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THE POSITIVE AND NEGATIVE EFFECTS OF SIGNIFICANT RELATIONSHIPS

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GRADUATE STUDENTS AND STRESS:  
THE POSITIVE AND NEGATIVE EFFECTS OF SIGNIFICANT RELATIONSHIPS

A THESIS APPROVED FOR THE  
DEPARTMENT OF HUMAN RELATIONS

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## Chapter 1

### Introduction

Goode (1960) proposed that human energy is a fixed and limited resource and individuals may be at risk for role strain whenever their resources to manage a stressful situation are limited or depleted. Stress has also been shown to be a predictor of psychological distress (Morrison & O'Connor, 2005). Empirically, women have been found to experience more stress than men (Cinamon & Rich, 2002; Dusselier, Dunn, Wang, Shelley II, & Whalen, 2005; Misra & McKean, 2000). Comparitively, single females, who are working full-time and in a non-committed relationship, reported higher stress (Hudson & O'Regan, 1994). Women experience more anxiety, depression, and self-imposed stress than men (Andrews & Wilding, 2004; Cinamon & Rich, 2002; Coombs & Fawzy, 1982). Research has shown medical school to be more stressful for a single adult student than their married colleagues, who have decreased daily tensions offset due to emotional support from their significant other (Coombs & Fawzy, 1982).

Averill (1973) defined the degree to which a task or event is controllable or predictable as stress. As a student, the individual is often in a subordinate and vulnerable position towards professors and administrators in regards to individual course assignments, projects, and group assignments. College students with low self-esteem, little partner support, and low relationship satisfaction are more likely to report stress (Norton, Thomas, Morgan, Tilley, & Dickens, 1998). Usually, students' intense feelings of stress are related to role ambiguity, role strain, and role overload (Dziegielewski, Turnage, & Roest-Marti, 2004). Rogers (2003) found stress can contribute "... to

withdrawal or hostility in interaction, dissatisfaction with the roles, and lowered role performance” (p. 482) for married adults.

In addition, stress has been defined as the behavioral adjustments a person makes due to physical and psychological changes (Reece & Brandt, 2005). Stress can be seen as a positive by stimulating a cognitive motivation to complete a task to the best of one’s ability or by providing the physical impetus needed to complete a task in a timely manner. Frequently, stress that persists over time is associated with negative effects on both health and behavior. Holmes and Rahe’s (1967) research annotated the negative impact stressors had to the onset of illness. Physically, stress can affect an individual through headaches (Degges-White, Myers, Adelman, & Pastoor, 2003), sleep disturbances (Buboltz, Brown, & Soper, 2001; Deckro et al., 2002; Sadeh, Keinan, & Daon, 2004), an increase risk of disease (S. Cohen, Frank, & Doyle, 1998), and a decrease in immune system function (S. Cohen, Frank, & Doyle, 1998).

Psychologically, stress has been related to anxiety (Rawson & Bloomer, 1994), depression (Andrews & Wilding, 2004), and unhealthy behaviors such as alcohol and drug abuse (Dyrbye, Thomas, & Shanafelt, 2005; Tate, Brown, Glasner, Unrod, & McQuiad, 2006). Research into suicidal ideation and hopelessness (Dixon, Rumsford, Heppner, & Lips, 1992) has also been linked to stress.

Clearly, prolonged levels of stress can negatively impact the functional capabilities of individuals. Negative experiences in one role can leave an individual with feelings of frustration, depression, and ineffectiveness in other roles (Rogers, 2003). Therefore, the negative and positive effects of one role can influence other roles and can be an important area for research.

Graduate students who are involved in a significant relationship face the same academic challenges as their single peers. Research by Phinney and Haas (2003) has shown that students who have a strong social support system in conjunction with educational pursuits experience a greater sense of self-efficacy, self-confidence, and self-determination. Consequently, these students believed they were more successful in their academic endeavors in that they are better able to cope with stressful experiences. Phinney and Haas' (2003) research with college students showed self-efficacy and social support were more important to coping with stress than being proactive, having positive reframing, or acceptance of the stressful situation. The least effective coping mechanism used by students was distance and avoidance of the stressor.

