TRANSITIONS DURING UNIVERSITY LIFE: ACADEMIC PERSISTENCE FOR MARRIED AND SINGLE STUDENTS

by

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ABSTRACT

Transitions During University Life: Academic Persistence for Married and Single Students

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This study was designed to look at the many factors that influence the transition to college life and academic persistence within the family life cycle framework using the ABCD-XYZ model of resource management. The sample included 348 students with declared majors within the College of Family Life. The dependent measure was student persistence in college. Independent variables included academic and institutional factors, gender and marital factors, family academic traditions, student motivation and commitment, self-esteem, stress factors, and social support. The results of this study indicate that the persistence variables chosen were better able to predict those who remain in school rather than those who drop out. The strongest predictor for students remaining in school in this study was students’ USU grade point average. Students with higher GPAs were more likely to remain in school. The other predictor was the students’ satisfaction with USU studies and professors, indicating that students leaving school in this sample did so for reasons other than for academic dissatisfaction. Correlations among predictor variables lend support to the theoretical base used in this research, indicating a systemic approach to understanding persistence in college and the many transitions encountered would be useful.

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CHAPTER 1
STATEMENT OF THE PROBLEM

Entering college is generally considered a positive experience, but usually requires students to face many new challenges and adjustments (Gerdes & Mallinckrodt, 1994). The transition to university life involves complex changes in emotional, social, and academic areas of functioning. Young adults entering college are navigating basic tasks of the life cycle which include developing autonomy and independence from their families and establishing other relationships. These demands, along with academic pressures, can place students at risk for elevated levels of stress and disharmony with previous roles, self-concepts, and expectations (Carter & McGoldrick, 1989). While some students are able to make the transition to college life productively, others choose alternate routes and drop out. The purpose of this study is to explore factors that impact the transition to college and the decision to remain in school or to drop out for both married and single students.

Student persistence in higher education is an ongoing concern for policy makers, administrators, faculty, and mental health professionals (Astin, 1986; Gerdes & Mallinckrodt, 1994). National studies indicate that 45% or more of all entering students will leave college before they get their degree, with 75% of these students dropping out within the first two years (Porter, 1990).

The transition to college is impacted by many factors other than academic performance or ability. Gerdes and Mallinckrodt (1994) suggested that emotional and social adjustment are other dimensions that may be equally important to managing the transitions of college life. They reported that emotional adjustment difficulties may be manifest in ways such as anxiety, low self-esteem, or depression. Depression and anxiety both predisposed students to dropping out of college. Social adjustment included areas such as managing greater social freedoms, forming new social support networks, and becoming integrated into the fabric of college social life (Gerdes & Mallinckrodt, 1994).

McCubbin and McCubbin (1988) found that strong social support during times of stress or transition was linked to more positive coping responses and adaptation. They indicated that individuals with inadequate or conflicted support systems may tire or give up
more readily. Bean (1990) discussed the importance of students having the support of friends, family, or significant others who believe in the importance of academic work and encourage them to stay in school. Shared beliefs, traditions, and interactions with others help organize roles, shape expectations, and create a form of identity which becomes a way of defining daily activities (Wolin & Bennett, 1984). Family academic traditions may provide some of the needed support to confront challenges or changes required of students in their transition to university life. Parents' income levels and parents' education levels have been found to be associated with school persistence. According to Lenning (1982), lower income students drop out more often when their parents' education levels are low. This is not the case when income is low but parental education levels are high.

While there are many reasons for leaving college, the decision to marry while still in college is an important factor, especially for women. Astin (1986) indicated that 59% of women and 26% of men give this reason for leaving college. The transition to marriage brings many new changes and demands that require additional adjustments on the part of the student. While marriage could bring increased support from the partner, it also adds greater responsibility in many areas such as multiple roles, finances, and independence.

Being married at college entrance increases women's chances of dropping out by 11%, but it has the reverse effect on men. When men are married at college entrance, their chances of dropping out decrease by 8% (Astin, 1986). Gender differences and the decision to remain in school through the marital transition need to be further explored to better understand and meet the needs of students who are married or are contemplating marriage.

Although theory and research indicate that social support is a buffer from experiencing higher levels of stress, it has not been clarified in what ways social support systems are perceived to change for the student while in school, especially for students also going through the transition of marriage. Given the stressful nature of transitions and the many adjustments that students face when navigating the complex demands of academic life, it is important to understand more fully the nature of transitional stressors and the decision to remain in school.
Successful management of the risks and the presence of protective factors during transitions can be conceptually understood using the ABCD-XYZ Resource Management Model (Dollahite, 1991). This model evolved beginning with the ABCX model by Hill (1958) when studying family crises in military situations, which includes: (A) stressor event, (B) resources, (C) family definition of the event, and (X) the crisis. This was enlarged by McCubbin and Patterson (1983) who added other adjustment and adaptation elements including: consideration of coping strategies, endeavors to develop new resources, changes in family definitions of the event, accumulation of stressors, and the results of coping attempts. Boss (1987) further developed the model by adding contextual factors in the environment with emphasis on the family values, beliefs, and perceptions.

Dollahite (1991) described the total model in four phases. These include the following: Phase I—the stimulus stage, which includes factor “A,” the stressor event or situation; Phase II—the perceiving stage, which includes the factors “B,” the coping resources; “C,” the definition of the situation; “D,” the demands of the situation; and “X,” the perceived crisis or stress; Phase III—the deciding stage includes factor “Y,” the cognitive coping and management of the situation; and Phase IV—the acting stage, which includes factor “Z,” the adaptive behavior with regards to demand responses and resource changes.

Feedback from adaptive behavior helps modify perceptions of the situation, demands, and coping resources. These, in turn, influence the manner in which future stressors or transitions are perceived. The ABCD-XYZ framework can be used to explore the complexity involved in student adjustment to college and the decision to remain in school. It acknowledges the many systemic contexts that influence student perceptions, resources, and coping responses including personal, family, and cultural definitions of the transitions. The importance of having access to needed resources during adjustment to stress and change is clearly manifest.

For the purpose of this study, A is the stressor of entering college, while A1 is the stressor of marriage combined with college entry. Factors B,C, D, and X include the
independent variables of family of origin and nuclear family descriptors, self-esteem, social adjustment and social support, and perceptions of academic and nonacademic aspects of college life. Factor Y, cognitive coping and management of the situation, was not specifically studied, but factor Z is assessed in this study by students' persistence or non-persistence in school.

Summary

There are many diverse variables affecting student outcomes while in college. While these variables have been associated with academic persistence, most persistence data is of a descriptive nature and not guided by theory. This study will look at academic persistence and transition to college within the family life-cycle framework using the ABCD-XYZ model of resource management (Dollahite, 1991).

It is expected that students with well-developed social support systems, less reported stress, and more positive past academic experiences (factors B, C, D, and X) will be less likely to drop out of school than students with less well-developed social support and fewer positive past academic experience. It is expected that students adjusting to marital transitions while attending college will report greater stress and role strain when reported family support is either minor or of an ambivalent nature. It is also expected that married female students will be more prone to dropping out than single students regardless of reported stress, role strain, and past academic experience. Students who have parents with stronger academic traditions and backgrounds are expected to persist more than students whose parents have not had much college experience.

Research Questions

Given the previous multifaceted considerations and difficulties that are often experienced when individuals go through transitions juxtaposed with the importance of getting an education in today's world, the focus of this study is expressed by five questions about factors predicting college persistence.

1. Are the family of origin factors of parental income, family academic traditions,
number of siblings, satisfaction with contact with parents related to student academic persistence?

2. Are the nuclear family factors of being married while in school, number of children, or gender of spouse enrolled in college related to student academic persistence?

3. Is satisfaction with social support related to student academic persistence?

4. Is perceived stress level related to student academic persistence?

5. Which of these variables along with academic factors best predict persistence in college overall?
CHAPTER II
REVIEW OF LITERATURE

The purpose of this study is to better understand the many factors that influence the transition to university life and students' academic persistence or nonpersistence. This review will first look at persistence literature beginning with definitions of persistence, and then to previously reported factors in persistence and nonpersistence. These factors will include academic and institutional factors, cultural trends and family academic traditions, student motivation and commitment, self-esteem, and stress factors. The next section will review transition literature with sections focusing on multiple stressors, social support, marital and gender factors, and family academic traditions. The review will then proceed to the conceptual framework of the ABCD-XYZ model (Dollahite, 1991) with sections on Phases I, II, III, and IV of the model. These will include summaries at the end of each section with the final summary followed by the research questions.

Persistence

In efforts to minimize college dropout rates, it is important to know more about the reasons students leave school. There are many factors related to a student's level of college persistence or conversely, dropping out. Some of these are students' achievements and academic accomplishments in high school; ethnicity; gender; marital status; cost; location; students' curricular and extracurricular activities; involvement with peers, faculty, and other organizations; on- or off-campus housing; family demographic characteristics; academic majors; size of university or college; and employment status (Bank, Biddle, & Slavings, 1992). These are only some of the many influences that can impact a college student's enrollment and are often studied as correlates of college student persistence.

National studies have indicated that dropout rates are highest during the first year and before the beginning of the second year of college (Astin, 1986; Porter, 1990; Tinto, 1987). Porter's (1990) study through the National Institute of Independent Colleges and Universities looked at degree completion over a 6-year period and found that it was important to consider time frames for completion when looking at persistence data. When
just looking at traditional path students who enrolled full-time directly after high school, the completion rate was 46%. When all students in the sample were included, the completion rate dropped to 41%. If the definition of persistence was “not dropping out,” the persistence rate increased to 55%, indicating if the time period were extended, more students would complete their degrees (Porter, 1990).

Definitions of Persistence

Problems are found in the literature from not having clear definitions of what constitutes a persister and a dropout. Some studies define dropouts by academic dismissal while others define it by voluntary withdrawal (Tinto, 1982). Persistence is defined either by degree completion versus no degree completion or by dropping out versus not dropping out. Porter (1990) identified four categories of persistence as being: (1) completers—students who finished their bachelor’s degree; (2)persisters—students who remained continuously enrolled; (3)stop outs—students who left school but later returned; and (4) dropouts—students who left and did not return. Astin (1986) maintains from his research that “dropouts” need to be distinguished from “stop outs.” He found that dropouts tended to leave school because of dissatisfaction and lack of integration into the academic environment. They either never returned or returned after an extended absence of years or decades. Stop outs’ reasons for leaving school were seen as temporary due to illness, accident, travel, or disciplinary suspension. Some students choose to leave school temporarily to serve religious missions. Stop outs usually returned to school within a few months or a year or two at most. For the purpose of this study, “persistence” is defined according to Porter’s (1990) second category; namely, a persister is a student who remains continuously enrolled in school.

In summary, definitions of persistence vary from study to study, but are most useful when they consider basic elements of time, purposes for remaining in school or for leaving school, and intentions to return. Longitudinal reviews of student enrollment and status provide more useful information regarding academic persistence or nonpersistence than studies examining a single point in time. This study included a longitudinal design, and in a limited way, examined students’ reasons for leaving school and intentions of returning.
Academic Factors

Students’ high school academic factors related to remaining in college include higher aptitude scores, GPAs, class rank, more college prep courses, including English, math, foreign language and physical science classes (Porter, 1990). Early preparation while in high school seems to indicate a higher interest and motivation to get a college education (Astin, 1986; Lenning, 1982; Porter, 1990).

Institutional Factors

Institutional variables that are related to higher persistence include universities that were higher in prestige, more selective, privately funded, 4-year versus 2-year, on-campus housing, high quality and quantity of student services, and a strong religious affiliation (Porter, 1990). Academic factors are generally considered powerful predictors of academic interest and persistence; however, Tinto (1982) found that college students who drop out usually have satisfactory grades, but lower than those of persisters. Based on the above information, it appears that students who are more academically successful are more likely to persist throughout their college experiences until graduation.

Cultural Trends and Family Academic Traditions

Asian and Jewish students drop out less than Anglo Americans, while Hispanic American students drop out more than Anglo Americans (Lenning, 1982). Lenning (1982) reported that although students from lower socioeconomic status (SES) levels leave school more often than higher SES students, persistence is correlated more with the educational level of the parents than with their SES. While these same trends have been identified in other research (Astin, 1986; Porter, 1990), little is reported on what factors may influence these types of results. Astin (1986) indicated that college students who drop out have lower personal and familial aspirations for completing school and acquiring doctoral or professional degrees, and less commitment to the college itself.

Lower personal and familial aspirations for completing school could be an indication of academic traditions that families may pass on to their children. It would be important to understand how academic traditions might influence a student’s decision to attend and
remain in school. It appears logical that the importance of parents’ education and their perceptions towards the education of their children would influence academic messages given throughout their children’s academic experiences. This study examines the impact of family members’ academic traditions, especially parents’, as this could be a source of support while adjusting to the pressure to remain, or perform well, in school.

Motivation and Commitment

It is important in the study of persistence to take into account students’ motivations for attending college. Researchers often fail to interview enrolling students on their academic goals or to gather exit information when they leave (Bean, 1990). Student aspiration data can be a powerful component in the persistence equation because many nonpersisters do not have college graduation as a goal to begin with. Bean (1990) reported that students who leave voluntarily may see their departure as positive and successful because certain personal goals were met.

In the literature, student academic aspirations powerfully separate planned non-persistence from less purposive nonpersistence (Bean, 1983; Spady, 1971; Terenzini & Pascarella, 1978; Tinto, 1982). Student perceptions and the meaning they apply to their education need to be understood more fully in order to develop strategies for remaining in school. Astin (1986) pointed out that despite the argument that leaving may have been beneficial for some students for personal development, faculty and administrators can be left feeling that their time, efforts, and institutional resources were wasted. Student talent and opportunities may go undeveloped creating setbacks or impediments for future career development. Enhancing motivation could be an important area to help students deepen their commitment to school and to their education. Students could possibly be motivated to choose opportunities for growth and development more wisely. Institutional supports could be established to help students overcome obstacles and increase motivation.

