family conflict. Previous research has suggested that both depression and anxiety can predict role conflict (Anderson, 2001; Gonchar, 1995; Home, 1998; Salters, Hughes, & O'Leary, 2009); however, only general psychological distress was used in many analyses for this study, given small sample sizes and the scores for depression and anxiety both being included in the general psychological distress score. Furthermore, these conflict and enrichment warrant further exploration to determine if they are related or unrelated constructs. While theoretically, these constructs are related (van Rhijn, 2009), this study did not show patterns of results suggesting that conflict and enrichment are related. Longitudinal research may be particularly helpful in better understanding conflict and the variables that lead to increases and decreases in role conflict over time. This information may help to better identify ways to decrease and manage role conflict effectively.

Coping and social support also offer further areas for research. First, it is important for future research to examine the potential differences in the impact of social support from friends versus support from family, as these areas could not be examined in this study due to low reliability. Additionally, given the impact that social support has been shown to have on stress levels in previous research (Anderson, 2008; Leigh & Milgrom, 2008; Mulsow, Caldera, Pursley, Reifman, & Huston, 2002; Österberg & Hagekull, 2000; Viana & Welsh, 2010) and in this research, it should be further explored in terms of ways that social support impacts student parents and how instrumental versus emotional support may impact stress levels. In terms of coping skills, future research should focus on better understanding what predicts different types of coping among student parents, in addition to ways to increase problem-focused coping, which

has been shown to decrease psychological symptomology. Research should also be done with regard to ways to help to student parents to limit the use of emotion-focused coping to situations in which it may be useful, rather than using it excessively, as it appears to be used currently. Excessive use of emotion-focused coping was shown to be linked to higher levels of stress and, thus, research should also focus on how to identify in which situations emotion-focused coping may be helpful and how to help student parents to use problem-focused coping in situations in which emotion-focused coping is not helpful.

Finally, future research should focus on continuing to examine comparisons of student parents with their non-parent student peers, as well as ways in which student parents are similar to and different from their peers who are parents, but are not students (non-student parents). Student parents reported higher levels of parenting distress and concerns related to their parent-child interactions than the normative population. In order to determine if their levels are significantly different from the non-student parent population, data must be gathered from this population. Such a comparison would also help to determine if there are parenting needs that are unique to the student parent population, including economic needs, psychological or emotional support, or child care needs related to the sometimes difficult schedules of students. Such research should also include an observational component that would explore possible reasons for higher levels of parenting stress and help to begin to develop an understanding of ways that stress related to the multiple life roles of student parents could be impacting their children.

Conclusion

Overall, this study provided some very useful information regarding the demographics and experiences of student parents. It also added significantly to the research literature by comparing student parents to their non-parent student peers. Despite a small sample size, many significant results were found and many trends were uncovered. In general, the results show that

student parents represent a heterogeneous group of individuals who display a positive ability to cope with multiple stressors and life roles. Student parents in general, are, however, in need of more support and resources that are tailored to meet their unique needs of balancing parenting, academics, and, frequently, employment. Much more research is necessary to fully understand the experience of student parents and how they can best be assisted in successfully completing their education while engaging in parenting, though this research and previous research regarding student parents has provided a significant basis for deeper exploration.

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Table 1

Summary of Demographic Variables Not Thoroughly Described in Text by Student Parent Sample and Non-Parent Student Sample

Demographic Variable	Student Parent Percentage (Frequency) (n = 28)	Non-Parent Student Percentage (Frequency) (n = 28)
Gender		
Female	75.0 (21)	78.6 (22)
Male	25.0 (7)	21.4 (6)
Marital Status		
Married, living with partner	42.9 (12)	0.0 (0)
Divorced, separated, or widowed	17.9 (5)	0.0 (0)
Single, not living with partner	17.9 (5)	89.3 (25)
Single, living with partner	21.4 (6)	10.7 (3)
Student Status		
Full time (12-18 credits)	78.6 (22)	96.4 (27)
Part-time (less than 12 credits)	21.4 (6)	0.0 (0)
Employment Status		
Employed	71.4 (20)	46.4 (13)
Unemployed	28.6 (8)	53.6 (15)
Yearly Income		
$0-19,999	42.9 (12)	42.9 (12)
$20,000-39,999	25.0 (7)	21.4 (6)
$40,000-59,999	25.0 (7)	10.7 (3)
$60,000-79,999	7.1 (2)	3.6 (1)
$80,000-99,999	0.0 (0)	7.1 (2)
$100,000 or more	0.0 (0)	10.7 (3)
Ethnicity		
Caucasian/White	75.0 (21)	89.3 (25)
Bi-racial	14.3 (4)	3.6 (1)
Single Ethnicity, Non-White	10.7 (3)	7.1 (2)

Table 2

Summary of Employment Information for Primary Job of Employed Students by Overall Sample, Student Parent Sample, and Non-Parent Student Sample

Demographic Variable	Overall Percentage (Frequency) (n = 33)	Student Parent Percentage (Frequency) (n = 20)	Non-Parent Student Percentage (Frequency) (n = 13)
Primary Job Location			
On campus, work study	9.1 (3)	10.0 (2)	7.7 (1)
On campus, not work study	15.3 (5)	20.0 (4)	7.7 (1)
Off campus	72.7 (24)	65.0 (13)	84.6 (11)
Primary Job Status			
Permanent	51.5 (17)	60.0 (12)	38.5 (5)
Temporary	45.5 (15)	35.0 (7)	61.5 (8)
Primary Job Hours Per Week			
0-10	21.2 (7)	10.0 (2)	38.5 (5)
11-20	39.4 (13)	35.0 (7)	46.2 (6)
21-30	15.2 (5)	20.0 (4)	3.6 (1)
31-39	15.2 (5)	20.0 (4)	3.6 (1)
40 or more	6.1 (2)	10.0 (2)	0.0 (0)

Table 3

Summary of Parenting-Related Categorical Demographic Variables for Student Parents

Demographic Variable	Student Parent Percentage (Frequency) (n = 27)
Number of Children	
1	51.9 (14)
2	29.6 (8)
3	14.8 (4)
7	3.7 (1)
Number of Children by Age	
Under 5 years old	
0	40.7 (11)
1	55.6 (15)
2	3.7 (1)
5-13 years old	
0	51.9 (14)
1	40.7 (11)
2	3.7 (1)
7	3.7 (1)
14-17 years old	
0	77.8 (21)
1	18.5 (5)
2	3.6 (1)
18 years old or older	
0	85.2 (23)
1	11.1 (3)
2	3.7 (1)
Planned Pregnancy	
For no children	48.1 (13)
For one or two children	51.9 (14)

Table 4

Summary of Student Parent Scores on School-Family Conflict Scale and School-Family Enrichment Scale, Work-Family Conflict Scale, and Work-Family Enrichment Scale

Scale/Subscale	School related scales, Mean (SD) (*n* = 27; range for total scales 18-90; range for subscales = 3-15)	Work related scales, Mean (SD) (*n* = 19; range for total scales 18-90; range for subscales = 3-15)
School/Work-Family Conflict Scale Totals	42.22 (13.02)	38.37 (9.55)
Time-Based School/Work Interference with Family (S/WIF)	8.48 (3.08)	8.00 (3.28)
Strain-Based S/WIF	7.19 (2.88)	6.22 (2.92)[b]
Behavior Based S/WIF	5.63 (2.44)	6.71 (2.11)[c]
Time-Based Family Interference with School/Work (FIS/W)	7.81 (3.15)[a]	5.42 (1.54)
Strain-Based FIS/W	6.59 (2.95)	5.42 (2.29)
Behavior Based FIS/W	6.52 (2.46)	7.00 (2.43)
School/Work-Family Enrichment Scale Totals	70.48 (11.99)	67.16 (15.14)
School/Work to Family (S/WTF) Development	12.19 (2.80)	11.68 (2.89)
S/WTF Affect	10.33 (1.88)	9.37 (2.87)
S/WTF Capital	13.19 (2.25) [a]	10.79 (3.21)
Family to School/Work (FTS/W) Development	11.63 (2.91)	11.79 (3.01)
FTS/W Affect	11.96 (2.97) [a]	12.26 (2.16)
FTS/W Efficiency	11.37 (2.91)	11.26 3.02)

[a] *n* = 26. [b] *n* = 18. [c] *n* = 17.