Although full- and part-time students spend similar amounts of time with their families (Rickinson & Rutherford, 1995), female students reported the use of emotional support and positive reframing at higher levels than male students (Moffat, McMonnachie, Ross, & Morrison, 2004). In contrast, men appeared to benefit more from leisure activities (Misra & McKean, 2000). Men also had a higher propensity of significant alcohol and drug use (Moffat, McMonnachie, Ross, & Morrison, 2004). Discrepancies between the coping styles of women and men can put student marriages at a high risk for divorce coinciding with graduation (Scheinkman, 1988).

Likewise, experiences of success in one role can contribute to feelings of competence, enjoyment, and stimulation in another role. These role successes contribute to greater performance in regards to interaction and role satisfaction in other roles (Rogers, 2003). In the same manner, students in a committed relationship must negotiate academic responsibilities with the needs of their significant other. Indeed, it is not

unreasonable to consider the needs or stressors between school and relationship as often in conflict, thus creating negative physical and psychological functioning among students.

### *Purpose of the Study*

The purpose of this study is to investigate the factors related to psychological strain experienced by graduate students and the subsequent association with life satisfaction and school satisfaction.

### *Significance of the Problem*

Students who matriculate through colleges and universities will, at some point, experience stress in regards to academic performance, intra- and inter-personal support, and role conflict (Ross, Niebling, & Heckert, 1999). Within these areas of stress, student services/affairs should seek to address the growing number of students who are matriculating towards a higher education while negotiating an emotionally satisfying significant relationship. Thus, the importance of relational interference or enhancement to alleviate stress is very important to the development of student support programs.

With divorce rising in America, universities and colleges should consider supporting students with significant others to face the stressors inherent in graduate school. Research shows that women who are pursuing an education beyond the traditional mark of bachelor's degree are the most likely to suffer marital disruption (Houseknecht & Spanier, 1980). If a student is to be successful in his or her academic endeavors, a holistic approach to providing services for a student should be established. Thus, it is essential for student support offices to know the needs of the students in significant relationships to ensure the appropriate services are offered.

## Chapter 2

### Review of Literature

The present review is limited to investigations of students matriculating through an undergraduate or graduate program of study. The literature review will include two areas: (a) a synthesis of the theoretical foundations of role strain, role expectations, and role conflicts with supporting empirical research and (b) emerging questions from the research. Studies targeting significant romantic relationships are the primary focal point.

#### *Synthesis of the Literature*

Most graduate students experience role strain (Goode, 1960), role expectations (McRoy & Fisher, 1982), and role conflicts (Rohr, Rohr, & McKenry, 1985) at the onset of graduate school or throughout their course of study.

Goode's (1960) theory of role strain proposed that "... the individual cannot satisfy fully all demands, and must move through a continuous sequence of role decisions and bargains, by which he attempts to adjust these demands" (p. 495). Similarly, Snoek (1966) defined role strain as "... the requirement to maintain working relationships with persons in a wide variety of complementary roles" (p. 363).

As a graduate student, the individual may experience multiple roles within the family structure. Goode's 1960 article also stated that role strain may occur because individuals have a finite sum of resources and those resources diminish with each additional obligation placed upon the individual. The individual's obligations must first be met at the most immediate level of the family system where it is assumed concessions and sympathy are extended; otherwise, if an individual accepts a role outside the family structure, greater role strain may be experienced.

Choosing the role of student by studying for an exam or working on an upcoming assignment rather than the needs of the relationship partner or child can sometimes be a difficult decision. Research has shown that women have a desire to meet the demands of each role (e.g. wife, mother, student) but receive less support in those roles (Mallinckrodt & Leong, 1992). Role strain can, therefore, occur in "... situations where individuals are unevenly committed to a series of roles" (Gerson, 1985, p. 79). Since Goode (1960) defined role strain to include "... difficulty in meeting given roles demands" (p. 485) as normal, graduate students could, therefore, encounter difficulty in their perceptions of role salience. Salience is the most prominent role an individual experiences within a given situation (Stryker, 1994).