Self-Esteem and Stress Factors

Lenning (1982) reported that student personality and value variables often present inconsistent findings due to their complex nature. Positive self-concept and self-confidence were generally related to greater persistence. Moderate anxiety about success can help
students persist, but when anxiety becomes too great, it has a negative impact on persistence. Emotional or personal problems associated with psychological distress are usually manifest in low self-esteem, somatic distress, depression, and anxiety with depression ranked as the primary psychiatric disorder observed among college students (Cowan, 1991; Gerdes & Mallinckrodt, 1994).

The transition to college is often filled with situations where many students question life directions, self-worth, and relationships (Cowan, 1991). Conflicted self-concepts and relationships with others have a negative impact on coping skills and adjustment (Hobfoll, 1986). Personal perceptions of abilities and the availability of needed support may alter the student’s ability to adjust (Gerdes & Mallincrodt, 1994). If perceived demands become too great, dropping out may be the result. This study examined how academic factors, student motivation and commitment, gender and marital trends, family academic traditions, and self-esteem and emotional factors along with multiple stressors contribute to the decision to remain in school or to leave.

Transitions

Change occurs across the life span for both families and individuals. These transitions often mark developmental stages where there are major shifts in life tasks, expectations, roles, and responsibilities which create demands for self-growth and development (Cowan, 1991; Fisher & Hood, 1987; Zirkel, 1992). This process of change typically involves a sense of disequilibrium, conflict, and crisis for the individuals or families involved (Mattessich & Hill, 1987). Stress is often greatest at these transitional points between stages, which can lead to symptomatic behavior or dysfunction (Carter & McGoldrick, 1989; Minuchin, 1974).

This study looks at the normative transitions of young adults while going to college, which include developing independence and building intimate relationships with others. Normative transitions are changes that are expected and experienced by most individuals or families during certain life-cycle stages within their social contexts such as going to college or getting married (Cowan, 1991). Nonnormative transitions are unexpected, unusual, or unpredictable. Erikson (1959) maintained that transitions create a period of crisis and
conflict necessary for growth and development. When transitions are successfully navigated, new levels of organization in the person or in the relationship are created. When they are not resolved, dysfunction or regression can occur (Erikson, 1959).

The family life-cycle stage encompassing young adulthood is considered to be a cornerstone where major life decisions and directions are chosen (Carter & McGoldrick, 1989; Haley, 1997). Adjustments at this time are not only required of the young person, but of all generations within the family system. Renegotiation of family roles and structure may be needed, often creating added stress and conflicting demands on parents, grandparents, and siblings as well as the student (Carter & McGoldrick, 1989; Fulmer, Medalie, & Lord, 1982; Preto, 1989). Successful adaptation and transition at this crucial time period of development can have a major impact on future opportunities. Students in transition are often restructuring, questioning, redefining, and reorganizing their sense of self. Old roles and basic assumptions about how things work may be questioned. This process is usually associated with heightened anxiety, tension, or perhaps depression (Cowan, 1991).

A longitudinal study done by Fisher and Hood (1987) examined the stress level experienced by students during the transition to university life. Their study indicates that all students, regardless of whether they are living at home or not, experience a rise in psychological disturbances such as depression, absent-mindedness, and obsessional symptoms. They suggest that adverse effects are often a result of students experiencing major life transitions in a new environment with new expectations. This may create a sense of helplessness and being out of control. The increased demands of university life can overload the students' resource systems and create a sense of temporary inadequacy until adjustments are made. Included among these demands are the stresses of losing old friends and established support systems juxtaposed with the stress of creating new friends in a new environment. In this study, adaptation scores were negatively correlated with the degree of stress symptoms reported. Better adjusted students were more able to make new social contacts, while homesick students reported more personal strain in the university environment and spent more time dwelling on past experiences.

Fisher and Hood (1987) indicated that students weigh the benefits and threats of their new environment against their home environment. When benefits and positive events at
college are perceived to be manageable and not overly demanding, student stress levels are more manageable as well. Fisher and Hood (1987) indicated that there were premorbid factors present before students enter college that may predispose students to higher levels of stress (e.g., poor relationships with parents). Although alluded to, these were not explored in Fisher and Hood’s (1987) study. Active support systems and family patterns of managing new situations may help students see transitions as an exciting challenge with difficult demands rather than a threat. These possibilities need to be explored along with students’ successful management styles of life transitions.

Zirkel’s (1992) research involved two studies looking at anxiety levels towards the life task of developing independence. This was explored in the areas of: (1) independence in academic performance and (2) independence in family and sorority relationships. Samples were selected from specialized collegiate groups (i.e., honor students and sorority students) who may handle anxiety differently than students without outstanding academic experience or structured social groups. Independence was defined as the ability for the student to manage everyday activities and goals in a competent and capable manner established by their social situation and experience. Zirkel (1992) reported similar anxiety levels for subjects in both the honors group and the sorority group, but that anxiety was directed differently. Sorority students were more invested in creating independence and security within their social framework with anxiety levels directed at accomplishing these goals. The academic performance group directed more anxiety at accomplishing independence and support through academic goals. Anxiety towards important goals for each student impacted how they organized and experienced college life. Zirkel’s (1992) work supported the concept that life tasks during transition are social constructions. Life tasks are given meaning and definition through the cultural and social subgroups that support them. Values and goals are reinforced through the activities and goals they endorse.

These studies reinforce the importance of students’ goals and perceptions while going through the transitions of college. The studies indicate that students seek out other students with similar interests and values to help provide the needed social support to
accomplish their goals. While these studies looked at anxiety levels during transitions while in school, they did not examine student persistence in the academic setting.

A study done by Cantor, Norem, Niedenthal, Langston and Brower (1987) explored self-concept ideals and cognitive strategies for dealing with life tasks during the transitions at college. This study addressed the idea that students have high expectations and lofty goals for their experience at college, but often meet with disappointment and frustration when trying to adjust to the demands and challenges of university life. Cantor et al. (1987) indicated that two effective coping strategies for handling discrepancies between real and ideal performance on life tasks were evident. Some students used a defensive pessimistic approach expecting poor outcomes despite positive past experiences. This was used to manage anxiety, to motivate, and to guide them into action to address current demands. Other students used a protective optimistic approach expecting good outcomes despite previous outcomes. While optimistic students experienced more debilitating effects when confronted with negative aspects of their performance, both approaches kept students motivated and engaged. This study focused on the process students go through in translating rewarding life task goals into action. While it provides some interesting results, the sample was taken from honor students who have more successful academic experiences and may handle things differently than nonhonor students. The study did not correlate findings with persistence in college.

In summary, these studies support the many normative developmental changes that students face as they make the transition to college life. The importance of successfully navigating these changes may be an important component of college persistence. Feelings of being capable and competent in handling these changes may enhance a student’s ability to handle the extra stress that comes with change and the added responsibilities of academic demands.

**Multiple Stressors**

Collegiate populations are exposed to many simultaneous stressors that place demands on personal performance and resources. Given the many transitions that college students face, they are especially vulnerable to the occurrence and the effects of stressful processes (Towbes & Cohen, 1996). Stress is defined as any factor which taxes, strains, or
undermines the optimal functioning of an individual. While some degree of stress is considered a normal part of life, effective management of stress is required to avoid detrimental effects such as lowered self-esteem, depression, or illness (Ainslie, Shafer, & Reynolds, 1996). This is important for students in the education process to maintain healthy and productive functioning.

Strong social support, especially from family members, during times of stress or change has been linked to more positive coping responses and adaptation while negative or conflicted aspects of family relationships have an adverse effect (Dollahite, 1991; McCubbin & McCubbin, 1988; Staats, 1983; Valentiner, Holahan, & Moos, 1994). Resilient family systems develop both instrumental and expressive resources when challenged by normative transitions and stressors (McCubbin & McCubbin, 1988). These families are characterized by greater strengths in areas of family traditions, bonding, flexibility, overall satisfaction, and well-being, which aid in the adjustment and adaptation process (McCubbin & McCubbin, 1988).

Trust, respect, and the ability to maintain emotionally calm and stable relationships characterize strong families as they accept difficulties and work together to solve problems. They have a clear sense of purpose, are able to look ahead, feel valued for their efforts, and have a sense of purpose and control over how they manage the challenges in their lives. They are more tolerant of hardships, and actively address problems and concerns while trying new things or facing difficulties (McCubbin & McCubbin, 1988). These qualities provide individuals with needed personal and social resources that make adaptation and adjustment to new situations more positive and productive.

Pearlin (1989) referred to the daily chronic strains of various social roles. The difficulties experienced within academic pursuits, employment, and marriage are important because of the importance of the roles themselves. Roles define and structure daily activities, experiences, relationships, and general well-being. Role strain or stress can come in the form of role overload. This occurs when the demands of the role exceed the stamina and energy of the individual’s capacities. Students may experience this when confronted with writing difficult papers, completing projects, or taking major exams.
Interpersonal conflicts between complementary roles is the most common role strain (Pearlin, 1989) and includes difficulties or problems experienced between students and professors, husbands and wives, parents and children, and so forth. A student may experience conflict with parents, spouse, or professors as they meet school expectations and the expectations of others. Another form of role strain is interrole conflict that occurs when the demands of one role are incompatible with the demands of another (Pearlin, 1989).

Lastly, role restructuring is a major strain for most college students. This refers to inevitable changes that roles go through as people develop and mature. There may be accompanying feelings of loss, betrayal, or disappointment as relationship rules and expectations change. This process is often not easy, especially when roles are well-established and entrenched into daily behaviors (Pearlin, 1989).

Vlisides, Eddy, and Mozie (1994) discussed the variety of emotional, physical, behavioral, and cognitive stress symptoms that collegiate populations experience. Emotional stress symptoms include agitation, depression, anxiety, irritability, guilt, and grief. Physical symptoms include headaches, fatigue, nausea, twitches, or muscle tremors. Behavioral symptoms include withdrawal, changes in communication skills, suspiciousness, insomnia, changes in activity, increased alcohol or other substance use, pacing, loss or increase in appetite, and emotional outbursts. Cognitive stress symptoms include memory problems, confusion, poor attention, increased or decreased alertness, poor concentration, blaming others for errors, poor abstract thinking or problem solving, and nightmares. It is important to recognize these symptoms so that counterbalancing efforts can be taken by the student, faculty, or others within the student’s resource network.

Greenberg (1981) discussed the relationship found between stress levels and illness in college students. He pointed out the importance of interventions that help the student to adjust to new life situations so as to experience fewer stressors. Perceptions can be altered so situations are not viewed in a threatening manner. Relaxation techniques and physical exercise are important resources that can be implemented to reduce the impact of stress and change (Greenberg, 1981).

Ainslie’s and others’ (1996) research indicated that student stress levels were affected by both external and internal factors. Students who perceived high levels of
support and indicated a high degree of control over their own lives reported the lowest levels of stress. High levels of achievement motivation were also correlated with higher levels of stress. Towbes and Cohen (1996) reported that first-year undergraduate students experienced greater levels of chronic stress when compared to more advanced undergraduates. This was indicated by greater difficulties with such things as homesickness, learning to maintain relationships with family and friends from a distance, and trying to choose a major. Their work indicates that chronic stress is a significant predictor of college student distress. Chronic stress in this study was defined as stressors or issues that persisted longer than a period of one month across several life domains. Life domains included academics, peer and family relations, romantic relationships, lifestyle, and physical appearance and health.

Zitzow (1992) suggested that stress is an everyday condition that offers the potential for growth or for damage due to effective or ineffective coping resources, respectively. Ways to adjust and cope with stress are learned from the family and other social networks. Effective coping can affect three major functions for students: (1) to modify the stressful situation, (2) to modify the meaning of the situation to reduce perceived threats to well-being, or (3) to manage symptoms of stress. Adaptive behaviors vary by the nature of the problem, and by the nature of the social role in which the problem arises. Both effective coping and positive social support serve to regulate the effects of stressful conditions and are used to help reduce, avoid, or eliminate stress (Pearlin, Leiberman, Menaghan, & Mullin, 1981).

The research of Gerdes and Mallinckrodt (1994) explored emotional, social, and academic adjustment in a 6-year longitudinal study of academic persistence. They pointed out the importance of social integration into the social system of college, development of a social network, and the ability to handle unfamiliar social freedoms. Their work indicates that students who persist in school report more informal contact with faculty, more satisfaction with their social life and extracurricular activities, and better management of homesickness.

Multiple stressors and coping strategies could serve as major determinants of academic success. Understanding the many stresses that students face and their
management strategies for coping with these stresses could help professionals better meet the needs of growing student populations whether on an academic or therapeutic level. It would be expected that extreme levels of stress and/or inadequate coping strategies would negatively impact a student’s ability to persist in college unless mediated by some type of relief.

In conclusion, results reported in previous literature support the idea that student persistence is impacted at least as much by personal abilities to effectively cope with the transitions and social integration into campus life as with the more researched area of academic qualities. In this study, student stressors, coping strategies, and social support networks were correlated with academic persistence. It was our expectation that students who expressed greater satisfaction with social support networks would express lower levels of frustration and stress and would be more likely to remain in school.

Social Support

The complex changes involved in the transition to college life are difficult for many students and necessitate major changes in students’ lives. These, along with greater demands for academic self-direction and interpersonal resources, often leave students in a state of disequilibrium. Some of the changes during transitions include reorganization of social networks outside of the family and adjustments in relationships between family members (Cowan, 1991; Falicov, 1988). McCubbin, McCubbin, Thompson, Han, and Allen (1997) listed social support as one of the 10 resiliency factors in family functioning both as a protective and recovery factor. Students draw from existing support systems and search out other forms of support that can offer additional meaning, direction, and strategies for coping. Positive social support is exchanged in interpersonal relationships and can be defined in six basic forms: money, status, love, information, goods, and services. When any of these resources fall below a certain level, overall functioning may be impaired (Dollahite, 1991; Foa, 1993).

Antrobus, Dobbelnaer, and Salzinger (1988) studied college social networks and how these affect academic success. They found that students spend a major portion of first semester social behavior directed towards finding students similar to themselves in areas of academic performance, gender, ethnicity, and racial group. The size of the social network
was not significantly related to academic success. The search for an appropriate peer group was more of a concern than actually receiving support from the new group. Students who were unable to find an adequate peer group were at higher risk for leaving school. Students early in their academic experience were more impacted by previous and ongoing relationships with their family system and old friends than by the new ones they were developing at the beginning of school. Academic traditions of important others may provide a bridge of support, especially during the transition to college while students are forming other supportive networks.