Table 5

Summary of BSI T-Scores by Student Parent Sample and Non-Parent Student Sample

Subscale	Student Parent Mean T-Score (SD) (n = 28)	Non-Parent Student Mean T-Score (SD) (n = 28)
General Symptom Inventory [a]	57.39 (9.90)	62.64 (11.35)
Somatization	53.61 (10.60)	58.04 (13.78)
Obsessive-Compulsive	60.00 (9.09)	63.89 (10.47)
Interpersonal Sensitivity	55.75 (10.77)	60.21 (10.96)
Depression*	52.00 (11.57)	60.00 (12.66)
Anxiety	52.36 (13.46)	56.61 (11.42)
Hostility	57.11 (8.56)	60.86 (12.34)
Phobic Anxiety*	51.46 (8.57)	57.04 (9.60)
Paranoid Ideation*	54.89 (9.60)	60.89 (9.86)
Psychoticism[b]	56.54 (10.94)	62.14 (12.49)

[a] For this variable, trend appeared in the data suggesting a possible difference, $p = .07$. [b] For this variable, trend appeared in the data suggesting a possible difference, $p = .08$

* $p < .05$

Table 6

List of Percentages of Campus Resources Heard of and Used by Parents and Non-Parents

Resource	% Parents Heard of (n)	% Parents Used (n)	% Non-Parents Heard of (n)	% Non-Parents Used (n)
Career Development Center	71.4 (20)	10.7 (3)	82.1 (23)	14.3 (4)
Center for Applied Psychology	78.6 (22)	7.1 (2)	53.6 (15)	10.7 (3)
Center for Health and Well-Being	89.3 (25)	21.4 (6)	89.3 (25)	35.7 (10)
Center for Student Success	71.4 (20)	14.3 (4)	60.7 (17)	3.6 (1)
The Counseling Center	82.1 (23)	10.7 (3)	96.4 (27)	14.3 (4)
Supplemental Instruction (SI)	57.1 (16)	17.9 (5)	42.9 (12)	10.7 (3)
The Writing Center	92.9 (26)	25.0 (7)	89.3 (25)	35.7 (10)
Advising and Testing Center	85.7 (24)	21.4 (6)	78.6 (22)	25.0 (7)
Indi Kids/Indiana County Child Daycare (in Davis Hall)	89.3 (25)	28.6 (8)	53.6 (15)	0.0 (0)
Other (Big Hearts, Little Hands)	3.6 (1)	3.6 (1)	0.0 (0)	0.0 (0)
Other (Library)	0.0 (0)	0.0 (0)	3.6 (1)	0.0 (0)
Other (New Haven Project)	0.0 (0)	0.0 (0)	3.6 (1)	0.0 (0)
Other (Safe Zone)	0.0 (0)	0.0 (0)	3.6 (1)	0.0 (0)
Other (Unidentified)	3.6 (1)	0.0 (0)	10.7 (3)	3.6 (1)

Table 7

List of Percentages of Community Resources Heard of and Used by Parents and Non-Parents

Resources	%Parents Heard of (n)	% Parents Used (n)	% Non-Parents Heard of (n)	% Non-Parents Used (n)
Indi Kids/Indiana County Child Day Care (at IUP, Davis Hall)	82.1 (23)	28.6 (8)	60.7 (17)	0.0 (0)
Indi Kids/Indiana County Child Day Care (at Local Elementary Schools)	60.7 (17)	14.3 (4)	25.0 (7)	0.0 (0)
Center for Applied Psychology	71.4 (20)	3.6 (1)	46.4 (13)	7.1 (2)
Indiana Free Walk-in Clinic	64.3 (18)	17.9 (5)	50.0 (14)	3.6 (1)
Adagio Health	71.4 (20)	32.1 (9)	35.7 (10)	14.3 (4)
Women, Infants, and Children of Indiana County (WIC)	89.3 (25)	53.6 (15)	32.1 (9)	0.0 (0)
Child Care Information Services of Indiana County (CCIS)	67.9 (19)	35.7 (10)	21.4 (6)	0.0 (0)
Birthright of Indiana County	50.0 (14)	7.1 (2)	14.3 (4)	0.0 (0)
Center for Family Life (CFL)	50.0 (14)	0.0 (0)	17.9 (5)	0.0 (0)
PA Department of Health	78.6 (22)	10.7 (3)	53.6 (15)	0.0 (0)
Indiana County Head Start	85.7 (24)	28.6 (8)	35.7 (10)	0.0 (0)
Indiana Regional Medical Center (IRMC), Prenatal, Infant, and Child Education	71.4 (20)	28.6 (8)	46.4 (13)	7.1 (2)
IRMC, Pediatric and Adolescent Dental Clinic	53.6 (15)	10.7 (3)	21.4 (6)	0.0 (0)
PA Children's Health Insurance Program (CHIP)	92.9 (26)	35.7 (10)	35.7 (10)	0.0 (0)
Housing Authority of Indiana County (HAIC)	67.9 (19)	7.1 (2)	35.7 (10)	0.0 (0)
Indiana County Goodwill	82.1 (23)	39.3 (11)	71.4 (20)	10.7 (3)
Indiana County Community Action Program (ICCAP)	78.6 (22)	21.4 (6)	21.4 (6)	0.0 (0)
Indiana County Transit Authority (IndiGo Public Transportation)	78.6 (22)	14.3 (4)	53.6 (15)	32.1 (9)
Med-Van Transport	64.3 (18)	0.0 (0)	39.3 (11)	3.6 (1)
Indiana County Guidance Center	64.3 (18)	14.3 (4)	32.1 (9)	7.1 (2)
Family Behavioral Resources	60.7 (17)	3.6 (1)	17.9 (5)	0.0 (0)
Other (Substance Abuse Rehabilitation (Open Door))	3.6 (1)	0.0 (0)	0.0 (0)	0.0 (0)
Other (Alice Paul House)	3.6 (1)	3.6 (1)	0.0 (0)	0.0 (0)
Other (Lifeway Pregnancy Center)	3.6 (1)	3.6 (1)	0.0 (0)	0.0 (0)
Other (Unidentified)	3.6 (1)	0.0 (0)	3.6 (1)	0.0 (0)

Table 8

Percentages of Personal Resources Listed by Student Parents and Non-Parents

Resource	Student Parents (n)	Non-Parents (n)
Friends	17.9 (5)	53.6 (15)
Family of origin	32.1 (9)	39.3 (11)
Spouse/Significant Other	50.0 (14)	17.9 (5)
Children	7.1 (2)	0.0 (0)
Professional Contacts	7.1 (2)	0.0 (0)
God/Clergy/Church	10.7 (3)	0.0 (0)
Self/Deal with it	21.4 (6)	32.1 (9)

Table 9

Percentages of the Most Helpful Resources, as Listed by Student Parents and Non-Parents