In contemporary urban society, men and women adopt varying degrees of traditional masculine and feminine roles and responsibilities within the family structure. Role conflict can occur when conflicting expectations among meaningful multiple roles (Sieber, 1974) are placed upon an individual. According to Rozario, Morrow-Howell, and Hinterlong (2004), the addition of roles can be a strain upon an individual and "... emphasizes that there are internal and external role expectations, which may result in conflicting role expectation" (p. 415). Role expectations in conjunction with role strain could potentially add to the stress experienced by a student.

Similarities or dissimilarities of social characteristics at the time of marriage can lead to marital adjustment or marital dissolution (Bumpass & Sweet, 1972). Evolving roles and expectations can be a potential stressor for graduate students. Research has shown that work and family roles can affect each other either positively or negatively

(Rapoport & Rapoport, 1965). Hence, the addition of the student role to this structure can add strain to the graduate student and his or her family.

In a traditional family structure in the US, husbands with less education than their wives had a negative perception of their wives enrollment in higher education programs (Suitor, 1988). Bumpass and Sweet (1972) suggest the extent to which husbands and wives hold similar backgrounds coincides with a higher probability of marital satisfaction due to a consensus on life goals, priorities, and similar marital role expectations.

Conversely, their research showed the discrepancy between education levels can lead to marital distress among husbands and wives who hold dissimilar backgrounds. Seminal research by Houseknecht and Spainer (1980) has shown that marital distress is higher for women with more than 5 years of college education, which may suggest "... dissimilar values, norms, and goals by which to structure their own marital interaction" (p. 387). Current research by Jose and Alfons (2007) concluded similar results for highly educated women.

Additionally, Guldner (1978) found spouses, most usually men, to have heightened emotional and jealous reactions to their partner's new independence thereby increasing the role strain felt by the student spouse. Research has shown married female students to have higher levels of role strain and higher reports of "... poor health, lack of emotional support from the family, and lower levels of marital satisfaction" (Van Meter, 1982, p. 134). Barrett and Baruch (1985) found married mothers experienced more role strain suggesting that they tend to impose more rigid standards for themselves in the roles of mother and wife. However, Seiber (1974) identified four positive outcomes of having

multiple active roles: "... (1) role privileges, (2) overall status security, (3) resources for status enhancement, (4) enrichment of the personality and ego gratification" (p. 569).

Van Meter and Agronow (1982) found married women experienced greater emotional support and child care support if the role of wife is salient to her student role. While most husbands tended to be "... unhappy about their increase participation in household labor and child care"(Suitor, 1987, p. 327), husbands in a relationship in which the wife has obtained a higher education viewed their wives return to school with both reservation and enthusiasm. Their husband's reservations stemmed from the concern that the wives increased self-confidence, which came from her academic achievements, would have a negative effect on their marriage (Bergen & Bergen, 1978). However, they also believed her increased education would generate a higher family income (Suitor, 1988). The opposite effect has been observed in a family structure where the male is well-educated; the men believe there will be no change to the family's income status (Suitor, 1988).

Barnett and Baruch (1985) found women must strike a balance between rewards and concerns with respect to their family roles to avoid symptoms of anxiety. In like manner, Sisca, Walsh, and Walsh (1985) found that "... positive and meaningful involvement with other people is necessary for the healthy functioning of human beings" (p. 66). Within the family structure, research shows the amount of support given to a spouse is related to marital satisfaction (Kerns & Turk, 1984). Essentially, if a student has a positive relationship with their spouse, the spouse provides more support for the spouse in the student role (Norton, Thomas, Morgan, Tilley, & Dickens, 1998). This perceived support acts as a buffer to stress (Katz, Monnier, Libet, Shaw, & Beach, 2000;

Norton, Thomas, Morgan, Tilley, & Dickens, 1998), reduces tension (Coombs & Fawzy, 1982), alleviates strain (Berkove, 1979; Van Meter, 1982), raises self-esteem (Norton, Thomas, Morgan, Tilley, & Dickens, 1998), and correlates with marital and life satisfaction (Coombs & Fawzy, 1982; Katz, Monnier, Libet, Shaw, & Beach, 2000).