Weir and Okun (1989) explored the relationships between social support, positive events, and college satisfaction. Their results indicated that greater college satisfaction was associated with more frequent contact with faculty, family, friends, and school organizations/clubs. This in turn was associated with a greater perception of positive college events, and a higher level of student identification with their college. Students perceived professors to be the best providers of social support, especially with regard to integration into college life.

Goplerud (1980) found similar results when he reported that students who were new to the area and had no established social supports indicated greater stress levels than students with already established social networks. He indicated that relationships with faculty were especially important to help students gauge their performance and aptitudes, and to set priorities. Insufficient feedback was reported to create intense distress during transitional periods for students. Cutrona and Russell (1987) indicated from their research that social support in the form of positive feedback reassuring personal worth was the most important prevention against depression following a stressful event. Such feedback enhances self-efficacy beliefs and has been linked to more effective coping behavior and decreased negative affect during stressful transitions. Combined research provides evidence that positive social support from important others may alter students’ perceptions of themselves and their situations in a positive manner adding strength of purpose and more positive self-evaluations.

Social support helps in the process of personal adjustment in various ways such as moderating negative health and illness during stress. Cutrona and Russell (1987) reported
different types of support that help individuals adjust better to different situations. Guidance and a reliable alliance were most helpful during transitions that required the acquisition of new roles and skills. Reassurance of worth was most helpful when individuals were expending high levels of effort to accomplish a valued goal that did not provide adequate reward or recognition.

Cutrona (1986) explored specific interpersonal behaviors that conveyed and were perceived as being supportive. She found that individuals who received more helping behaviors following a stressful event were less depressed. Most frequently used helping behaviors were listening and expressing concern or caring (emotional support) and offers of advice and personal perspectives on the problems (informational support). Tangible support (doing something about the problem) was least offered. Support was most effective when provided immediately after stressful events. People who experienced positive feedback about themselves were less likely to experience reduced self-esteem and they also experienced fewer incidences of depression following a negative or difficult event.

Results of Astin’s (1986) national longitudinal study indicated that to promote persistence, students needed to be involved enough with campus life to identify with their university. Tinto (1987) maintains from his research that when all things are held equal, integration into the fabric of college life is the main determinant for remaining in school. Integration involves a variety of social and academic connections that make the student feel like a part of the collegiate community.

In summary, social support is considered to be a major part of helping students to persist in their educational endeavors. If students are satisfied with the amount and quality of the support they receive, it can enhance their abilities to positively cope and feel competent with changes and responsibilities they are facing in the academic world. This study will examine some of the forms of social support experienced by the student and their satisfaction with support as it relates to retention. It is expected that the greater the satisfaction with their social support, the more likely students are to remain in school, despite multiple stressors and changes.

Gender and Marital Factors

Lenning (1982) provided an in-depth list of different variables generally considered
helpful for identifying subgroups that may be at greater risk for dropping out. He reported that men are more likely to drop out from large nonselective universities, to give academic reasons for leaving, and to leave during the freshman year. Women drop out more when male-to-female ratios are high and are more likely to give nonacademic reasons for leaving. Ostrow, Paul, Dark, and Behrman (1986) reported that the life stress most predictive of maladjustment for women in college was conflicted interpersonal relationships. While their study indicated that satisfaction with social support was the most important predictor for adjustment for both men and women, the social support of marriage while in college was not explored.

Personal adjustment and social integration are described more often for single students than for married students, although research indicates that marriage is an important variable in persistence and nonpersistence (Astin, 1986; Lenning 1982). Astin (1986) indicated that marriage, before or while in college, tends to decrease women’s chances of persisting, but will increase men’s chances of persisting until graduation. He also stated that marriage was the most common reason given by women for leaving school. Astin (1986) reported that marital effects on career development for women can be substantially reduced if women can remain in school. He reported that financial support from spouses substantially increases the student’s chances of remaining in school, but spousal support was not explored by gender or by any other types of support. Differences in effects of marriage for men and women need to be further examined.

The added transition of marriage represents not only the adjustment of becoming a couple, but represents the bringing together of two family systems with different patterns of interaction, expectations, and ways of supporting each other. Support systems are altered and need realignment with both families and friends (Carter & McGoldrick, 1989). Researchers suggest that women may be more vulnerable to stress from relational conflict and responsibilities, multiple role strain, and incongruent sex-role expectations than men and that these differences may account for the effect marriage has on women’s persistence in school (Carter & McGoldrick, 1989; Hobfoll, 1986; Pugliesi, 1989). Nonetheless, although marriage brings additional life changes for both partners in roles, status, and time
pressures, it may also provide additional resources for support (Staats, 1983). The question is why this support seems to have different effects on persistence by gender.

Support has been well documented as a moderator between stressful events or transitions and the level of stress perceived (Dollahite, 1991). When a spouse provides major financial support for the student partner to attend school, dropout rates are dramatically reduced and conversely, when a spouse provides only minor or sporadic support, dropout rates increase (Astin, 1986). Valentiner et al. (1994) proposed that "personal and social resources relate to subsequent mental health both directly and indirectly through adaptive coping responses" (p. 1094). Cowan (1991) suggested an investigation of an individual’s consistency in adaptation across time would be useful to help us understand gender differences in adjustment to different life events.

Many studies have indicated that college women report significantly higher levels of academic and life stress than college men (Abouserie, 1994; Gadzella, 1994; Ostrow et al., 1986; Wohlgemuth & Betz, 1991). Mallinckrodt and Leong (1992) investigated gender differences in stress and support while in school. Their research supports previous findings that women report more life change stress, more anxiety, and more depression than men. Women report lower quality leisure time, inadequate financial resources, less communication and less cohesive support (sharing of responsibilities by each family member, acceptance of individual interests outside the home, and day-to-day functioning of the household). According to Mallinckrodt and Leong (1992), married women report significantly less family support than married men. This is attributed to the emphasis placed on women’s roles to provide for the needs of others. Women in this situation may find themselves giving more than they receive, especially in the area of emotional support. While it was noted that there is a greater awareness of the need for equal division of household labor and childcare among couples, the major charge for those responsibilities still remains with women (Mallinckrodt & Leong, 1992).

Mallinckrodt and Leong (1992) suggested that women experience greater role strain and less support for the multiple roles and responsibilities they carry while trying to juggle the demands of university and family life. Social support in the form of quality of living conditions, child care, and financial resources were the three most significant buffering
factors for women in school. When these areas were positive, despite the presence of other 
stressors, adjustment was positive. When these factors were negative, the impact of other 
stressors was compounded. While many studies indicate that women report greater levels 
of stress and life change than men, these results need to be studied further in the context of 
overall college adjustment and persistence.

Affleck, Morgan, and Hayes (1989) investigated the influence of college student 
gender role attitudes on life expectations. Their research indicates that after graduation, both 
men and women expect to be employed and also involved in family responsibilities. 
However, despite these expectations, both male and female students indicated that traditional 
household tasks and childcare were the major responsibility of the female. Students who 
had employed mothers demonstrated more awareness of the need for shared responsibility, 
but generally most students demonstrated a lack of awareness for the difficulty and 
complexity in combining both work and family responsibilities. Affleck et al. (1989) 
suggested that role strain and stress will continue to place women at a disadvantage in areas 
outside the home whether it is in education or employment as long as women carry the 
major responsibility for household labor and childcare.

Novack and Novack (1996) reported that many women who have nontraditional goals 
for a professional career still have very traditional attitudes in regards to maternal 
obligations and need for deference to their husbands’ job opportunities. Men in the study 
indicated that, if possible, they preferred women to stay home with infants. They had a 
tendency to place their wife’s career and education in a secondary position to their own and 
to be less comfortable with the idea of having a lower salary than their wife’s.

Marital and gender factors described previously indicate that traditional roles or 
incongruent role demands have the potential to create internal and external conflict for both 
partners while trying to manage work and family goals. This may help explain the higher 
dropout rate for women, and greater persistence for men. In this study, we expected that 
mARRed women would have a greater dropout rate than married men or single students. 
Nonetheless, we suspected that women’s role strains might be mediated by nuclear and 
family of origin academic traditions and values.
In summary, roles and social expectations change when students marry and they change differentially for men and women. Students usually find that even within their own family, support systems and resources change with marriage (Pugliesi, 1989). This study explored factors related to the decision to remain or drop out of school for both married and single students.

Family Academic Traditions

Academic traditions and values of the student’s family are important factors to consider in academic persistence. Patterned family interactions that convey support and expectations for continued enrollment in school can help define the student’s roles and responsibilities while organizing daily life activities (Wolin & Bennett, 1984). Family academic traditions provide students with personal expectations and a certain identity while going through the educational experience. Research indicates that students have a greater chance of persisting when their families or spouses support their decision to attend school (Bean, 1990; Cooke, Sims, & Peyrefitte, 1995).

Holmbeck and Wandrei (1993) found that students were better adjusted during the transition to college when they were able to maintain close ties with their parents. Families that had prepared themselves emotionally for the separation process during college helped students to adjust better away from home. Positive family relations and high levels of adaptability to change and greater coping resources were correlated with healthier adjustment across all outcomes for both men and women students. Valentiner et al. (1994) found that parental support was correlated with psychological adjustment and adaptive coping strategies in students. Strong academic traditions may provide all family members with perceptions that provide purpose and coping skills while going through the transition of a family member leaving home and going to school. Parents who have experienced and successfully navigated academic transitions have established academic pathways and expectations that may be expected of their children. This could be perceived as either a source of support and/or pressure.

Family traditions become a way of educating and regulating the behavior of its members. Traditions enhance individual and family identity providing stability and anchors when going through developmental changes and facing different challenges (McCubbin &
McCubbin, 1988; Wolin & Bennett, 1984). When students feel that they have the support of important others in their lives and have the resources necessary to confront challenges or changes required of them (Dollahite, 1991), they are better able to feel in control, approach a situation, seek information, and to rely on logical analysis or active problem solving (Valentiner et al., 1994).

The research of Bank et al. (1992) indicates that there are two types of expectancies most predictive of college persistence. The first was social expectancies, including relationships with new friends, family, spouse, and old friends. The second was positional expectancies including expected access to a particular course of study, achievement of career goals, personal help from faculty, and good achievement. Results indicated that persistence was most likely when students felt that these two areas could be best met in the academic environment rather than another setting. These expectations were found to be shaped by normative assumptions of the student and supportive others. The study emphasizes the importance of norms in students’ decisions to persist in college and that student perceptions of what they feel they should do are generally higher motivation than what they want to do.

Family academic traditions and student perceptions of those traditions and values can be a powerful component of the decision to persist in college or even to attend college. Student perceptions about the importance of getting an education and support from others for those perceptions can help the student make important decisions regarding their academic pursuits. It is expected that students with parents and/or spouses who have family academic traditions valuing education will persist more than students who do not have this type of support.

Conceptual Framework

Dollahite’s (1991) ABCD-XYZ model is particularly useful when examining the factors leading to adjusting to academic transitions and persistence. This model was developed with three basic assumptions: (1) resource management during transitions or high stress situations needs to be viewed within a systemic framework incorporating the many contexts that establish meaning, purpose, and direction to given circumstances; (2) nondisruptive adaptation to stress can be facilitated by effective management of cognitive,
affective, and behavioral resources; and (3) balance needs to be maintained between change and stability. Contexts in the first assumption include culture, economics, politics, religion, health, values or beliefs, and developmental stages of the life cycle. While there are many others, what is important is that contexts influence all elements of the coping and adaptation process. This includes family or individual perceptions of events and levels of vulnerability to those events or stressors (Dollahite, 1991).

This framework provides a way of conceptualizing the complex systemic nature of the many factors influencing college attendance and persistence. The transition to college creates many changes for students as well as additional stressors from new responsibilities. The model acknowledges different contexts that influence student goals and perceptions about college life and adjustment, including family and cultural definitions of the situation. It also addresses the importance of having actual and perceived access to needed resources to make adjustment to stress and change nondisruptive. Dollahite (1991) divides the model into four phases, which include: Phase I—stimulus, Phase II—perceiving, Phase III—deciding, and Phase IV—acting.

**Phase I—Stimulus**

Phase I includes the “A” factor, which is the stressor situation or event that forces some response. A stressor influences and is influenced by the available resources and the demands of the situation. College adjustment provides many challenges that create stress for the student. Some general challenges include academic performance, managing new independence, and creating and maintaining social networks (Gerdes & Mallinckrodt, 1994). Marriage while in school is another event which creates additional transitions and adaptations including managing new roles, and creating a nuclear family system with its own rules and expectations.

**Phase II—The “B, C, D, “ and “X” Factors**

Phase II is the perceiving stage and includes the “B, C, D,” and “X” factors. The “B” factor is the coping resources available to meet the stressful situation’s demands. This includes all resources whether of a material, financial, interpersonal, emotional, or social nature. These resources need to be available in the right place, form, and time for the
individual who needs them. Social support is considered a major coping resource that can buffer the perception and level of stress experienced (Dollahite, 1991; McCubbin & McCubbin, 1988; H. I. McCubbin & Patterson, 1983). Student social support networks often go through major changes with the transition to school. Students’ perceptions of their financial, emotional, social, and peer group support networks were explored in this study.

The “C” factor is how the situation is defined by the individual or the family system. This definition is shaped by the demands of the situation and the perceived resources available. It is shaped by individual, familial, and cultural values, beliefs, and traditions. Accurate perception of resources is important to access and utilize what is available. It is important to have a sense of structure, predictability, and logic that resources will be available when needed and that the rigors and difficulties the student is facing are worth the time and effort (Dollahite, 1991). The decision to go to college has different meaning to different students and their families. Goals and values about academic performance and persistence would seem to be strongly impacted by parental academic traditions that offer meaning and support. This may be especially so for students who marry while in college.

The “D” factor is the perceived or actual demands of the situation which can be internal (goals, needs, wants, etc.) or external (class assignments, finances, rules, etc.). Individual and family expectations for college attendance and performance could create many demands for students to manage. These could become a source of motivation as well as stress for the student. Various academic assignments or expectations put added strain on the student’s ability to manage time, energy, and other resources productively. This study looks at these in the form of academic study skills, frustrations, and stress motivation.