Resource	Student Parents (n)	Non-Parents (n)
IndiKids	21.4% (6)	0.0% (0)
Family Members	17.9% (5)	7.1% (2)
Child Care Information Services (CCIS)	14.3% (4)	0.0% (0)
Headstart	14.3% (4)	0.0% (0)
Significant other	10.7% (3)	3.6% (1)
WIC	10.7% (3)	0.0% (0)
Alice Paul House	7.1% (2)	0.0% (0)
On-Campus Library	7.1% (2)	10.7% (3)
Other Daycare	7.1% (2)	0.0% (0)
PA Children's Health Insurance Program (CHIP)	7.1% (2)	0.0% (0)
School Personnel	7.1% (2)	7.1% (2)
Community Guidance Center	3.6% (1)	3.6% (1)
Counseling Center	3.6% (1)	10.7% (3)
County Assistance Office	3.6% (1)	0.0% (0)
Food Stamps	3.6% (1)	0.0% (0)
Free Library (community)	3.6% (1)	0.0% (0)
God/Church	3.6% (1)	0.0% (0)
IndiGo Bus System	3.6% (1)	10.7% (3)
IT Support Center	3.6% (1)	0.0% (0)
Lifeway Pregnancy Center	3.6% (1)	0.0% (0)
On-Campus Tutoring	3.6% (1)	3.6% (1)
Special Needs Activity Program (SNAP)	3.6% (1)	0.0% (0)
Adagio Health	0.0% (0)	3.6% (1)
Center for Health and Well-Being	0.0% (0)	17.9% (5)
Disability Support Services (On Campus)	0.0% (0)	3.6% (1)
Friends	0.0% (0)	17.9% (5)
Gym	0.0% (0)	3.6% (1)
Indiana Hospital	0.0% (0)	3.6% (1)
Office of International Education	0.0% (0)	3.6% (1)
Writing Center	0.0% (0)	14.3% (4)

Table 10

Percentage of Student Parents Indicating Interest in Possible Resources

Resource	% Indicating Interest (n)
Daycare center	39.3 (11)
Student parent support group	42.9 (12)
Changing/feeding stations	28.6 (8)
Playground	50.0 (14)
Parent training in child behavior management	32.1 (9)
Parent-child play groups	42.9 (12)
Family housing	42.9 (12)

Table 11

Correlations Between Subscales of the PSI, PSSS, Age, and Select BSI Subscales for Student Parents

	PSI-PD	PSI- P-CDI	PSI-DC	PSI-Tot	PSSS
Age	-.44*	.30	.13	.01	-
BSI-D	.48**	.24	.12	.35[a]	-.29
BSI-A	.30	.23	.23	.34[b]	-.44*
BSI-GSI	.61**	.31	.19	.48*	-.40*
PSSS	-.29	-.46*	-.50*	-.54**	-

Note. n = 28

[a] For this variable, trend appeared in the data suggesting a possible difference, $p = .07$. [b] For this variable, trend appeared in the data suggesting a possible difference, $p = .08$

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

Table 12

Correlations Between Conflict and Enrichment Scales, Resources Used, Age, Number of Children, PSI, Select BSI Subscales, and the Brief COPE

	School-Family Conflict Scale Total	School-Family Enrichment Scale Total[b]	Work-Family Conflict Scale Total[a]	Work-Family Enrichment Scale Total[a]	Age	# of Campus Resources Used[b]	# of Community Resources Used
# Children	-.03[c]	-.21[c]	.01	-.22	-	-	-
PSI-PD	.62**	-.36[d]	.16	-.05	-	-	-
PSI-P-CDI	-.22	-.38*	-.13	-.20	-	-	-
PSI-DC	-.10	-.28[e]	-.03	-.41	-	-	-
PSI-Total	.14	-.40*	-.01	-.31	-	-	-
Age	-.38	.03	.00	-.37	-	-.21	-.34[f]
BSI-GSI	.45*	-.51**	.37	-.18	-	-	-
BSI-Depression	.26	-.32	.27	-.14	-	-	-
BSI-Anxiety	.19	-.51**	.48*	-.48*	-	-	-
Emotion-Focused Coping	-.04	.04	-.06	.14	-.33	.16	.16
Problem-Focused Coping	.20	.16	-.14	.33	.06	.01	.11
Dysfunctional Coping	.24	-.17	.16	-.20	-.22	-.02	.24

Note. Unless otherwise noted, $n = 27$.

[a] $n = 19$. [b] The School-Family Enrichment Scale and the number of campus resources used are not normally distributed variables Therefore, all correlations that include the these variables are calculated using Spearman's Rho, as opposed to Pearson's Product-Moment correlations. [c] $n = 26$. [d] A trend in the data suggested a possible correlation between variables, $p = .07$. [e] A trend in the data suggested a possible correlation between variables, $p = .09$. [f] A trend in the data suggested a possible correlation between variables, $p = .08$.

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

Table 13

Mean Scores (SD) of Select Measures used in Comparative Analyses for Subgroups of Student Parents

Demographic Variable	n	PSI-Total	BSI-GSI	BSI-D	BSI-A	Dys. Cope	PSSS	SFCS	SFES	WFCS	WFES
Type of score		Raw	T-Score	T-Score	T-Score	Raw	Raw	Raw	Raw	Raw	Raw
Possible range of scores		36-180	*M* = 50, *SD* = 10	*M* = 50, *SD* = 10	*M* = 50, *SD* = 10	12-48	0-40	18-80	18-80	18-80	18-80
Traditional Status											
Traditional students	11	66.37 (15.36)	59.18 (7.72)	-	-	22.73[a] (5.06)	-	49.00[b] (10.80)	-	-	-
Nontraditional students	16	71.50 (18.31)	54.75 (9.64)	-	-	19.69[a] (3.38)	-	37.56[b] (12.63)	-	-	-
Gender											
Male	6	72.83 (22.08)	52.17 (12.47)	-	54.83 (12.77)	-	24.50 (3.45)	36.67 (10.93)	-	-	-
Female	21	68.43 (15.86)	57.81 (7.72)	-	50.33 (12.64)	-	26.43 (4.25)	43.81 (13.37)	-	-	-
Marital Status											
Married or living with a partner	18	70.33 (17.24)	56.06 (8.35)	48.17[c] (8.89)	50.44 (12.96)	-	-	42.89 (12.43)	-	-	-
Not living with a partner	9	67.56 (17.53)	57.56 (10.71)	56.56[c] (11.38)	53.11 (12.27)	-	-	40.89 (14.83)	-	-	-
Student Status											
Part-time	22	76.00 (6.48)	54.40 (5.73)	-	-	-	25.20 (4.09)	33.00[d] (9.46)	-	-	-
Full-time	5	67.91 (18.42)	57.05 (9.65)	-	-	-	26.18 (4.18)	44.32[d] (12.97)	-	-	-
Academic Status											
Freshman	8	-	-	-	-	-	-	43.38 (15.29)	62.00 (14.94)	46.50[e] (11.23)	64.00[e] (14.07)
Sophomore	4	-	-	-	-	-	-	43.75	73.25	43.25[e]	62.50[e]

								(9.91)	(9.68)	(6.24)	(17.44)
Junior	5	-	-	-	-	-	-	42.60	69.80	36.00[e]	63.00[e]
								(10.85)	(6.94)	(7.62)	(11.94)
Senior	8	-	-	-	-	-	-	44.13	76.50	32.00[f]	73.83[f]
								(14.30)	(8.57)	(8.07)	(18.27)
Other	2	-	-	-	-	-	-	26.00	76.50	34.00 [g]	75.00[g]
								(1.41)	(14.85)	(N/A)	(N/A)
Employment											
Unemployed	8	73.25	60.38	-	-	-	27.63	48.50	-	-	-
		(16.69)	(9.88)				(3.25)	(17.46)			
Employed	19	67.79	54.95	-	-	-	25.32	39.58	-	-	-
		(17.39)	(8.39)				(4.31)	(10.08)			
Yearly Income											
Less than	12	71.67	57.83	-	-	-	-	41.83	-	39.38[h]	-
$20,000		(18.14)	(9.50)					(13.27)		(8.05)	
More than	15	67.60	55.53	-	-	-	-	42.53	-	37.64[i]	-
$20,000		(16.54)	(8.81)					(13.28)		(10.83)	

Note. BSI-D = BSI- Depression, BSI-A = BSI- Anxiety, Dys. Cope = Dysfunctional Coping.
[a] $p = .07$. [b] Scores for this variable showed a trend toward a significant difference between subpopulations of student parents, $p = .02$. Bonferroni correction makes the significant *p*-value for this analysis .01. [c] $p = .05$. [d] $p = .08$. [e] $n = 4$. [f] $n = 6$. [g] $n = 1$. [h] $n = 8$. [i] $n = 11$.
* $p < .05$.