The “X” factor is the stress or crisis. Crises are acute and severe changes that disrupt or immobilize functioning, while stress is more a sense of pressure or disequilibrium when facing the demands of the situation. Physiological symptoms related to stress include such things as increased muscle tension, elevated heart rate, and greater emotional sensations of fear, anger, or anxiety. There is an interactive relationship between stressors, available resources, and demands of the situation (Dollahite, 1991). These are all impacted by the perceptions of the student involved. When students feel able to manage the demands placed on them from the many changes in their lives, they are better able to deal
with the stress. When demands conflict or become too great, a crisis in personal management could occur. This is measured in this study by the accumulation of stressors and major changes that the student reports experiencing while in school.

**Phase III--The “Y” Factor**

Phase III is the “Y” factor where cognitive coping and management take place. This is when decisions are made on how to handle the situation. This would be when a student makes decisions whether to maintain emotional distance, seek additional social support, or evaluate the circumstances in context. This important time may include such cognitive processes as goal and value clarification, searching out additional information, and looking at alternatives (Dollahite, 1991). The coping process helps the student decide how to manage the situation. Resource management skills can be enhanced when students have a clear sense of purpose, know their values, and set goals including organized activities that help avoid crises or unnecessary stresses or problems. These are skills that originate in the family and culture through patterns developed over time when managing stress or change.

**Phase IV--the “Z” Factor**

Phase IV is the last stage of the model and includes factor “Z.” This is where decisions made previously are acted upon. Adaptive responses manipulate resources and/or demands to create the perceived needed change or growth to better meet the needs of the situation. At this stage, students will either take action to facilitate additional resources (persist) or perhaps decide that such resources are not available to support their decisions about school (dropout). Feedback occurs from the action taken by the student which will influence future perceptions of demands and resources (Dollahite, 1991).

In summary, the model provides a way of looking at factors in resource management when an individual or family moves through the transitions and changes of life (Dollahite, 1991). College creates many stressful situations for students. How these situations are perceived and managed by students’ relates to resource management. Previous experience in successful or unsuccessful management of transitions or stress may impact the student’s perceptions of being able to succeed. Support from family, spouse, friends, and faculty may
provide the additional resources needed to make the transition to college life and to persist in meeting academic goals.

General Summary

This review of the literature indicates that there are many factors that can influence persistence in higher education systems. Academic factors are the most easily monitored and measured. Past educational experience seem to create a strong framework for continued success in school. Additional impetus for academic motivation comes from family traditions and attitudes towards education. Additionally, male and female students experience different stresses and role strains when making the transitions to independent living in the school setting, and especially when they are married. Perceived support to manage stressors appears to be an important mediator for staying in school.

The present study examined student persistence data for both married and single students in the context of academic, family, social support, self-esteem, and stress factors. This research furthers our understanding of the needs of students making the transition to academic life. It also provides insight into possible ways to assist students to make these transitions.

Research Questions

Given the previous multifaceted considerations and difficulties that are often experienced when individuals go through transitions juxtaposed with the importance of getting an education in today's world, the focus of this study is expressed by five questions about factors predicting college persistence.

1. Are the family of origin factors of parental income, family academic traditions, number of siblings, satisfaction with contact with parents related to student academic persistence?

2. Are the nuclear family factors of being married while in school, number of children, or gender of spouse enrolled in college related to student academic persistence?

3. Is satisfaction with social support related to student academic persistence?

4. Is perceived stress level related to student academic persistence?
5. Which of these variables along with academic factors best predict persistence in college overall?
CHAPTER III
METHODS

Design

This study is a longitudinal, group design drawn from a convenience sample in the College of Family Life at Utah State University. Survey data had previously been gathered as a part of an ongoing survey of student academic experience, perceptions, and demographics. Previously gathered student data was matched with current enrollment information from university records.

Sample

The sample (N = 348) for this study was taken from two cohorts (Cohort 1996, n = 106, and Cohort 1997, n = 242) of students who had filled out the Family Life Survey (Austin, Pfister, Newland, Kruse, & Wyse, 1994) while enrolled in the Orientation to the College of Family Life class (FL 110) offered each winter quarter (before the University changed to a semester system) at Utah State University. FL 110 is a required class for all majors within the College of Family Life (CFL), although other students may enroll in this class. Only students with a declared major within the College of Family Life class were included in this study. Both cohorts included students who were new freshmen, continuing students from previous quarters, off-campus transfers, on-campus transfers, or students reentering the CFL after being absent for one or more quarters (not including summer quarters).

Of the 348 students, there were 53 freshmen (15%), 62 sophomores (18%), 124 juniors (36%), and 109 seniors (31%). Marital status of the students included 264 (76%) single students and 84 (24%) married students. There were 318 (91%) females and 30 (9%) males. Complete student demographics and persistence status for CFL are presented in Tables 1-3. These include ethnic composition, gender, marital status, rank, and department. Tables 2 and 3 present parental education, income, and persistence information.
Table 1
Demographics and Persistence Status Combined CFL Cohorts (N = 348)

<table>
<thead>
<tr>
<th>Persistence status</th>
<th>n(%)</th>
<th>Persisted</th>
<th>Dropped</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnic Composition</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Anglo American</td>
<td>334 (96.0)</td>
<td>284 (85%)</td>
<td>50 (15.0%)</td>
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<tr>
<td>Native American</td>
<td>2 (0.6)</td>
<td>2 (100.0%)</td>
<td>0</td>
</tr>
<tr>
<td>Hispanic American</td>
<td>1 (0.3)</td>
<td>1 (100.0%)</td>
<td>0</td>
</tr>
<tr>
<td>International</td>
<td>11 (3.1)</td>
<td>11 (100.0%)</td>
<td>0</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>318 (91.0)</td>
<td>272 (86.0%)</td>
<td>46 (14.0%)</td>
</tr>
<tr>
<td>Male</td>
<td>30 (9.0)</td>
<td>26 (87.0%)</td>
<td>4 (13.0%)</td>
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<tr>
<td>Marital status</td>
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</tr>
<tr>
<td>Married</td>
<td>84 (24.0)</td>
<td>73 (87.0%)</td>
<td>11 (13.0%)</td>
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<tr>
<td>Single</td>
<td>264 (76.0)</td>
<td>225 (85.0%)</td>
<td>39 (15.0%)</td>
</tr>
<tr>
<td>Rank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>53 (15.0)</td>
<td>43 (81.0%)</td>
<td>10 (19.0%)</td>
</tr>
<tr>
<td>Sophomore</td>
<td>62 (18.0)</td>
<td>46 (74.0%)</td>
<td>16 (26.0%)</td>
</tr>
<tr>
<td>Junior</td>
<td>124 (36.0)</td>
<td>104 (84.0%)</td>
<td>20 (16.0%)</td>
</tr>
<tr>
<td>Senior</td>
<td>109 (31.0)</td>
<td>104 (95.0%)</td>
<td>4 (5.0%)</td>
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<tr>
<td>Department</td>
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<td></td>
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<tr>
<td>Family and Human Development (FHD)</td>
<td>187 (54.0)</td>
<td>168 (90.0%)</td>
<td>19 (10.0%)</td>
</tr>
<tr>
<td>Early Childhood Education (ECE)</td>
<td>22 (6.0)</td>
<td>16 (73.0%)</td>
<td>6 (27.0%)</td>
</tr>
<tr>
<td>Family Consumer Science (FCS)</td>
<td>3 (1.0)</td>
<td>3 (100.0%)</td>
<td>0</td>
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<tr>
<td>Consumer Science Education (CSE)</td>
<td>7 (2.0)</td>
<td>5 (71.0%)</td>
<td>2 (29.0%)</td>
</tr>
<tr>
<td>Interior Design (ID)</td>
<td>49 (14.0)</td>
<td>42 (86.0%)</td>
<td>7 (14.0%)</td>
</tr>
<tr>
<td>Apparel Merchandising (AM)</td>
<td>25 (7.0)</td>
<td>23 (92.0%)</td>
<td>2 (8.0%)</td>
</tr>
<tr>
<td>Nutrition and Food Sciences (NFS)</td>
<td>55 (16.0)</td>
<td>41 (75.0%)</td>
<td>14 (25.0%)</td>
</tr>
</tbody>
</table>
Table 2

Parents’ Education and Student Persistence Status

<table>
<thead>
<tr>
<th>Highest grade completed</th>
<th>Mother</th>
<th>Father</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dropped</td>
<td>Dropped</td>
</tr>
<tr>
<td>0 No answer</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>1 1-7th grade</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2 8-9th grade</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>3 10-11th grade</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>4 High school graduate</td>
<td>77</td>
<td>43</td>
</tr>
<tr>
<td>5 Vocational or some college</td>
<td>107</td>
<td>82</td>
</tr>
<tr>
<td>6 College graduate</td>
<td>142</td>
<td>113</td>
</tr>
<tr>
<td>7 Graduate/professional school</td>
<td>16</td>
<td>98</td>
</tr>
</tbody>
</table>

Note. Mother’s education level (M = 5.23, SD = .97); Father’s education level (M = 5.65, SD = 1.27)

Table 3

Annual Family of Origin Income and Student Persistence Status

<table>
<thead>
<tr>
<th>Income level</th>
<th>Total</th>
<th>Persisted</th>
<th>Dropped</th>
</tr>
</thead>
<tbody>
<tr>
<td>No answer</td>
<td>15 (4%)</td>
<td>12 (80%)</td>
<td>3 (20%)</td>
</tr>
<tr>
<td>1) Less than $5,000</td>
<td>12 (3%)</td>
<td>10 (83%)</td>
<td>2 (17%)</td>
</tr>
<tr>
<td>2) $5,000 to $10,000</td>
<td>22 (6%)</td>
<td>22 (100%)</td>
<td>0</td>
</tr>
<tr>
<td>3) $10,000 to $15,000</td>
<td>31 (9%)</td>
<td>27 (87%)</td>
<td>4 (13%)</td>
</tr>
<tr>
<td>4) $15,000 to $30,000</td>
<td>55 (16%)</td>
<td>43 (78%)</td>
<td>12 (22%)</td>
</tr>
<tr>
<td>5) $30,000 to $45,000</td>
<td>79 (23%)</td>
<td>69 (87%)</td>
<td>10 (13%)</td>
</tr>
<tr>
<td>6) $45,000 to $60,000</td>
<td>73 (21%)</td>
<td>63 (85%)</td>
<td>10 (15%)</td>
</tr>
<tr>
<td>7) Above $60,000</td>
<td>61 (18%)</td>
<td>52 (85%)</td>
<td>9 (15%)</td>
</tr>
</tbody>
</table>
Average maternal education for this sample was level 5 (vocational or some college, \( M = 5.23, \ SD = .97 \)) and average paternal education was level 5 (vocational or some college, \( M = 5.65, \ SD = 1.27 \)). However, the most frequent education level reported in this sample was level 6 (college graduate) for both mothers and fathers (\( n = 142 \) and \( n = 113 \), respectively). The average family of origin income was level 4 ($15,000 to $30,000, \( M = 4.89, \ SD = 1.63 \)) with the most frequent income levels were in level 5 ($30,000 to $45,000, \( n = 79 \)). Income and education levels were derived from Hollingshead’s (1975) “Four Factor Index of Social Status.”

Procedures

Students enrolled as majors in the College of Family Life at Utah State University are required to take the orientation class FL 110 that was offered each winter quarter. Students were requested to complete the FLS as part of the course work during the class period. Total number of valid surveys completed was 512, with 348 from students enrolled in CFL. Only students who had declared a major in CFL were included in this study. The survey included basic demographical information and questions regarding personal goals and experience while attending Utah State University. Information from the survey for both winter classes from the years 1996 and 1997 was entered into a database. Enrollment status was gathered from Winter 1998 academic records to determine whether students were still persisting in school, had graduated, or had dropped out. CFL information was matched with student academic data from the quarter they completed the FLS. These data included GPA, rank, total credits earned, department, and major. This research was approved by the Institutional Review Board and exempted from further review as can be noted in the Human Subjects Letter in Appendix A.

Measures

Family Life Survey

The Family Life Survey (FLS; Austin et al., 1994) is a 186-item survey designed to study student demographics, academic study skills, satisfaction with academic experiences, stress management, and satisfaction with social networks while attending Utah State
University. This instrument was developed to measure those elements considered key in the retention literature for student persistence. It included the following domains: academic study skills, satisfaction with academic experiences, and stress motivation (Utah State University Student Services, 1995), satisfaction with social networks (Crnic & Greenberg, 1981), and self-esteem (Rosenberg, 1965). A complete copy of the FLS can be found in Appendix B. Pilot study data were collected from a sample ($N = 363$) of 1995 students who were enrolled in the College of Family Life.

Pilot FLS data were analyzed for internal consistency using factor analysis with varimax rotation. Two factors from the pilot data were used in the present study from academic study skills including: (1) study attentiveness, which had 12 items, alpha = .63; and (2) academic attitude, which had two items, alpha = .62. The subscale satisfaction with academic experiences had five items. These all loaded onto one factor, alpha = .74.

Two factors from stress motivation were used including: (1) drive to accomplish, which had four items, alpha = .75; and (2) time constraints, which had four items, alpha = .70. Satisfaction with social networks yielded one factor, alpha = .74, which included seven items.

**Rosenberg Self-Esteem Scale**

All 10 items of the Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965) were incorporated into the FLS. The RSE is a widely used and accepted measure of global self-esteem. It provides an overall picture of both positive and negative perceptions of the self. Previous research has indicated Cronbach coefficient alphas ranging from a low of .72 to a high of .88 (Gray-Little, Williams, & Hancock, 1997).

Factor analysis from the pilot study data for the self-esteem subscale yielded two factors with five items each. The first factor, self-acceptance, had an alpha of .81, and the second factor, self-worth, had an alpha of .81.

**Social Readjustment Rating Scale**

The Social Readjustment Rating Scale (SRRS; Holmes & Rahe, 1967) consists of 43 life-event items that require some sort of change in individual adjustment. According to scoring protocol, each life event is given a particular numerical weight (life change units),
which are then added together to measure the amount of change a person has experienced during a particular time frame. Life crisis is defined by this model as any clustering of life-change units adding up to 350 points or more. This model is particularly useful when examining the accumulation of life stresses within a certain unit of time and has yielded strong correlations with the onset of psychological, physical, and behavioral disturbances in functioning (Holmes & Masuda, 1974).

High consensus between discrete groups has been reported concerning the relative order and magnitude of the means of the SRRS life-event items. Coefficients of correlation were above .90 with the original study done by Holmes and Rahe (1967). Recalculation of data using Spearman’s rank order correlation coefficient yielded almost identical results. Kendall’s coefficient of concordance for the replication study was .48 (p < .005) (Holmes & Masuda, 1974). College performance in the area of grade point average has been found to be inversely proportional to the quantity of life change experienced. This was indicated to be the case regardless of the level of college readiness expressed by the student (Holmes & Masuda, 1974). Fifteen items from this scale were used in the FLS. These items were selected on the basis of what was felt to address student concerns during the transition to college.

Persistence Status

Persistence status, the dependent measure, was divided into two categories. These were persisters and nonpersisters. Persisters included those who had graduated, were still enrolled, or had dropped for a quarter or more, but had returned by Winter Quarter of 1998. Students were classified as nonpersisters if they had neither graduated nor been enrolled by Winter Quarter of 1998.
CHAPTER IV
RESULTS

Data Analysis

Descriptive statistics and frequencies were run on all of the variables used in the study. Information was reviewed for distributions and aberrant data. Questions were then organized according to whether they addressed family of origin or nuclear family variables of social support, stressors, and academic traditions. Then t-tests were performed to determine sample differences between married and single students. Two-tailed Pearson correlations between marital status and FLS variables were run. Correlations between independent variables, persistence, and nonpersistence were run to determine the items to be included in the discriminant analysis.

By winter term 1998, 50 (14%) students had dropped out of school. Seven of the 50 indicated that they were intending to go on a religious mission for The Church of Jesus Christ of Latter-day Saints (LDS church). Eight (2%) had stopped out, but returned after a quarter or more absence; 79 (23%) had graduated; and 211 (61%) were still persisting in school without any stop outs. Table 4 presents information on the enrollment status of all student surveys including those from other majors who filled out the survey while in the class. Student surveys that did not have declared majors within the College of Family Life were dropped from further analyses in this study.

Table 4
Enrollment Status

<table>
<thead>
<tr>
<th>FLS cohort</th>
<th>Graduated</th>
<th>Enrolled</th>
<th>Stopped</th>
<th>Dropped</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1996 (n = 121)</td>
<td>38 (31%)</td>
<td>54 (45%)</td>
<td>0</td>
<td>29 (24%)</td>
</tr>
<tr>
<td>Cohort 1997 (n = 391)</td>
<td>50 (13%)</td>
<td>273 (70%)</td>
<td>12 (3%)</td>
<td>56 (14%)</td>
</tr>
<tr>
<td>Total (N = 512)</td>
<td>88 (17%)</td>
<td>327 (64%)</td>
<td>12 (2%)</td>
<td>85 (17%)</td>
</tr>
<tr>
<td>CFL Students (N = 348)</td>
<td>79 (23%)</td>
<td>211 (61%)</td>
<td>8 (2%)</td>
<td>50 (14%)</td>
</tr>
</tbody>
</table>
Enrollment statuses were then combined to meet this study's definition of persistence. Persisters included those students who had graduated, remained enrolled by Winter Quarter of 1998, or who had stopped out for a quarter or more during this time, but had returned by Winter Quarter of 1998. Nonpersisters were those who had not graduated and had not been enrolled by Winter Quarter of 1998. This is presented in Table 5.

Student data indicating that they had had thoughts of leaving school for an LDS mission were reviewed separately at one point in the analysis to allow for the 18-month to 2-year absence normally required for a mission. This is an important consideration since many USU students stop-out for a year or two for voluntary church service (Austin et al., 1994). Of the 31 students who responded that they were considering LDS missions, data indicated that 2 were male and 29 were female, 4 had married by Winter Quarter 1998, and 27 were single. Twenty-four of these students were still persisting in their education as of Winter Quarter 1998. Seven were no longer enrolled nor had graduated, all 7 of whom were single females. This information was updated later giving time for mission completion. Five of the seven are currently enrolled pursuing their educations at USU. No information was available on the remaining two students. Data were analyzed with and without the missionaries. There were no significant differences, so the original data were retained.

### Table 5

**Persistence Status**

<table>
<thead>
<tr>
<th>FLS cohort</th>
<th>Persisters</th>
<th>Nonpersisters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1996 (n = 121)</td>
<td>92 (76%)</td>
<td>29 (24%)</td>
</tr>
<tr>
<td>Cohort 1997 (n = 391)</td>
<td>335 (86%)</td>
<td>56 (14%)</td>
</tr>
<tr>
<td>Total (N = 512)</td>
<td>427 (83%)</td>
<td>85 (17%)</td>
</tr>
<tr>
<td>CFL students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (N = 348)</td>
<td>298 (86%)</td>
<td>50 (14%)</td>
</tr>
</tbody>
</table>
Group Differences by Marital Status

Marital status was determined and $t$ tests were run between single ($n = 264$) and married ($n = 84$) student sample groups. Statistically significant group differences were found in stress total, $t(346) = 2.84, p < .01$; satisfaction with group support, $t(346) = 2.55, p < .01$; frustrations, $t(346) = -2.40, p < .02$; and number of children, $t(346) = 6.58, p < .00$. Married students had higher stress total scores and scores for satisfaction with support. Single students had higher frustration scores (Table 6).

Table 6
Means, Standard Deviations, and $t$ Test Between Married and Single Students

<table>
<thead>
<tr>
<th>Student factor</th>
<th>Married (n = 84)</th>
<th>Single (n = 264)</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Study skills</td>
<td>4.29</td>
<td>4.30</td>
<td>4.69</td>
</tr>
<tr>
<td>Stress motivation</td>
<td>43.33</td>
<td>8.23</td>
<td>42.01</td>
</tr>
<tr>
<td>Sibling total</td>
<td>3.75</td>
<td>2.26</td>
<td>3.81</td>
</tr>
<tr>
<td>Stress total</td>
<td>100.86</td>
<td>78.18</td>
<td>78.56</td>
</tr>
<tr>
<td>Satis. w/emo s.</td>
<td>14.05</td>
<td>2.39</td>
<td>13.95</td>
</tr>
<tr>
<td>Satis. w/grp s</td>
<td>10.31</td>
<td>2.48</td>
<td>9.61</td>
</tr>
<tr>
<td>Frustrations</td>
<td>2.35</td>
<td>1.63</td>
<td>2.81</td>
</tr>
<tr>
<td>Number of children</td>
<td>.69</td>
<td>1.10</td>
<td>.09</td>
</tr>
<tr>
<td>Satis. w/USU</td>
<td>15.82</td>
<td>2.75</td>
<td>16.21</td>
</tr>
<tr>
<td>Rosenberg’s SES</td>
<td>25.92</td>
<td>2.43</td>
<td>26.14</td>
</tr>
</tbody>
</table>

*p < .02; **p < .01; ***p < .00
Research Question 1

*Are the family of origin factors of parental income, family academic traditions, number of siblings, satisfaction with contact with parents related to student academic persistence?*

Two-tailed Pearson’s correlations between independent variables were run for married and single students by persistence status. None of the family of origin variables were statistically significantly correlated with persistence for the overall sample or for the single students (Table 7). For the married sample (Table 8), students’ mothers’ education was the only family of origin factor that statistically significantly correlated with persistence in school, $r(83) = .28$, $p < .01$. For this study, the family of origin factors of parental income, family academic traditions, number of siblings, satisfaction with contact with parents were not related directly to student academic persistence except for students’ mothers’ education for married students.

Supporting family academic traditions, in the ABCD-XYZ model, mother’s education was statistically significantly correlated with father’s education for single students, $r(263) = .59$, $p < .00$, for married students, $r(83) = .40$, $p < .00$, and the overall sample, $r(347) = .54$, $p < .00$. For single students, parental education levels were correlated with family of origin income including mother’s education, $r(263) = .21$, $p < .00$, and father’s education, $r(263) = .24$, $p < .00$. Family of origin income levels were also negatively correlated with stress total, $r(263) = -.17$, $p < .01$. Satisfaction with USU programs/professors was correlated with mother’s education, $r(263) = -.12$, $p < .05$.

Research Question 2

*Are the nuclear family factors of being married while in school, number of children, or gender of spouse enrolled in college related to student academic persistence?*

Nuclear family factors of being married while in school, number of children, and gender of spouse enrolled in college were not related to student academic persistence in this study (Table 8).
Table 7
Pearson Correlation Coefficients Depicting Relationships Between Persistence Status and Predictor Variables for Single Students

<table>
<thead>
<tr>
<th></th>
<th>Mother’s educ.</th>
<th>Father’s educ.</th>
<th>USU GPA</th>
<th>Rosenberg Self-Esteem w/USU</th>
<th>Satis. w/USU</th>
<th>Stress total</th>
<th>Satis. w/emo. support</th>
<th>Satis. w/grp s.</th>
<th>Frustrations</th>
<th>Stress motiv.</th>
<th>Family income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence status</td>
<td>.02</td>
<td>.04</td>
<td>.21**</td>
<td>-.14*</td>
<td>.02</td>
<td>-.06</td>
<td>.04</td>
<td>.00</td>
<td>-.04</td>
<td>-.04</td>
<td></td>
</tr>
<tr>
<td>Mother’s education</td>
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<td></td>
<td>.59***</td>
<td>-.06</td>
<td>-.06</td>
<td>.06</td>
<td>.10</td>
<td>.09</td>
<td>.09</td>
<td>.03</td>
<td>.21**</td>
</tr>
<tr>
<td>Father’s education</td>
<td></td>
<td></td>
<td>.03</td>
<td>-.00</td>
<td>-.09</td>
<td>-.06</td>
<td>.07</td>
<td>.12</td>
<td>-.00</td>
<td>-.04</td>
<td>.24**</td>
</tr>
<tr>
<td>USU GPA</td>
<td></td>
<td></td>
<td>.03</td>
<td>.09</td>
<td>-.14*</td>
<td>-.00</td>
<td>.14</td>
<td>.09</td>
<td>.05</td>
<td>.02</td>
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<tr>
<td>Rosenberg Self-Esteem</td>
<td></td>
<td></td>
<td>-.01</td>
<td>.01</td>
<td>-.01</td>
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<td>.10</td>
<td>.10</td>
<td>.07</td>
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<tr>
<td>Satis. w/USU</td>
<td>-.10</td>
<td>.07</td>
<td>.04</td>
<td>-.25***</td>
<td>-.11</td>
<td>.07</td>
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</tr>
<tr>
<td>Stress total</td>
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<td></td>
<td>-.07</td>
<td>-.05</td>
<td>-.04</td>
<td>.14*</td>
<td>-.17**</td>
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<tr>
<td>Satis. w/emo. support</td>
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<td></td>
<td></td>
<td>.45***</td>
<td>-.16*</td>
<td>-.00</td>
<td>.12</td>
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<tr>
<td>Satis. w/group support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.17*</td>
<td>.06</td>
<td>.11</td>
<td></td>
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<tr>
<td>Frustrations</td>
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<td>.15*</td>
<td>.10</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Stress motivation</td>
<td></td>
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<td>-.04</td>
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</tbody>
</table>

* p < .05; ** p < .01; *** p < .00
Table 8

Pearson Correlation Coefficients Depicting Relationships Between Persistence Status and Predictor Variables for Married Students

<table>
<thead>
<tr>
<th></th>
<th>Mother's educ.</th>
<th>Father's educ.</th>
<th>USU GPA</th>
<th>Rosenberg Self-Esteem</th>
<th>Satis. w/USU</th>
<th>Stress total</th>
<th>Satis. w/emo support</th>
<th>Satis. w/grp support</th>
<th>Frustrations</th>
<th>Stress motivation</th>
<th>Family income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence status</td>
<td>.28**</td>
<td>.12</td>
<td>.15</td>
<td>-.01</td>
<td>-.06</td>
<td>-.11</td>
<td>.01</td>
<td>.01</td>
<td>-.08</td>
<td>.10</td>
<td>-.02</td>
</tr>
<tr>
<td>Mother's education</td>
<td></td>
<td>.40***</td>
<td>.01</td>
<td>-.08</td>
<td>.17</td>
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<td>-.05</td>
<td>-.00</td>
<td>.11</td>
<td>-.04</td>
<td>.06</td>
</tr>
<tr>
<td>Father's education</td>
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<td>.13</td>
<td>-.03</td>
<td>-.02</td>
<td>.17</td>
<td>.04</td>
<td>-.05</td>
<td>-.04</td>
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<td>-.03</td>
<td>-.24*</td>
<td>-.05</td>
<td>.01</td>
<td>-.15</td>
<td>.08</td>
<td>.09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rosenberg Self-Esteem</td>
<td>.01</td>
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<td>-.09</td>
<td>-.02</td>
<td>.18</td>
<td>.20</td>
<td>-.21</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Satis. w/USU</td>
<td>-.02</td>
<td>.15</td>
<td>.03</td>
<td>.07</td>
<td>.03</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Stress total</td>
<td>-.24*</td>
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<td>.30*</td>
<td>.15</td>
<td>-.30*</td>
<td></td>
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</tr>
<tr>
<td>Satis. w/emotional support</td>
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<td>.43***</td>
<td>-.10</td>
<td>.03</td>
<td>-.09</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Satis. w/group support</td>
<td></td>
<td>-.22*</td>
<td>-.12</td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Frustrations</td>
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<td>-.03</td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Stress motivation</td>
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<td>-.19</td>
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<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

* p < .05; ** p < .01; *** p < .00
Research Question 3

Is satisfaction with social support related to student academic persistence?

Social support had two factors: 1) satisfaction with emotional support, and 2) satisfaction with group support. These were summed separately for each student and analyzed with two-tailed Pearson correlations for single and for married students. In this study, social support was not directly related to student academic persistence for single or married students. Statistically significant correlations for social support and other factors supporting the ABCD-XYZ model were found.