Table 14

Results of Multivariate Analyses of Variance (MANOVAs) Comparing Subpopulations of Student Parents

MANOVA	df	*F*	partial η^2
Traditional versus Nontraditional Students			
PSI-Total	1,25	.58	.02
BSI-GSI	1,25	1.61	.06
SFCS[a]	1,25	5.99	.19
Dysfunctional Coping[b]	1,25	3.52	.12
Gender			
PSI-Total	1,25	.30	.01
PSSS	1,25	1.03	.04
SFCS	1,25	1.43	.05
BSI-GSI	1,25	1.88	.07
BSI-Anxiety	1,25	.59	.02
Full-time versus Part-time Students			
SFCS[c]	1,25	3.36	.12
PSI-Total	1,25	.91	.04
PSSS	1,25	.23	.01
BSI-GSI	1,25	.34	.01
Marital Status			
BSI-GSI	1,25	.16	.01
BSI-Depression[a]	1,25	4.44	.15
BSI-Anxiety	1,25	.26	.01
PSI-Total	1,25	.15	.01
SFCS	1,25	.14	.01
Employment Status (Employed vs. Unemployed)			
BSI-GSI	1,25	2.13	.08
PSI-Total	1,25	.57	.02
SFCS	1,25	2.83	.10
PSSS	1,25	1.84	.07
Income (Above vs. Below the Poverty Line)			
BSI-GSI	1,25	.42	.02
PSI-Total	1,25	.37	.02
SFCS	1,25	.02	.00

[a] For this variable, trend appeared in the data suggesting a possible difference, $p < .05$ before a Bonferonni corrections is applied. [b] For this variable, trend appeared in the data suggesting a possible difference, $p = .07$, though this should be interpreted with extreme caution given that the *p*-value for significance is .01 after the Bonferonni correction is applied. [c] For this variable, trend appeared in the data suggesting a possible difference, $p = .08$, though this should be interpreted with extreme caution given that the *p*-value for significance is .01 after the Bonferonni correction is applied.

Table 15

Results and Comparisons of Measures Completed by Student Parents and Non-Parents

Measures	Student Parent, M (SD) (N = 28)	Non-Parent Student, M (SD) (N = 28)
PSSS (Raw score; range = 0-40)	25.64 (4.45)	24.15 (4.74)
Brief COPE (Raw scores)		
Emotion-focused coping (range = 10-40)	29.00 (4.62)	26.89 (5.76)
Problem-focused coping (range = 6-24)	18.89 (3.07)	18.14 (3.47)
Dysfunctional coping*** (range = 12-48)	21.18 (4.46)	27.96 (7.41)
BSI (T-scores)		
General Symptom Inventory	57.39 (9.90)	62.64 (11.35)
Depression[a]	52.00 (11.57)	60.00 (12.66)
Anxiety	52.36 (13.46)	56.61 (11.42)
Resources (Frequency count)		
Campus resource awareness	7.25 (2.35)	6.68 (1.95)
Campus resources use	1.61 (1.87)	1.54 (1.48)
Community resource awareness***	14.96 (5.94)	7.79 (6.65)
Community resource use***	4.11 (3.30)	0.86 (1.04)

[a] For this variable, a trend appeared in the data suggesting a possible difference, $p = .02$. P-value for significance for this analysis was .01 as a result of a Bonferroni correction.

*** $p < .001$

Appendix A

Demographic Questionnaire

Please complete the following questions by either checking or filling in your answers where appropriate.

What is your current age? ____ years

Do you feel like you have reached adulthood?
____ Yes ____ No ____ In some respects yes, In some respects no

In what ways do you feel like you have, or have not, reached adulthood?
_____
_____

Sex (check one): ___ Male ___ Female

Marital status (check one): ___ Married, living with partner
___ Married, but not living with partner
___ Divorced, separated, or widowed
___ Single, not living with a partner
___ Single, living with a partner

If you currently have a partner, do you feel generally satisfied with your relationship?
Yes No

What is your current student status (check one)?
___ Full-time (12-18 credits) ___ Part-time (less than 12 credits)

What is your current academic status (check one)?
___ Freshman ___ Sophomore ___ Junior
___ Senior ___ Graduate student ___ Other (please specify: _____)

Are you currently employed in any setting (check one)? ___ Yes ___ No

If yes:

How many jobs do you currently hold? ___

Where do you currently work (check all that apply)?
____ On-campus through a work study program
____ On-campus not through work study
____ Off-campus (not at IUP or affiliated with the university)

(For each job) Is your current employment: Permanent or Temporary

(For each job) Are you employed (check one)
___ 0-10 hours per week
___ 11-20 hours per week
___ 21-30 hours per week
___ 31-39 hours per week
___ 40 or more hours per week

What is your annual household income (check one)?
___ $0-$9,999
___ $10,000-$19,999
___ $20,000-$29,999
___ $30,000-$39,999
___ $40,000-$49,999
___ $50,000-$59,999
___ $60,000-$69,999
___ $70,000-$79,999
___ $80,000-$89,999
___ $90,000-$99,000
___ More than $100,000

What is your ethnicity (check all that apply)?
___ Caucasian
___ African American
___ African
___ Mexican, Mexican American, Chicano
___ Puerto Rican
___ Cuban
___ Other Spanish/Hispanic/Latino (please specify: _____)
___ American Indian or Alaska Native
___ Asian Indian
___ Chinese
___ Filipino
___ Japanese
___ Korean
___ Vietnamese
___ Other (please specify:_____)

Are you the first person in your family to ever attend college (check one)? ___ Yes ___ No

What is your current grade point average (GPA)? _____

Are you currently responsible for at least 50% of the care of at least one person under the age of

18 (children)? ____ Yes ____ No

If yes:

How many children do you have? _____

What are the age(s) of your children? _____

Do any of the children you currently care for have any physical, developmental, or other disabilities? What disability(ies) does that child(ren) experience? _____

How many of your child(ren) were the result of a planned pregnancy? _____

When you are unable to care for your child(ren) due to work, school, or other engagements, how are your child(ren) usually cared for?

_____ On-campus child care center

_____ Off-campus child care center

_____ Babysitter

_____ Friends care for my child(ren)

_____ My significant other cares for my child(ren)

_____ Other family members care for my child(ren)

_____ Other (Please describe: _____)

Appendix B

School-Family Conflict Scale

Below is a list of statements about the relationship between school and family. On a scale from 1 (strongly disagree) to 5 (strongly agree), please indicate your level of agreement for each statement based on your relationship between your schooling and your family life.

Strongly Disagree — Strongly Agree
1——————2——————3——————4——————5

School-to-family conflict

1. My school keeps me from my family activities more than I would like.
2. The time I must devote to my schoolwork keeps me from participating equally in household responsibilities and activities.
3. I have to miss my family activities due to the amount of time I must spend on school responsibilities.
4. When I get home from school I am often too frazzled to participate in family activities/responsibilities.
5. I am often so emotionally drained when I get home from school that it prevents me from contributing to my family.
6. Due to all the school pressures, sometimes I am too stressed to do the things I enjoy at home.
7. The problem-solving behaviors I use for school are not effective in resolving problems at home.