Single student information (Table 7) indicated that satisfaction with group support was correlated with USU GPA, \( r(263) = .14, p < .03 \). Frustrations were negatively correlated with satisfaction with emotional support, \( r(263) = -.16, p < .01 \), and satisfaction with group support, \( r(263) = -.17, p < .01 \).

For married students (Table 8), satisfaction with emotional support negatively correlated with stress total, \( r(83) = -.24, p < .03 \). Satisfaction with emotional support correlated with satisfaction with group support, \( r(83) = .43, p < .00 \); and frustrations correlated negatively with group support satisfaction, \( r(83) = -.22, p < .05 \).

Total sample results (Table 9) indicated satisfaction with emotional support correlated negatively with stress total, \( r(347) = -.11, p < .03 \). Frustrations correlated negatively with satisfaction with emotional support, \( r(347) = -.15, p < .01 \), and with satisfaction with group support, \( r(347) = -.20, p < .00 \). Satisfaction with group support correlated with father’s education, \( r(347) = .12, p < .02 \), with USU GPA, \( r(347) = .11, p < .04 \), and with satisfaction with emotional support, \( r(347) = .44, p < .00 \).

Research Question 4

Is perceived stress level related to student academic persistence?

Stress total scores were weighted and summed separately for each student and analyzed with two-tailed Pearson correlations for impact on persistence for both single and married students. Perceived stress level was not directly related to student academic persistence in this study.
Table 9

Pearson Correlation Coefficients Depicting Relationships Between Persistence Status and Predictor Variables for Overall Sample

<table>
<thead>
<tr>
<th></th>
<th>Mother's educ.</th>
<th>Father's educ.</th>
<th>USU GPA</th>
<th>Rosenberg Self-Esteem w/USU</th>
<th>Satis. stress total</th>
<th>Satis. w/emo. support</th>
<th>Satis. w/grp s.</th>
<th>Frustrations</th>
<th>Stress motivation</th>
<th>Family income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence status</td>
<td>.08</td>
<td>.06</td>
<td>.20***</td>
<td>.03</td>
<td>-.13*</td>
<td>-.01</td>
<td>-.05</td>
<td>.04</td>
<td>-.02</td>
<td>.00</td>
</tr>
<tr>
<td>Mother's education</td>
<td>.54***</td>
<td>-.05</td>
<td>-.01</td>
<td>-.04</td>
<td>-.05</td>
<td>.07</td>
<td>.05</td>
<td>.11*</td>
<td>.00</td>
<td>.20***</td>
</tr>
<tr>
<td>Father's education</td>
<td>.02</td>
<td>-.00</td>
<td>-.02</td>
<td>-.06</td>
<td>.05</td>
<td>.12*</td>
<td>.02</td>
<td>.01</td>
<td>.18**</td>
<td></td>
</tr>
<tr>
<td>USU GPA</td>
<td>.02</td>
<td>.06</td>
<td>-.16**</td>
<td>-.01</td>
<td>.11*</td>
<td>-.11*</td>
<td>.06</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rosenberg Self-Esteem</td>
<td>.00</td>
<td>.05</td>
<td>-.02</td>
<td>.03</td>
<td>.12*</td>
<td>.12*</td>
<td>.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satis. w/USU</td>
<td>-.08</td>
<td>.08</td>
<td>.03</td>
<td>-.20***</td>
<td>-.08</td>
<td>.08</td>
<td>.08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress total</td>
<td>-.11*</td>
<td>-.06</td>
<td>.05</td>
<td>.15**</td>
<td>-.25***</td>
<td>-.01</td>
<td>.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satis. w/emotional support</td>
<td>.44***</td>
<td>-.15*</td>
<td>-.01</td>
<td>.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satis. w/group support</td>
<td>-.20***</td>
<td>.02</td>
<td>.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frustrations</td>
<td>.18**</td>
<td>.11*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05; ** p < .01; *** p < .00
Other statistically significant correlations between stress level and other factors for single, married, and total sample groups were found that support the ABCD-XYZ model. Results for single students (Table 7) indicate that stress total was negatively correlated with USU GPA, \( r (263) = -.14, p < .02 \). Frustrations were negatively correlated with satisfaction with USU programs/professors, \( r (263) = -.25, p < .00 \), and stress motivation was correlated with frustrations, \( r (263) = .15, p < .02 \).

For married students (Table 8), stress total was negatively correlated with USU GPA, \( r (83) = -.24, p < .03 \). Frustrations were also correlated with stress totals, \( r (83) = .30, p < .01 \) and with stress motivation, \( r (83) = .29, p < .01 \). Family of origin income was negatively correlated with stress total, \( r (83) = -.30, p < .01 \).

Total sample results (Table 9) indicated stress total correlated negatively with USU GPA, \( r (347) = -.16, p < .00 \); with satisfaction with emotional support, \( r (347) = -.11, p < .03 \); and with family of origin income, \( r (347) = -.29, p < .00 \). Stress total correlated positively with stress motivation, \( r (347) = .15, p < .01 \). Frustrations correlated with mother’s education, \( r (347) = .11, p < .05 \), with stress motivation, \( r (347) = .18, p < .00 \), and self-esteem, \( r (347) = .12, p < .03 \). Frustrations correlated negatively with USU GPA, \( r (347) = -.11, p < .04 \), with satisfaction with USU programs/professors, \( r (347) = -.20, p < .00 \), with satisfaction with emotional support, \( r (347) = -.15, p < .01 \), and with satisfaction with group support, \( r (347) = -.20, p < .00 \). These were also used in the discriminant analysis.

**Research Question 5**

*Which of these variables along with academic factors best predict student persistence in college overall?*

Two-tailed Pearson correlations were run between persistence status and all independent variables. For single students, the statistically significant variables correlating with persistence were USU GPA, \( r (263) = .16, p < .00 \); and satisfaction with USU programs/professors, \( r (263) = -.16, p < .02 \). These same variables correlated with persistence for the overall sample: USU GPA, \( r (347) = .20, p < .00 \); and satisfaction with USU programs/professors, \( r (347) = -.13, p < .02 \). For married students’, mothers’
education was the only statistically significant factor correlated with persistence in school, 
\( r (83) = .28, p < .01. \)

Stepwise discriminant analysis was then completed using these items. Table 10 gives
the standardized discriminant function coefficient (SDC), which is analogous to factor
coefficients in factor analysis and to beta weights in regressions (Jones, 1984). The table
also gives the canonical correlation, which is an estimate of the strength of the predictors to
discriminate between persisters and nonpersisters. The group centroids given are an
estimate of spatial distance between persisters and nonpersisters (Jones, 1984).

Table 10

Discriminant Analysis, Means, and Standard Deviations Contrasting Student Factors with
Persistence Status

<table>
<thead>
<tr>
<th>Student factors</th>
<th>Persisters (n = 298)</th>
<th>Dropped (n = 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SDC</td>
<td>Mean SD</td>
</tr>
<tr>
<td>USU GPA</td>
<td>.790</td>
<td>3.17 .49</td>
</tr>
<tr>
<td>Satis. w/USU</td>
<td>-.682</td>
<td>15.97 2.71</td>
</tr>
<tr>
<td>Group centroids</td>
<td>.084</td>
<td>-.498</td>
</tr>
</tbody>
</table>

Canonical correlation = .20; Chi square = 21.16

Two variables were identified by discriminant analysis as statistically significant
predictors of college persistence for the overall sample. These included USU GPA and
satisfaction with USU programs/professors, \( F (2, 345) = 7.23, p < .001. \) The canonical
correlation was .20 indicating that 4% of the variance was explained by the two independent
variables in the equation. Classification results (Table 11) for predicted group membership
indicated that the model is more successful at predicting those who remain in school (99.7%
successful predictions) than those who dropped out of school (0%).

The factors that predict student persistence in college overall in this study are the
academic factors of USU GPA and satisfaction with USU programs/professors. No other
factors were predictors of persistence in the analysis.
Table 11

Discriminant Analysis Classification Results for Persistence Status

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Persistence status of student</th>
<th>Dropped</th>
<th>Persisted</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Original</td>
<td>Dropped</td>
<td>0.0</td>
<td>50.0</td>
<td>50.0</td>
</tr>
<tr>
<td></td>
<td>Persisted</td>
<td>1.0</td>
<td>297.0</td>
<td>298.0</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dropped</td>
<td>.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Persisted</td>
<td>.3</td>
<td>99.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Cross-validated</td>
<td>Count</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dropped</td>
<td>0.0</td>
<td>50.0</td>
<td>50.0</td>
</tr>
<tr>
<td></td>
<td>Persisted</td>
<td>1.0</td>
<td>297.0</td>
<td>298.0</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dropped</td>
<td>.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Persisted</td>
<td>.3</td>
<td>99.7</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note. 85.3% of original grouped cases correctly classified. 85.3% of cross-validated grouped cases correctly classified.

Summary of Results

Predictor variables identified by discriminant analysis for the overall sample were USU GPA and satisfaction with USU programs/professors, $F(2, 345) = 7.23$, $p < .001$. These two variables were also statistically significant correlates with persistence for single students, USU GPA, $r(345) = .21$, $p < .00$; and satisfaction with USU programs/professors, $r(345) = -.14$, $p < .02$, but not for married students. No family of origin items helped to predict persistence in the discriminant analysis; however, persistence and married students’ mother’s education levels were statistically significantly correlated, $r(83) = .28$, $p < .01$. For the family of origin correlations, one item’s relationship was statistically significant with a predictor item. This was single students’ mother’s education levels with satisfaction with USU programs/professors, $r(263) = -.12$, $p < .05$. 


No social support or stress-related variables were significantly related to persistence. However, stress total was significantly correlated with USU GPA for both married students, single students, and overall sample, $r(83) = -.24, p < .03; r(263) = -14, p < .02; \text{and } r(347) = -.16, p < .00$, respectively. Satisfaction with group support was correlated with USU GPA for single students, $r(263) = .14, p < .03$.

Group differences between married and single students were found in stress total, group support satisfaction, frustrations, and number of children, $t(346) = 2.84, p < .01; t(346) = 2.55, p < .01; t(346) = -2.40, p < .02; \text{and } t(346) = 6.58, p < .00$, respectively. Married students scored higher in stress total, satisfaction with group support, and had more children. Single students reported higher scores in frustrations.
Question 1

Are the family of origin factors of parental income, family academic traditions, number of siblings, satisfaction with contact with parents related to student academic persistence?

The family of origin factors of parental income, family academic traditions, number of siblings, satisfaction with contact with parents were not directly related to student academic persistence for single students or the overall sample. Family academic traditions (part of the "C" factor) as in parental education levels were not statistically significantly correlated with persistence except for married students where mother's education level was related to persistence.

However, it is interesting to notice that when looking at national and state demographic statistics, parent education levels for these USU students is higher than both national and state averages. National averages from the 1990 Census indicated that 20.3% of the adult population are 4-year college graduates. State averages taken from "Economic and Demographic Profiles" by the Utah Office of Planning and Budget (1993) indicated that 22.3% of the adults have 4-year college educations. In the CFL sample, 45% of the mothers were 4-year college graduates or more and 61% of the fathers were college graduates or beyond. An additional 31% of the mothers had had vocational training or some college education as had an additional 24% of fathers. Combined percentages indicated that 76% of mothers had some higher education experience as had 85% of fathers. Thus, students enrolled in the College of Family Life generally come from families with strong academic traditions.

Results indicate that family of origin factors may be associated with students' initial decision to attend college. Persistence, once enrolled, was impacted by academic traditions of the mother of the married student, indicating the importance of maternal examples, especially after the transition of marriage. Academic traditions may become more important as the transition of marriage is being made, especially for women. This may help alleviate
1989; Pugliesi, 1989). It is interesting that the mother’s education would be the only variable that was statistically significantly correlated with persistence for married students. However, this is consonant with extant literature in early childhood and child development. This literature indicated that maternal education level is one of the most powerful correlation factors in cognitive development for children. Mothers’ and fathers’ education levels were highly correlated with each other indicating that both parents were similar in educational traditions.

Higher education levels were also correlated with higher income levels which may provide an added incentive for students of these families to expect higher paying jobs if they continue to persist with their education. Higher family of origin income levels (part of the “B” factor) were correlated with lower total stress scores for all samples, which were correlated with higher GPAs. This indicates that students may have more of the needed financial resources to help make the transition to school less demanding in some areas of academic functioning. Although none of these were statistically significant factors related to persistence in college, except married students’ mothers’ education, indirect correlations among factors may support the ABC-XYZ Model.

**Question 2**

Are the nuclear family factors of being married while in school, number of children, or gender of spouse enrolled in college related to student academic persistence?

Marital status (“A1” factor), number of children, and gender were not statistically significant factors in relation to persistence in this study. This may have been due to the high percentage of females in this sample (91%). Lenning (1982) indicated that women are more likely to drop out when male-female ratios are large. Having high proportions of female students may provide additional support for females seeking an education. Females may also experience less role strain or disparity (“C” and “D” factors) due to the nature of many of the core classes required by the CFL. These classes support and explore basic and advanced life skills in the fields more often associated with traditional female interests. The College strongly encourages persistence in school. This is reinforced by the many outstanding female role models from which students gather support and to whom students
may look for examples of professional achievement. Marital relationships and parental responsibilities are acknowledged and supported on many levels both by professors themselves and by the nature of classes taught.

**Question 3**

*Is satisfaction with social support related to academic persistence?*

Satisfaction with social support was not statistically significantly related to persistence for this sample in this study; however, higher satisfaction with emotional support was significantly correlated with lower total stress scores for married students and the overall sample. Lower stress scores were statistically significantly correlated with higher GPAs which were correlated with greater persistence. These results support the concept that supportive resources may help alleviate negative responses to stressors as discussed in the “B” factor in the ABCD-XYZ model. Married students indicated higher stress totals than did single students, however, married students also indicated higher satisfaction with group support and lower frustrations than single students. Marriage may help provide additional support networks that help reduce frustrations compared to single students’ experience.