8. Behavior that is effective and necessary for me at school would be counterproductive at home.
9. The behaviors I perform that make me effective at school do not help me to be a better parent and/or spouse/partner.

Family-to-school conflict

10. The time I spend on family responsibilities often interferes with my school responsibilities.
11. The time I spend with my family often causes me not to spend time in activities at school that would be helpful to my education.
12. I have to miss school activities due to the amount of time I must spend on family responsibilities.
13. Due to stress at home, I am often preoccupied with family matters at school.
14. Because I am often stressed from family responsibilities, I have a hard time concentrating on my schoolwork.
15. Tension and anxiety from my family life often weakens my ability to do well in school.
16. The behaviors that work for me at home do not seem to be effective at school.
17. Behavior that is effective and necessary for me at home would be counterproductive at school.
18. The problem-solving behavior that works for me at home does not seem to be useful at school.

Appendix C

School-Family Enrichment Scale

To respond to the items that follow, mentally insert each item into the sentence where indicated. Then indicate your agreement with the entire statement using the scale provided below. Place your response in the blank in front of each item. Please note that in order for you to strongly agree (4 or 5) with an item you must agree with the full statement.

Take for example the first statement: My involvement in my schooling helps me to understand different viewpoints and this helps me be a better family member. To strongly agree, you would need to agree that (1) your school involvement helps you to understand different viewpoints AND (2) that these different viewpoints transfer to home making you a better family member.

Strongly Disagree — Strongly Agree

1——————2——————3——————4——————5

School-to-family enrichment

My involvement in my schooling:

1. Helps me to understand different viewpoints and this helps me be a better family member.
2. Helps me to gain knowledge and this helps me be a better family member.
3. Helps me acquire skills and this helps me be a better family member.
4. Puts me in a good mood and this helps me be a better family member.
5. Makes me feel happy and this helps me be a better family member.
6. Makes me cheerful and this makes me be a better family member.
7. Helps me feel personally fulfilled and this helps me be a better family member.

8. Provides me with a sense of accomplishment and this helps me be a better family member.
9. Provides me with a sense of success and this helps me be a better family member.

Family-to-school enrichment

My involvement in my family:

1. Helps me to gain knowledge and this helps me be a better student.
2. Helps me acquire skills and this helps me be a better student.
3. Helps me expand my knowledge of new things and this helps me be a better student.
4. Puts me in a good mood and this helps me be a better student.
5. Makes me feel happy and this helps me be a better student.
6. Makes me cheerful and this helps me be a better student.
7. Requires me to avoid wasting time at school or on schoolwork and this helps me be a better student.
8. Encourages me to use my school time in a focused manner and this helps me be a better student.
9. Causes me to be more focused at school or on schoolwork and this helps me be a better student.

Appendix D

Work-Family Conflict Scale

Below are a list of statements about the relationship between work and family. On a scale from 1 (strongly disagree) to 5 (strongly agree), please indicate your level of agreement for each statement based on your relationship between your employment and your family life.

Strongly Disagree 1——2——3——4——5 Strongly Agree

Time-based work interference with family

1. My work keeps me from my family activities more than I would like.
2. The time I must devote to my job keeps me from participating equally in household responsibilities and activities.
3. I have to miss family activities due to the amount of time I must spend on work responsibilities.

Time-based family interference with work

4. The time I spend on family responsibilities often interferes with my work responsibilities.
5. The time I spend with my family often causes me not to spend time in activities at work that could be helpful to my career.
6. I have to miss work activities due to the amount of time I must spend on family responsibilities.

Strain-based work interference with family

7. When I get home from work I am often too frazzled to participate in family activities/responsibilities.

8. I am often so emotionally drained when I get home from work that it prevents me from contributing to my family.
9. Due to all the pressures at work, sometimes when I come home, I am too stressed to do the things I enjoy.

Strain-based family interference with work

10. Due to stress at home, I am often preoccupied with family matters at work.
11. Because I am often stressed from family responsibilities, I have a hard time concentrating on my work.
12. Tension and anxiety from my family life often weakens my ability to do my job.

Behavior-based work interference with family

13. The problem-solving behaviors I use in my job are not effective in resolving problems at home.
14. Behavior that is effective and necessary for me at work would be counterproductive at home.
15. The behaviors I perform that make me effective at work do not help me to be a better parent and spouse.

Behavior-based family interference with work

16. The behaviors that work for me at home do not seem to be effective at work.
17. Behavior that is effective and necessary for me at home would be counterproductive at work.
18. The problem-solving behavior that works for me at home does not seem to be as useful at work.

Appendix E

Work-Family Enrichment Scale

Instructions:

To respond to the items that follow, mentally insert each item into the sentence where indicated. Then indicate your agreement with the entire statement using the scale provided below. Place your response in the blank in front of each item. Please note that in order for you to strongly agree (4 or 5) with an item you must agree with the full statement.

Take for example the first statement: My involvement in my work helps me to understand different viewpoints and this helps me be a better family member. To strongly agree, you would need to agree that (1) your work involvement helps you to understand different viewpoints AND (2) that these different viewpoints transfer to home making you a better family member.

Strongly Disagree — Strongly Agree

1——————2——————3——————4——————5

My involvement in my work _____.

Work to family development

1. Helps me to understand different viewpoints and this helps me be a better family member.
2. Helps me to gain knowledge and this helps me be a better family member.
3. Helps me acquire skills and this helps me be a better family member.

Work to family affect

4. Puts me in a good mood and this helps me be a better family member.
5. Makes me feel happy and this helps me be a better family member.

6. Makes me cheerful and this helps me be a better family member.

Work to family capital

7. Helps me feel personally fulfilled and this helps me be a better family member.
8. Provides me with a sense of accomplishment and this helps me be a better family member.
9. Provides me with a sense of success and this helps me be a better family member.

My involvement in my family _____.

Family to work development

10. Helps me to gain knowledge and this helps me be a better worker.
11. Helps me acquire skills and this helps me be a better worker.
12. Helps me expand my knowledge of new things and this helps me be a better worker.

Family to work affect

13. Puts me in a good mood and this helps me be a better worker.
14. Makes me feel happy and this helps me be a better worker.
15. Makes me cheerful and this helps me be a better worker.

Family to work efficiency

16. Requires me to avoid wasting time at work and this helps me be a better worker.
17. Encourages me to use my work time in a focused manner and this helps me be a better worker.
18. Causes me to be more focused at work and this helps me be a better worker.

Appendix F

Perceived Social Support Scale

Perceived Social Support from Friends

Directions: The statements which follow refer to feelings and experiences which occur to most people at one time or another in their relationships with friends. For each statement there are three possible answers: Yes, No, Don't know. Please check the answer you choose for each item.

Yes	No	Don't know	
			1. My friends give me the moral support I need.
			2. Most other people are closer to their friends than I am.
			3. My friends enjoy hearing about what I think.
			4. Certain friends come to me when they have problems or need advice.
			5. I rely on my friends for emotional support.
			6. If I felt that one or more of my friends were upset with me, I'd just keep it to myself.
			7. I feel that I'm on the fringe in my circle of friends.
			8. There is a friend I could go to if I were just feeling down, without feeling funny about it later.
			9. My friends and I are very open about what we think about things.
			10. My friends are sensitive to my personal needs.
			11. My friends come to me for emotional support.
			12. My friends are good at helping me solve problems.
			13. I have a deep sharing relationship with a number of friends.
			14. My friends get good ideas about how to do things or make

			things from me.
			15. When I confide in friends, it makes me feel uncomfortable.
			16. My friends seek me out for companionship.
			17. I think that my friends feel good that I'm good at helping them solve problems.
			18. I don't have a relationship with a friend that is as intimate as other people's relationships with friends.
			19. I've recently gotten a good idea about how to do something from a friend.
			20. I wish my friends were much different.

Perceived Social Support from Family

Directions: The statements which follow refer to feelings and experiences which occur to most people at one time or another in their relationships with family. For each statement there are three possible answers: Yes, No, Don't know. Please check the answer you choose for each item.

Yes	No	Don't know	
			1. My family gives me the moral support I need.
			2. I get good ideas about how to do things or make things from my family.
			3. Most other people are closer to their family than I am.
			4. When I confide in the members of my family who are closest to me, I get the idea that it makes them uncomfortable.
			5. My family enjoys hearing about what I think.
			6. Members of my family share many of my interests.
			7. Certain members of my family come to me when they have problems or need advice.

			8. I rely on my family for emotional support.
			9. There is a member of my family I could go to if I were just feeling down, without feeling funny about it later.
			10. My family and I are very open about what we think about things.
			11. My family is sensitive to my personal needs.
			12. Members of my family come to me for emotional support.
			13. Members of my family are good at helping me solve problems.
			14. I have a deep sharing relationship with a number of members of my family.
			15. Members of my family get good ideas about how to do things or make things from me.
			16. When I confide in members of my family, it makes me uncomfortable.
			17. Members of my family seek me out for companionship.
			18. I think that my family feels that I'm good at helping them solve problems.
			19. I don't have a relationship with a member of my family that is as close as other people's relationships with family members.
			20. I wish my family were much different.

Appendix G

Brief COPE

These items deal with ways coping with the stress in your life. Obviously, different people deal with things in different ways and some problems may be more stressful than others, but I'm interested in how you've tried to with stress and difficulties in your current daily life in general. Each item says something about a particular way of coping. I want to know to what extent you do what the item says (how much or how frequently). Don't answer on the basis of whether it seems to be working or not or what you may have done in the past—just whether or not you're doing it in your current daily life. Use these response choices below. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can.

1 = I don't do this at all
2 = I do this a little bit
3 = I do this a medium amount
4 = I do this a lot

1. I turn to work or other activities to take my mind off things.
2. I concentrate my efforts on doing something about the situation I'm in.
3. I say to myself, "this isn't real."
4. I use alcohol or other drugs to make myself feel better.
5. I get emotional support from others.
6. I give up trying to deal with it.
7. I take action to try to make the situation better.
8. I refuse to believe that it has happened.
9. I say things to let my unpleasant feelings escape.
10. I get help and advice from other people.
11. I use alcohol or other drugs to help me get through it.

12. I try to see it in a different light, to make it seem more positive.

13. I criticize myself.

14. I try to come up with a strategy about what to do.

15. I get comfort and understanding from someone.

16. I give up the attempt to cope.

17. I look for something good in what is happening.

18. I make jokes about it.

19. I do something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.

20. I accept the reality of what has happened or is happening.

21. I express my negative feelings.

22. I try to find comfort in my religion or spiritual beliefs.

23. I try to get advice or help from other people about what to do.

24. I learn to live with it.

25. I think hard about what steps to take.

26. I blame myself for things that have happened.

27. I pray or meditate.

28. I make fun of the situation.

Appendix H

Resources Measure

Resources Checklist for Students

Below is a list of resources at Indiana University of Pennsylvania (IUP). If you have heard of the resource, place a check in the "heard of" box next to the resource. If you have used the resource at least one time, check the "used resource" box.

Resources	Heard of	Used
1. Career Development Center		
2. Center for Applied Psychology		
3. Center for Health and Well-Being		
4. Center for Student Success		
5. The Counseling Center		
6. Supplemental Instruction (SI)		
7. The Writing Center		
8. Advising and Testing Center		
9. Indi Kids/Indiana County Child Daycare (in Davis Hall)		
10. Other (Please describe: _____)		

Resources Checklist for all Participants

Below is a list of resources in the Indiana community. If you have heard of the resource, place a check in the "heard of" box next to the resource. If you have used the resource at least one time, check the "used resource" box.

Resources	Heard of	Used

1. Indi Kids/Indiana County Child Day Care (at IUP, Davis Hall)		
2. Indi Kids/Indiana County Child Day Care (at Ben Franklin Elementary, Horace Mann Elementary/Trinity Church, or at Homer Center Elementary School)		
3. Center for Applied Psychology		
4. Indiana Free Walk-in Clinic		
5. Adagio Health		
6. Women, Infants, and Children of Indiana County (WIC)		
7. Child Care Information Services of Indiana County (CCIS)		
8. Birthright of Indiana County		
9. Center for Family Life (CFL)		
10. PA Department of Health		
11. Indiana County Head Start		
12. Indiana Regional Medical Center (IRMC), Prenatal, Infant, and Child Education		
13. IRMC, Pediatric and Adolescent Dental Clinic		
14. PA Children's Health Insurance Program (CHIP)		
15. Housing Authority of Indiana County (HAIC)		
16. Indiana County Goodwill		
17. Indiana County Community Action Program (ICCAP)		
18. Indiana County Transit Authority (IndiGo Public Transportation)		
19. Med-Van Transport		
20. Indiana County Guidance Center		
21. Family Behavioral Resources		

22. Other (Please describe: _____)		

Questions

When you are having trouble meeting all of your daily obligations, where do you turn for help?

What resources (on- or off-campus) have been the most help for you?

Are there any resources that you have not had access to in the past, but you think would be very helpful for you? If so, what are they?

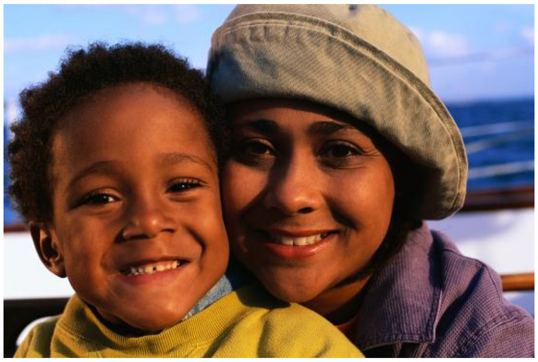
Check any of the following that you would consider using if available to you on campus:

Resource	
Daycare center	
Student parent support group	
Changing/feeding stations	
Playground	
Parent training in child behavior management	
Parent-child play groups	
Family housing	
Other (Please describe: _____)	

Appendix I

Recruitment Flyer

Are you a Student Parent?



We want YOUR input!

We are conducting a study of undergraduate students who are also parents. We are trying to better understand who student parents are and how they cope with the responsibilities of parenting and college. This is your opportunity to have your voice heard!

Participation in this study will take about an hour to complete and *FREE* childcare will be provided while you participate. You will also have the opportunity to enter a drawing to win one of two ***$50.00 visa gift cards***.

This study is approved by the Indiana University of Pennsylvania Internal Review Board and is being conducted as a part of a Doctoral Dissertation in the Department of Psychology, faculty advisor Dr. Laura Knight.

For further information, contact the primary researcher, Amy Swingle, through the e-mail address or phone number listed below.

Parenting Study e-mail: IUPParentingStudy@gmail.com Phone: 724-357-6227	Parenting Study e-mail: IUPParentingStudy@gmail.com Phone: 724-357-6227	Parenting Study e-mail: IUPParentingStudy@gmail.com Phone: 724-357-6227	Parenting Study e-mail: IUPParentingStudy@gmail.com Phone: 724-357-6227	Parenting Study e-mail: IUPParentingStudy@gmail.com Phone: 724-357-6227	Parenting Study e-mail: IUPParentingStudy@gmail.com Phone: 724-357-6227	Parenting Study e-mail: IUPParentingStudy@gmail.com Phone: 724-357-6227	Parenting Study e-mail: IUPParentingStudy@gmail.com Phone: 724-357-6227	Parenting Study e-mail: IUPParentingStudy@gmail.com Phone: 724-357-6227	Parenting Study e-mail: IUPParentingStudy@gmail.com Phone: 724-357-6227

Appendix J

Recruitment E-mail Announcement

Subject Line: Are you a student parent?