**Question 4**

*Is perceived stress level related to student academic persistence?*

No stress level factors were significantly correlated with persistence, however, stress level correlation results between variables lends support to the concepts found in the literature and the ABCD-XYZ model used to conceptualize this project. The overall stress score (“X” factor) was significantly correlated with lower USU GPA, which supports results reported by Holmes and Masuda (1974). This was true of married students, single students, and overall sample groups. Lower total stress scores were correlated with higher family of origin income levels for all samples as well. Higher satisfaction with emotional support was also correlated with lower total stress scores for married students and the overall sample. These results support the concept that supportive resources may help alleviate negative responses to stressors.
Total stress scores were computed from students' responses to various stressful life events taken from the SRRS (Holmes & Rahe, 1967). Specific items were chosen that were felt to best address student concerns during the transitions to college; however, the 15 items used from the complete measure of 43 items may not have sufficiently assessed student stress levels. Married students in this study indicated higher stress totals than did single students; however, married students also indicated higher satisfaction with group support and lower frustrations than single students.

Question 5

Which of these variables along with academic factors best predict persistence in college overall?

The results of this study indicate that the persistence variables chosen were better able to predict those who remain in school rather than those who drop out (Y and Z factors). The strongest predictors for students remaining in school in this study were the academic factors of students' USU grade point average and students' satisfaction with USU studies and professors. Students with higher GPAs were more likely to remain in school. Lenning (1982) indicated that most students who do drop out usually have satisfactory grades, but they do tend to have slightly lower grades than persisters. This was supported in the findings of this study. Lenning (1982) suggested that when student grades begin to slip or if students are struggling by self-report or as noticed by school personnel, special notice should be taken to assess the needs of the student.

The other main predictor was the students' satisfaction with USU studies and professors. This factor included four items, which are (1) quality of the program in student's major; (2) accessibility of professors in the major; (3) helpfulness of professors in the major; and (4) professional/vocational advising in the major. These were rated by the student on a 5-point Likert scale (5 = very satisfied, 4 = satisfied, 3 = dissatisfied, 2 = very dissatisfied, 1 = no response). Students who dropped out indicated more satisfaction with these items than those who persisted (M = 16.88, SD = 2.49; and M = 15.97, SD = 2.17, respectively). This interesting result indicates that students leaving school in this sample did so for other reasons than for academic dissatisfaction.
It is a positive note to members of the College of Family Life faculty that students do not leave this program at this university because of dissatisfaction with the quality of their USU experience. However, it raises more unanswered questions of why CFL students do leave school. As this is explored in greater detail by future studies, perhaps it will be noted in which areas students need greater resources, more motivation, broader perspectives on their educational goals, or better ways to manage and cope with the resources that they do have available.

There are many other reasons why significant dropout predictors may not have been discovered. Some may be due to the sampling limitations, the measures used, or just because the reasons students leave school are often complex and multifaceted. The sample was taken from CFL students only, who may be different in persistence than students in other programs at this university as well as students from other universities. If sampling could have taken place in the first year of students’ university experience and transition to college life, results may have been different. The measures used may not have adequately addressed student concerns and perspectives. Dropout rates for the College of Family Life are neither considered high nor considered a cause of concern at this time. The study was begun more as a preventative and informational undertaking than to identify major problems (Austin et al., 1994). Low dropout rates may make it more difficult to identify predictor variables.

In summary, USU grade point average was the most powerful predictor for student persistence in college. Grade point variations, however slight, may be resources that indicate student resilience after ongoing transitions while in college. Students who dropped out did not leave because of dissatisfaction with their college studies or professors. The strongest predictor of married student persistence was maternal education levels. Other factors were correlated with each other, but were not powerful predictors for persistence. The relatedness of these factors to stronger predictors and each other could be interpreted as support for the ABCD-XYZ model with these factors and others not yet identified to help support the students’ decision to remain in school. The complex nature of students’ transitions to college life and the decisions to remain or drop out of school needs more in-depth study to understand fully.
Limitations

Results of this study are specific to the CFL and may not be generalized to other college populations. This specificity was used to generate a convenient, nonrandom sampling procedure. Much of the cohort 1996 group was unusable as many of the 354 students \((n = 233)\) did not use names or social security numbers on their surveys, and thus information could not be matched with university data in regards to major, department, GPA, or persistence status, and so forth. It was impossible to determine differences between those who completed the surveys with identification and those who did not without matched information from university data. So, attrition may be a threat to internal validity in this study. However, cohort 1996 and cohort 1997 were run separately with similar results.

The predominant religion of the region from which this sample was drawn was predominantly Latter-day Saint (LDS) or otherwise known as Mormons. This religion is known for its strong family values and emphasis on education. This may have confounded the results, making it different from other university samples with other predominant or more diverse religious orientations. The CFL objectives and educational programs are in close agreement with stated LDS emphasis on marriage and the family. This may make it easier for students, especially women, to remain in school without so much added role strain or stress as it would support cultural beliefs and expectations.

The basic purpose of this study was to explore general factors that influence persistence for the College of Family Life. The study needs to be replicated using more specific measures with established reliability and validity that directly address the factors used in this study. For example, it is not known how many students were actually living at home rather than living away from home while attending college. This would impact the nature of the transitions the student faced in many areas of functioning.

Future Research

Future research in this area specific to the College of Family Life would be to continue to track academic performance for students still persisting or having dropped out in order to monitor and evaluate any patterns that may be discovered in their academic
process. It would be useful to follow the progress of these students to see if they continue their educational path; what time frames they observed in completing degrees; or if students who had dropped during this study returned later to complete their degrees. The longitudinal nature of this study would allow for this type of tracking to give additional information. It would be interesting and provide valuable information to investigate students’ reasons for dropping out in a more qualitative manner as in personal interviews. This could provide more insight into the many reasons that students decide to leave school that may not have been measured by this survey.

It would be helpful if students were required to take the course in their freshman year or the same year that they choose a major in the CLF, since attrition rates are often highest in the first and second years of college (Porter, 1990). This was the original intention of the CFL when student data were being gathered in 1994; however, schedule conflicts for students prevented many from taking the course until later on in their academic careers.

It would be helpful to explore specifically the areas of social support, multiple transitions, and stress levels in a more direct and precise way. Different measures could be used that were specific to these areas of interest which could provide more in-depth results.

Implications for Practice

Having an informed perspective can create greater awareness and proficiency when dealing with any specific population. Awareness of the many reasons that may impact student functioning, whether dropping out or not, can be useful to professionals trying to help in academic or in therapeutic roles. Professors can become more astute at recognizing students struggling with performance or others that do not seem particularly motivated to remain in school or to graduate (Astin, 1986). Gerdes and Mallinckrodt (1994) indicated that separate interventions may be needed for students who are considering leaving school for academic versus nonacademic reasons. Given the systemic and correlated nature of the many reasons students persist or drop out, whether academic or not, systemic interventions may prove most useful. By assessing such things as student resources, goals, stress levels, family academic traditions, and perceived social support, professionals may help intervene on the most meaningful level to the student who is navigating the transitions of college life.
This could be used to improve the quality of the student’s academic career in different areas of functioning, which could include learning to manage the requirements of academia more effectively, balancing the demands and expectations from family, spouse, or social groups, along with the pressure of financial obligations.

Students in this study who left school generally indicated that they were either satisfied or very satisfied with university programs and professors. These students also had slightly lower GPAs, but not low enough to be in academic danger. Higher stress levels were associated with lower GPAs for both married and single students. Whether they are single or married, students with a deeper awareness of the impact of their education on their futures may help them get past temporary setbacks or distractions that might have enticed them to leave school. It may help them look ahead with more clarity and purpose. This could help improve the student’s coping and adaptability skills when faced with the ambivalences about the subsequent changes and added responsibilities the transition to college life brings (Fulmer et al., 1982).

Therapeutically speaking, students could be encouraged to examine the adequacy of their natural helping resources within and outside family boundaries (Neidhardt & Allen, 1993). Circumstances or events take on meaning and personal definition as a problem when they over stress resources or complicate the life experience of those affected by it. Students may be unaware of personal, family, or cultural resources that have been overlooked or forgotten with the stressful demands on their time and energies. Often, just being reminded of previous successes in solving problems or working through other transitions can help students feel stronger and more competent in dealing with current problems. Knowing what has worked for them in the past can help them reapply those same attributes or attitudes to current stressors until they are resolved or no longer a problem (Neidhardt & Allen, 1993).

Helping the student to remain in school could often be supported by simply redefining and reframing current stressors in a workable way that fits into the student’s experience (Neidhardt & Allen, 1993). What may seem problematic for one student may seem to be a normal challenge for another student based on personal and family meanings applied to the circumstances involved in pursuing an education. Old premises for viewing
their life circumstances may need to be updated to be helpful in their current life stage and circumstances. Normalizing stressors as a natural part of life transitions could help students explore ways that could change their behaviors, seek out more helpful resources, or alter perceptions to help them decide to remain in school and maintain a stable GPA. Awareness that greater stress is associated with fewer resources could help students stay more dedicated to their studies now while patiently working towards creating a less stressful future for themselves by completing their training now. This could help them to perseverre with more confidence and personal responsibility in their education.

Professionals could help reinforce the importance of graduating from college and completing a degree in context of creating or continuing strong family traditions that support education. Family parental education history for students could be made note of especially for students who do not have parents with strong academic traditions. Since mother’s education was the only statistically significant correlation for persistence for married students found in this study, it would be seem important for professionals to understand what this means to the student. If these students do not have mothers who have completed school, extra attention could be given to help them see and understand their potential role in creating strong academic traditions for themselves and their own children.

The meaning that individual students place on their education could be explored in context of their previous experience and perceptions about higher education in their family system. This could be done with the use of a genogram that exposes family patterns and rules about school to help them have greater understanding in trying to creating a secure future for themselves and their families. Understanding intergenerational patterns in education could help students become more aware of what influences their decisions and values when it comes to completing their education (Fulmer, 1982). When they realize how their parents’ and perhaps even their grandparents’ decisions have impacted them personally and how their decisions might in turn impact them and the futures of their own children, it opens the doors to personal empowerment with greater understanding and opportunities to make decisions based on a bigger picture than just current stressors or previous assumptions (Neidhardt & Allen, 1993).
Students who want to be able to earn higher incomes may be better able to persist if they are aware of the statistically significant correlations between education and income. The strong correlations between family income and education could also be advocated by professors or therapists by helping students identify role models that they admire who have gone forward with their education and made successful careers for themselves. Students could be reminded of personal dreams and goals they have had that motivate them to choose college in the first place or to continue even when things are challenging. Student resources and strengths can come in many forms, which the student may need help in recognizing. Stressors may have clouded their abilities to see their capabilities clearly. Focusing on what students want to achieve, and what they need to accomplish, may help people direct attention to solutions for making their education happen rather than focusing on the problems that they face (Nichols & Schwartz, 1995). Keeping their sights on a greater goal of being able to provide a secure and rewarding existence for themselves and their families can provide an added resource that is within the student, but will also affect future generations in the family. Tice and Perkins (1996) suggested that directing attention to strengths and resources a person may have or acquire, rather than on a person’s stressors or problems, may help bring up the important question of “not what kind of life one has, but rather what kind of life one wants” (p. 34). Dropping out of school to solve a problem or because of circumstances that a student is currently dealing with may be a short-term solution that creates long-term patterns of stress and more difficulties.

Students facing the added transition of marriage while in college face the psychosocial task of forming a new couple based on two different family systems coming together (Carter & McGoldrick, 1989). This forms an entirely new system with many new roles and responsibilities to learn for each. Both partners will have differing expectations and traditions for themselves and their partners to fulfill. Professionals within the academic environment can help students understand their families’ generational patterns within the marital roles and how current decisions may fit into these patterns. An example of a pattern or expectation may be that the wife will stop educational pursuits to put her husband through school rather than completing school herself (Astin, 1986). This has been a cultural and family tradition for many families where husbands are expected to be the
primary financial provider in the family. Current economic trends and high demands on family systems make providing for families increasingly difficult especially without education or training (Pugliesi, 1989). Although marriage was not a significant factor in persistence in this study, it may be more important for students coming from university programs less outwardly supportive of family and marital concerns as suggested by previous research (Astin, 1986).

Students with mothers who have provided an example that places a high priority on education may have helped the student see the importance and security of maternal education. This may be one reason why maternal education level was the strongest predictor for married student persistence especially since most of the students in this sample were female. If students from less educated families are able to look at their own family traditions and values about education and their partner’s family’s as well, they may be able to then form their own traditions based on what is best for them, rather than what is expected of them by others. Families and individuals who function successfully require the ability to be flexible in their structure, responses, and roles to meet environmental and developmental needs and purposes (Walsh, 1993). Having both partners fully educated would seem likely to enhance their potential as equal partners, wage earners, and parents, especially in today’s demanding society whether previous family traditions support both partners completing a degree or not (Astin, 1986). Married students’ parental education levels were statistically significantly correlated with each other in this study. This provides another interesting aspect for students to consider especially in light of couples just beginning the adventure of creating their own traditions and resources.

Interventions in therapy or discussions with professors could help students understand their potential in the academic setting and help them to clarify, discover, and express their needs and desires for themselves and changes that they would like to make or goals that they would like to work towards as individuals or as a couple (Tice & Perkins, 1996). Interventions could help students evaluate and access resources they have within themselves and within their social and cultural networks to bring their goals to fruition. Noticing times when they were able to achieve a goal or make a healthy choice for themselves could remind them of how to stay in school now. Personal traditions of success
and achievement could help them create or continue the academic traditions important to their current success. Having a strong academic base with completed degrees would increase a couples’ financial and intellectual resources both on a personal level and on a relational level, providing a strong tradition for the generations that follow them.

In summary, students who are contemplating the decision to drop out of school or remain enrolled in college until completion could be encouraged to stay by looking at the meaning of their family academic traditions that they want to continue or create for themselves and their families, especially for women. Professionals can help them understand and make better decisions for themselves by understanding the role their family and cultural perspectives and experience play in defining for themselves whether they are capable or desirous of staying in school. Students can be encouraged to understand the relationship that education has with their potential to generate a good income. They can be encouraged to maximize their resources and to build on past successes in going through challenges or transitions to help overcome stressors and see beyond current limitations that might impair their ability to remain in school.
REFERENCES


Hollingshead, A. B. (1975). *Four factor index of social status*. Unpublished manuscript, Yale University, New Haven, CT.