Are you a student parent? We want YOUR input!

We are conducting a study of undergraduate students who are also parents. We are trying to better understand who student parents are and how they cope with the responsibilities of parenting and college. This is your opportunity to share your experiences and opinion about being a student parent at IUP!

Participation in this study will take about an hour to complete and *FREE* childcare will be provided while you participate. You will also have the opportunity to enter a drawing to win one of two ***$50.00 visa gift cards***.

This study is approved by the Indiana University of Pennsylvania Internal Review Board and is being conducted as a part of a Doctoral Dissertation in the Department of Psychology, faculty advisor Dr. Laura Knight.

For further information, contact the primary researcher, Amy Swingle, by e-mail (IUPParentingStudy@gmail.com) or by phone (724-357-6227).

Thank you for your time!

Appendix K

Informed Consent Form

You are invited to participate in the Stress and Coping research study. The following information is provided in order to help you to make an informed decision whether or not to participate. If you have any questions please do not hesitate to ask the primary researcher or the individual administering the test. You are eligible to participate because you are a student at Indiana University of Pennsylvania (IUP).

The purpose of this study is to examine the characteristics of IUP students who are parents in comparison to IUP students who are not parents. Participation in this study will take about one hour of your time. This study will involve answering demographic questions (such as your age and gender) and questions about your mood and general well-being, stress and coping strategies, and resources you use to help you meet your obligations from various areas of your life.

Your participation in this study is voluntary. You are free to decide not to participate in this study or to withdraw at any time without adversely affecting your relationship with the investigators, IUP, or other community organizations. Your decision will not result in any loss of benefits to which you are otherwise entitled. If you choose to participate, you may withdraw at any time by notifying the primary researcher or by informing the person administering the test. Upon your request to withdraw, all information pertaining to you will be destroyed. If you choose to participate, all information will be held in strict confidence and will have no bearing on your academic standing or services you may receive from the University. Your response will be considered only in combination with those from other participants. The information obtained in the study may be published in scientific journals or presented at scientific meetings, but your identity will be kept strictly confidential.

If you are an IUP student and are taking Psychology 101, participation or non-participation will not impact the evaluation of your performance in this class. In return for your participation, you will receive one hour of research participation credit that will count toward the Research Requirement in PSYC-101.

There are no known risks to participation in this study; however, the information will be used to help to describe different populations of parents and of undergraduate students to better understand their needs.

If you are willing to participate in this study, please type your name and date below and check the "agree" box. Paper copies of this informed consent are available for you from the person administering the survey. Please take a paper copy of this informed consent form with you when you leave. If you choose not to participate, please check the "disagree" box below.

Project Director:
Amy Swingle, MA
Doctoral Candidate
Psychology Department

Faculty Advisor:
Laura Knight, PhD
Assistant Professor
Psychology Department

Uhler Hall 220
Indiana, PA 15705
Phone: 724-357-6227

Uhler Hall 205
Indiana, PA 15705
Phone: 724-357-4526

This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: 724-357-7730).

VOLUNTARY CONSENT FORM:

I have read and understand the information on the form and I consent to volunteer to be a subject in this study. I understand that my responses are completely confidential and that I have the right to withdraw at any time. I have received an unsigned copy of this informed Consent Form to keep in my possession.

Name _____
Date _____

Agree ___ Disagree ___

I certify that I have explained to the above individual the nature and purpose, the potential benefits, and possible risks associated with participating in this research study, have answered any questions that have been raised, and have witnessed the above signature.

Witness _____
Date _____

Appendix L

Debriefing Form

Thank you for participating in this study designed to better understand the similarities and differences between college students who are parents (student parents) and college students who are not parents. Research has suggested that different resources should be provided to best help these populations to be successful. Your information will help researchers to understand who student parents are and how they are both similar to and different from students who are not parents and parents who are not students.

While there are no known risks to participation in this study, it is possible that you may want to speak with someone further about the issues involved in this study. If this is the case, the following resources are available to you. If you choose to contact any of the agencies, you are responsible for initiating appointments, and for paying any fees associated with services. The IUP Student Counseling Center is free to students.

IUP Student Counseling Center: 724- 357-2621 Suites on Maple East, G31
901 Maple Street

Indiana County Guidance Center: 724- 465-5576 699 Philadelphia St.

The research project is sponsored by the Indiana University of Pennsylvania Department of Psychology and has been approved by the Internal Review Board at IUP. The primary investigator is Amy Swingle, M.A. and the faculty sponsor is Laura Knight, Ph.D. If you would like to receive the results of this research when it is completed, please give your name and contact information to the Research Assistant, or call the Psychology Department at 724-357-2426.

Appendix M

Resource Sheets

Resource sheet for IUP students

The following resources are available to assist students with their experience here at IUP.

Career Development Center
Pratt Hall, 302
724-357-2235
http://www.iup.edu/career/default.aspx
"The center functions as a comprehensive career planning and placement service within the university in order to meet the needs of IUP students and alumni by helping students develop self-awareness, enabling students to clarify and evaluate their career and educational goals, providing students with direction and information on the job market and educational opportunities, helping students develop a methodology to reach their educational goals, and assisting students in the career decision making process."

Center for Applied Psychology
Uhler Hall, 210
724-357-6228
http://www.iup.edu/psychology/centers/default.aspx
"The CAP currently houses four clinics (Intake Clinic, Stress and Habit Disorders Clinic, Family and Child Treatment Clinic, and Adult Assessment Clinic) offering psychotherapeutic and evaluation services, staffed by IUP faculty members who are Pennsylvania licensed psychologists and by doctoral students in advanced training."

Center for Health and Well-Being
Suites on Maple East, Ground Floor
724-357-3550
http://www.iup.edu/healthcenter
"The Health Service is the campus health-care provider for IUP students. Part of the Center for Health and Well-Being, it contains offices providing health services for students (formerly the Pechan Health Center), counseling services, health education services, and alcohol, tobacco, and other drug services."

Center for Student Success
Pratt Hall, 107
724-357-3936
http://www.iup.edu/success/default.aspx
"Pratt Hall is designated as the Center for Student Success, and our students and staff are learning to depend on the resources within Pratt to enhance their IUP learning experience." Within the Center for Student Success is the Veterans' Student Liaison, Peer Mentor Program, PATH: Project Assignment Technology Help, and College Prep 101 for Latinos.

The Counseling Center
Suites on Maple East, G – 31
724-357-2621
http://www.iup.edu/counselingcenter
"Faculty members and staff at the center work collaboratively with students to foster the self-knowledge and skills necessary to succeed personally, academically, and professionally. The Counseling Center allows students the opportunity to integrate their personal goals with their academic goals."

Supplemental Instruction (SI)
Department of Developmental Studies
Pratt Hall, 202
724-357-2729
http://www.iup.edu/page.aspx?id=40085
"SI provides small-group study/review sessions for sections of courses with difficult content or high levels of failure and withdrawal rates."

The Writing Center
Eicher Hall, 218
724-357-3029
http://www.iup.edu/writingcenter
"The Writing Center provides a variety of free services and resources to help students develop their writing skills as well as a quiet, comfortable environment to get creative juices flowing."

Advising and Testing Center
Pratt Hall, 216
724-357-4067
http://www.iup.edu/advisingtesting
"The mission of the Advising and Testing Center is to provide both service and access to the greater university for the students whom it serves. In doing so, it supports the advising services and equal access mission of Indiana University of Pennsylvania. The faculty and staff of the center are guided by the philosophy of developmental advising as they provide students with advising assistance that both answers questions and encourages the development of personal resources for decision making."

Resource sheet for parents

The following resources are available to assist parents in the Indiana community.

Indiana County Child Day Care (Indi Kids)
570 S. 11th Street
724-349-1821
http://www.indikids.org/
"Indiana County Child Day Care Program, Inc. (Indi Kids) was established in November 1970 to provide quality child care. We strive to provide the highest quality early care and education services to our families. … Our goal is to team with parents, working for the fullest development of their children socially, physically, cognitively, and emotionally. Our learning environments stress interaction and exploration with adults and other children. Teacher-supported play is an essential component. Teachers are responsive to the developmental needs of each child, fostering self-confidence, independence, curiosity, and problem-solving skills."

Center for Applied Psychology
1020 Oakland Ave (210 Uhler Hall)
724-357-6228
http://www.iup.edu/psychology/centers/default.aspx
"The CAP currently houses four clinics (Intake Clinic, Stress and Habit Disorders Clinic, Family and Child Treatment Clinic, and Adult Assessment Clinic) offering psychotherapeutic and evaluation services, staffed by IUP faculty members who are Pennsylvania licensed psychologists and by doctoral students in advanced training."

Indiana Free Walk-in Clinic
7 S 5th St
724-463-1410

Adagio Health
1099 Oak Street
724-349-2022/1-800-215-7494
http://www.adagiohealth.org/
"Adagio Health promotes the reproductive health and overall well-being of women of all ages, their families, and their communities by providing healthcare services and educational programs that are responsive and creative."

Women, Infants, and Children of Indiana County (WIC)
Adagio Health Indiana
1099 Oak Street
1-800-WIC-WINS/1-800-942-9467
http://www.adagiohealth.org/pages/nutrition/wic.htm
"WIC is a nutrition education program that provides foods that promote good health for pregnant, breastfeeding, and postpartum women, as well as infants and children."

Child Care Information Services of Indiana County (CCIS)
155 N. Clymer Avenue
724-349-8830/1-800-327-3070
http://www.childcareinfoservice.org/
"Child Care Information Services (CCIS) is funded by the Department of Public Welfare (DPW) through a contract with the Indiana County Commissioners. CCIS is responsible for: Providing resource and referral services on child day care to all families, determining whether or not families are eligible for state subsidized child day care, [and] recruiting child day care providers and increasing the number of facilities which will accept enrollment of state subsidized children."

Birthright of Indiana County
271 Philadelphia St.
724-463-9118
http://www.birthright.org/htmpages/index.htm
"Birthright provides caring, non-judgmental support to girls and women who are distressed by an unplanned pregnancy. Using its own resources and those of the community, Birthright offers positive and loving alternatives. Birthright presents many services and refers for many more. We provide friendship and emotional support, free pregnancy testing, and maternity and baby clothes. We also give information and referrals to help clients meet legal, medical, financial, and housing needs."

Center for Family Life (CFL)
125 N. 5th Street
724-463-8595
http://www.centerforfamilylife.net/
"The Center for Family Life, Inc. encourages and advances healthy family relationships by providing child abuse prevention education, information, and support for Indiana County residents."

PA Department of Health
75 N. 2nd Street
724-357-2995 (During business hours) or 412-565-5101 (Emergency/After Hours)
http://www.health.state.pa.us/
"We strive to promote healthy lifestyles, prevent injury and disease, [and] assure the safe delivery of quality health care for all commonwealth citizens."

Indiana County Head Start
528 Gompers Avenue
724-349-6200/1-800-592-9036
http://www.indianacountyheadstart.org/
"Head Start of Indiana County, Pennsylvania, operates five preschool centers throughout the County, along with a Full-Day/Full-Year Program and an Early Head Start Program. … All Head Start Programs are federally funded and provide services to income eligible children and their families in the areas of Child Development, Parent Involvement, Social Services, Health, Mental Health and Nutrition, as well as support to parents of children with disabilities."

Indiana Regional Medical Center (IRMC), Prenatal, Infant, and Child Education
Family Programs
835 Hospital Road
724.357.7496
http://www.indianarmc.org/svc-family-programs.html
"Indiana Regional Medical Center (IRMC) provides prenatal and family programs that have been recognized on both the state and national levels for excellence. … The IRMC Family Programs Staff works with other IRMC departments, community groups and organizations to empower families through a wellness model of education to make informed decisions regarding their health and care."

IRMC, Pediatric and Adolescent Dental Clinic
590 Indian Springs Road
724-357-6960
http://www.indianarmc.org/svc-dental.html
"The dental clinic provides general dentistry services to children, ages 3 -18 who are participants in the Medical Assistance Program."

PA Children's Health Insurance Program (CHIP)
1-800-986-KIDS
http://www.chipcoverspakids.com/
"CHIP is short for the Children's Health Insurance Program - Pennsylvania's program to provide health insurance to all uninsured children and teens who are not eligible for or enrolled in Medical Assistance."

Housing Authority of Indiana County (HAIC)
104 Philadelphia Street
724-463-4730
http://www.housingauthority-indianacounty.com/
"The Housing Authority, also known as HAIC, has been proudly serving Indiana County for more than 40 years by offering quality, affordable housing in a safe, secure environment for area seniors, disabled, physically or mentally challenged individuals, and low-to-moderate income families."

Indiana Goodwill
1470 Oakland Ave
724-463-6212
http://www.goodwill.org/
Goodwill is an organization that provides second-hand household items and clothing for sale at a reduced rate and provides jobs to individuals that have barriers to employment.

Indiana County Community Action Program (ICCAP)
827 Water Street
724-465-2657
http://www.iccap.net/

"ICCAP provides programs aimed at helping low-income families and individuals attain self sufficiency. Our programs provide new ways to solve household problems, manage emergencies, learn new living skills, and foster community involvement. We also examine and promote methods by which organizations and institutions can deal with the problems of rural and disadvantaged people."

Indiana County Transit Authority (IndiGo Public Transportation)
724-465-2140/1-800-442-6928
http://www.indigobus.com/
"[IndiGo exists] to positively affect the quality of life for all citizens of Indiana County by providing safe, affordable and comfortable transportation services with dignity."

Med-Van Transport
298 Philadelphia St
724-349-3700
http://www.med-van.com/
"Med-Van Transport is a Non-Emergency Transport Service with specially equipped vehicles. We are able to transport patients by wheelchair or stretcher. Services are available anytime day or night and we will accommodate your individual needs."

Indiana County Guidance Center
793 Old Route Hwy 119
724-465-5576/1-888-686-1991
http://www.thecgc.com/
"The mission of the Community Guidance is to provide high quality comprehensive Mental Health and Mental Retardation Services, empowering individuals and families residing in the community to improve the quality of their lives."

Family Behavioral Resources
1380 Route 286 Hwy East
724-463-3600
http://www.familybehavioralresources.com/
"Since its start in 1999, Family Behavioral Resources (FBR) has continually enhanced its delivery of quality mental health services … and now provides a variety of mental health services throughout twelve counties in Southwestern Pennsylvania. FBR continues to work with counties' MH/MR centers and managed care systems to identify other mental health needs, either new programs or expansion of existing programs, that will help people in those counties."

Indiana County Department of Health and Human Services
300 Indian Springs Road, Suite 203
724-463-8200
http://humanservices-countyofindiana.org/
"The Department administers human service funds for the county, provides and directs activities focused toward improving the coordination and collaboration of planning, managing, and delivering human services, assesses residents' human services needs in order to provide services, and provides volunteer, information, early care and education, and transportation services."