APPENDIXES
Appendix A.

Human Subjects Letter
MEMORANDUM

TO: Ann Austin
    Sandra Krambule

FROM: True Rubal, Secretary to the IRB

SUBJECT: "Adjustment, Stress, and Social Support as Factors in Student Retention"

The above-referenced proposal has been reviewed by this office and is exempt from further review by the Institutional Review Board. The IRB appreciates researchers who recognize the importance of ethical research conduct. While your research project does not require a signed informed consent, you should consider (a) offering a general introduction to your research goals, and (b) informing, in writing or through oral presentation, each participant as to the rights of the subject to confidentiality, privacy or withdrawal at any time from the research activities.

The research activities listed below are exempt from IRB review based on the Department of Health and Human Services (DHHS) regulations for the protection of human research subjects, 45 CFR Part 46, as amended to include provisions of the Federal Policy for the Protection of Human Subjects, June 18, 1991.

4. Research, involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

Your research is exempt from further review based on exemption number 4. Please keep the committee advised of any changes, adverse reactions or termination of the study. A yearly review is required of all proposals submitted to the IRB. We request that you advise us when this project is completed, otherwise we will contact you in one year from the date of this letter.

June 22, 1998
Appendix B.

College of Family Life Student Survey
College of Family Life Student Survey

We are interested in your experiences since you started school at Utah State University. Please take a few minutes to answer the following questions. Your responses will help us create an even better climate for students at USU. Your answers are confidential.

1. Please list your parents and their current occupation if they claimed you on last year’s taxes.

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<th>Current Occupation</th>
<th>Employed part time of full time</th>
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<tr>
<td>Mother/Step/Partner</td>
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<tr>
<td>Father/Step/Partner</td>
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2. Please list yourself and your spouse (if applicable) and your current occupations, if your parents did not claim you on last year’s taxes.

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<tr>
<th>Current Occupation</th>
<th>Employed part time of full time</th>
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<tbody>
<tr>
<td>Self</td>
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<tr>
<td>Spouse/Partner</td>
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3. Please list your siblings. Please list your children.

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<th>Child #</th>
<th>Gender</th>
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4. Please check your marital status:

- [ ] Never married
- [ ] First marriage
- [ ] Divorced
- [ ] Remarriage
- [ ] Widowed
- [ ] Separated

5. How many years have you been in the present marriage/long term commitment? __________

6. Please check yearly income of your family or origin:

- [ ] Less than $5,000
- [ ] $5,000-10,000
- [ ] $10,000-15,000
- [ ] $15,000-30,000
- [ ] $30,000-45,000
- [ ] $45,000-60,000
- [x] $60,000+
7. Please check the highest level in school or college that your mother has completed.
   □ 1-7th grade  □ high school graduate  □ college graduate
   □ 8-9th grade  □ vocational or some college  □ graduate or professional school
   □ 10-11th grade

8. Please check the highest level in school or college that your father has completed.
   □ 1-7th grade  □ high school graduate  □ college graduate
   □ 8-9th grade  □ vocational or some college  □ graduate or professional school
   □ 10-11th grade

9. Since coming to Utah State have you actually changed your major? __Yes  __No. If yes, what
   major(s) have you changed from ______________. If you haven’t changed your major,
   have you thought about changing? __Yes  __No. If yes, what major(s) have you thought about
   changing to ______________? Undecided ______.

10. Right now, what career or occupation are you planning?

11. Please check the major reasons you attended USU. Check as many as apply.
    a. __ Good program in major
    b. __ Scholarship/financial aid
    c. __ Visit to campus impressed me
    d. __ Close to home (parents, spouse, children, etc.)
    e. __ Former student’s recommendation
    f. __ Counselor or teacher’s advice
    g. __ Lower costs
    h. __ Parents or alumni

12. Did you consider other colleges or universities? __No. __Yes. If yes, please list these:

13. Did you attend other colleges or universities? __No. __Yes. If yes, please list these:

14. Did you graduate with an associate degree or a bachelor’s degree from any of the other
    colleges and universities you listed on #13? __No. __Yes. Which college or university was this and
    what was the degree?

15. Please check those who most influenced your choice to attend USU. Check as many as apply.
    a. __ Faculty
    b. __ Representative of the college
    c. __ Relatives
    d. __ High school personnel
    e. __ Friends
    f. __ Brochures or other advertising materials
    g. __ Quality of education overall at USU
    h. __ Quality of education in your major
16. How do you like it here at USU? (check 1)
a. ___ Love it
b. ___ Like it
c. ___ Okay—so so
d. ___ Not too well
e. ___ Not at all

17. What were the major frustrations in your first few months on campus? Check as many as apply.
   a. ___ None
   b. ___ Homework/coursework
c. ___ Red tape/bureaucracy
d. ___ Dropped programs/budget cuts.
e. ___ Lack of specific services.
f. ___ Getting classes
g. ___ Getting along with roommates
h. ___ Deciding on a major field of study
i. ___ Finances
j. ___ Difficulty in making friends
k. ___ Housing
l. ___ Homesickness
m. ___ Finding my way around
n. ___ Parking
o. ___ Finding a job
p. ___ Changing majors

18. Have you thought of leaving?  ___ No  ___ Yes
   If yes, check the reasons why. Check as many as apply.
   a. ___ Lost interest in school
   b. ___ Program cuts
c. ___ Finances
d. ___ Poor grades
e. ___ Military service
f. ___ Couldn’t get the needed classes
g. ___ Just wanted a break
h. ___ Family problems
i. ___ Homesick/depression
j. ___ LDS mission
k. ___ Wasn’t what I thought it would be
l. ___ Marriage
m. ___ Roommates
n. ___ Unable to get into the program I wanted
c. ___ Pregnancy or new child
p. ___ Tired of red tape

19. To what extent are you satisfied with each of the following at USU. Rank your satisfaction (5 = Very Satisfied, 4 = Satisfied, 3 = Dissatisfied, 2 = Very Dissatisfied, 1 = no response)
a. ___ Overall quality of education
b. ___ Quality of the program in your major
c. ___ Accessibility of professors in your major
d. ___ Helpfulness of professors in your major
e. ___ Professional/vocational advising in your major
f. ___ Availability of classes
g. ___ Class size
20. Please rank the following objectives from 1 to 7, with 1 being the most important objective you expect to receive from your university experience.
   a. ___ Become a leader in my potential profession or discipline
   b. ___ Increase my research skills
   c. ___ Improve my ability to teach or practice my profession/field
   d. ___ Prepare me to work with other professions or disciplines
   e. ___ Prepare me to address important human or social problems
   f. ___ Sharpen my interest in public policy issues
   g. ___ Prepare me to be a leader with a broad knowledge of critical issues

21. What career or occupation are you planning?

________________________________________________________________________

We would like to know about your network with friends and family as it is here at USU.

22. How involved are you in your dorm or neighborhood?
   a. ___ Not at all
   b. ___ Somewhat
   c. ___ Very involved
   d. ___ Other (please explain) ________________________________

23. How satisfied are you with the above situation?
   a. ___ Very dissatisfied (I wish things were very different)
   b. ___ Somewhat dissatisfied (I would like some changes)
   c. ___ Somewhat satisfied (OK for now; pretty good)
   d. ___ Very satisfied (I’m really pleased)
   e. ___ Other (please explain) ________________________________

24. How involved are you in campus life?
   a. ___ Not at all
   b. ___ Somewhat
   c. ___ Very involved
   d. ___ Other (please explain) ________________________________

25. How satisfied are you with the above situation?
   a. ___ Very dissatisfied (I wish things were very different)
   b. ___ Somewhat dissatisfied (I would like some changes)
   c. ___ Somewhat satisfied (OK for now; pretty good)
   d. ___ Very satisfied (I’m really pleased)
   e. ___ Other (please explain) ________________________________

26. Are there any organized groups (for example: church, social, educational or sports) that are a source of support for you?
   a. ___ None
   b. ___ Some
   c. ___ Many
   d. ___ Other (please explain) ________________________________

27. How satisfied are you with the above situation?
   a. ___ Very dissatisfied (I wish things were very different)
   b. ___ Somewhat dissatisfied (I would like some changes)
   c. ___ Somewhat satisfied (OK for now; pretty good)
   d. ___ Very satisfied (I’m really pleased)
   e. ___ Other (please explain) ________________________________
28. Think of a typical week. About how many times did you talk on the phone or visit in person with your
friends?
   a. ___ None
   b. ___ Once
   c. ___ 2 or 3 times
   d. ___ 4 - 7 times
   e. ___ More than 7 times
   d. ___ Other (please explain) 

29. How satisfied are you with this amount of visiting?
   a. ___ Very dissatisfied (I wish things were very different)
   b. ___ Somewhat dissatisfied (I would like some changes)
   c. ___ Somewhat satisfied (OK for now; pretty good)
   d. ___ Very satisfied (I'm really pleased)
   e. ___ Other (please explain) 

30. If you were to become upset or angry, would you have someone to talk to? How many people?
   a. ___ No one
   b. ___ 1 person
   c. ___ 2 people
   d. ___ 3 - 4 people
   e. ___ More than 4 people
   d. ___ Other (please explain) 

31. How satisfied are you with the above situation?
   a. ___ Very dissatisfied (I wish things were very different)
   b. ___ Somewhat dissatisfied (I would like some changes)
   c. ___ Somewhat satisfied (OK for now; pretty good)
   d. ___ Very satisfied (I'm really pleased)
   e. ___ Other (please explain) 

32. When you are happy, is there someone you can share it with--someone who will be happy just because
you are?
   a. ___ No
   b. ___ Yes
   c. ___ Other (please explain) 

33. How satisfied are you with the above situation?
   a. ___ Very dissatisfied (I wish things were very different)
   b. ___ Somewhat dissatisfied (I would like some changes)
   c. ___ Somewhat satisfied (OK for now; pretty good)
   d. ___ Very satisfied (I'm really pleased)
   e. ___ Other (please explain) 

34. Since coming to USU, how often do you visit with your parents either in person or on the phone?
   a. ___ Never/once or twice a year
   b. ___ Less than once a month
   c. ___ 1 - 2 times per month
   d. ___ Once a week
   e. ___ Several times a week
35. How satisfied are you with this amount of visiting?
   a. __ Very dissatisfied (I wish things were very different)
   b. __ Somewhat dissatisfied (I would like some changes)
   c. __ Somewhat satisfied (OK for now; pretty good)
   d. __ Very satisfied (I'm really pleased)
   e. __ Other (please explain)------------------------

36. How often do you visit with your spouse/partner's parents (in-laws) in person or on the phone?
   a. __ Never/once or twice a year
   b. __ Less than once a month
   c. __ 1 - 2 times per month
   d. __ Once a week
   e. __ Several times a week
   f. __ Not applicable

37. How satisfied are you with this amount of visiting?
   a. __ Very dissatisfied (I wish things were very different)
   b. __ Somewhat dissatisfied (I would like some changes)
   c. __ Somewhat satisfied (OK for now; pretty good)
   d. __ Very satisfied (I'm really pleased)
   e. __ Other (please explain)------------------------
   f. __ Not applicable

38. Rate yourself as to how you typically feel about the following, there are no right or wrong answers.
   4 = Strongly agree 3 = Agree 2 = Disagree 1 = Strongly disagree
   a. __ I am able to do things as well as most other people.
   b. __ All in all, I am inclined to feel that I am a failure.
   c. __ I feel I do not have much to be proud of.
   d. __ I feel that I am a person of worth, at least on an equal plane with others.
   e. __ At times, I think I am no good at all.
   f. __ I feel that I have a number of good qualities.
   g. __ I take a positive attitude toward myself.
   h. __ On the whole, I am satisfied with myself.
   i. __ I certainly feel useless at times.
   j. __ I wish I would have more respect for myself.

39. During the last 12 months, have you personally been affected by any of the following? (Please check any that have happened)
   __ Death of a spouse __ Divorce
   __ Marital separation __ Change in schools
   __ Death of close family member __ Personal injury or illness
   __ Marriage __ Change in financial status
   __ Marital reconciliation __ Pregnancy
   __ Serious change in health of family member __ Spouse begins or stops work
   __ Death of close friend __ Change in residence
   __ Son or daughter leaving home
40. Rate yourself as to how you typically react in each of the situations listed below. There are no right or wrong answers.

4 = Always 3 = Frequently 2 = Sometimes 1 = Never

a. Do you try to do as much as possible in the least amount of time?
b. Do you become impatient with delays or interruptions?
c. Do you always have to win at games to enjoy yourself?
d. Do you find yourself speeding up the car to beat the red light?
e. Are you unlikely to ask for or indicate you need help with a problem?
f. Do you constantly seek the respect and admiration of others?
g. Are you overly critical of the way others do their work?
h. Do you have the habit of looking at your watch or clock often?
i. Do you constantly strive to better your position and achievements?
j. Do you spread yourself "too thin" in terms of your time?
k. Do you frequently get angry or irritable?
l. Do you have little time for hobbies or time for yourself?
m. Do you consider yourself hard-driving?
n. Do your friends or relatives consider you hard-driving?
o. Do you have a tendency to get involved in multiple projects?
p. Do you have a lot of deadlines in your work?
q. Do you feel vaguely guilty if you relax and do nothing during leisure?
r. Do you take too many responsibilities?

41. Please check all that apply to you.

I don’t care if I finish school.
I would rather not be in school.
I dislike most of the work in my classes.
I often go to class unprepared.
I find it hard to stick to a study schedule.
I only study when there is the pressure of a test.
I end up “cramming” for almost every test rather than studying regularly throughout the term.
I make good use of daytime hours between classes.
I set aside a specific length of time to study and stick to it.
I put off studying more than I should.
I tend to spend so much time with friends that my course work suffers.
I find that during lectures I think of other things and don’t really listen to what is being said.
Problems outside of school, being in love, financial difficulties, conflict with parents, etc., cause me to neglect my school work.
I am distracted from my studies very easily.
I don’t understand some course material because I don’t listen carefully.
My mind wanders a lot when I study.
I stop periodically while reading and mentally go over or review what was said.