At the same time, graduate school can have a negative effect on student marriages (Scheinkman, 1988). During the second year of graduate school, the non-student spouse can become resentful of added household responsibilities (Norton, Thomas, Morgan, Tilley, & Dickens, 1998), lack of time spent together as a couple due to extended periods of academic study (Legako & Sorenson, 2000), and loss of the dominant position in the home (Suitor, 1988). Often, family structures in which both spouses are students have higher marital satisfaction (Brannock, Litten, & Smith, 2000) than marriages in which only the wife is a student (Bergen & Bergen, 1978).

Psychological distress is very prevalent on college campuses (Deckro et al., 2002). Stress has been found to be among the foremost impediments to academic performance (Finkelstein, Brownstein, Scott, & Lan, 2007). Research by Andrews and Wilding (2004) found anxiety, time management, and satisfaction with leisure activities can be used to predict academic stress. From existing research, women have been shown to experience a higher prevalence of academic stress (Campbell, Severson, & Jarvis, 1992) and have better time management skills (Misra & McKean, 2000) than men. Whereas, men had more difficulty relating to exam performance (Andrews & Wilding, 2004; Shirom, 1986) than women. Men, in particular, experienced a higher satisfaction with leisure activities (Misra & McKean, 2000) with women having better coping skills (Moffat, McMonachie, Ross, & Morrison, 2004). Financial and emotional distress can

likewise contribute to low academic performance (Andrews & Wilding, 2004; Moffat, McMonnachie, Ross, & Morrison, 2004), academic dishonesty and cynicism (Dyrbye, Thomas, & Shanafelt, 2005).

For both men and women, researchers found coping mechanisms can be enabled through prevention strategies (Hammer, Grigsby, & Woods, 1998) such as providing workshops and seminars specific to graduate students' needs (e.g. stress and time management), appropriate support systems (Szulecka, Springett, & de Pauw, 1987), and health education intervention (Andrews & Wilding, 2004; Campbell, Severson, & Jarvis, 1992).

In 2000, Legako's research showed that the accumulation of stress during graduate study can have a detrimental effect on a marriage. In fact, Norton (1998) found an inverse relationship between high levels of stress and marital satisfaction for students. For women, Coser and Rokoff (1971) found that family roles were expected to take precedence whenever there were conflicting demands by non-family roles. When women placed more emphasis on their family role, their husbands were found to be more supportive of the academic requirements (Van Meter, 1982). When women placed more emphasis on the student role, their husbands became disappointed and frustrated with their wives household role (Perlin & Turner, 1987; Sutor, 1987).

#### *Hypotheses for Research Model*

A review of existing literature exposes a number of stressors that are experienced by graduate students during their matriculation through graduate school. The first and most notable observation from the research is that stress on graduate students directly affects all aspects of their lives (Misra & McKean, 2000). Relationships, achievement,

work and personal issues are influenced by the degree of both academic and relational stress placed upon students (Grace, 1997). Each piece of literature examined the effects of school stress on the individual student and the effect upon their lives outside of course work.

Thus, for the purpose of this study, life satisfaction may be defined as an individual's perception of his or her life based on a cognitive judgment of self-imposed standards relative to perceived norms (Diener, Emmons, Larsen, & Griffin, 1985). Similarly, school satisfaction can be defined as internally-motivated academic related outcomes.

Psychological strain is assessed using Goldberg's GHQ-12 (1978) to identify minor psychiatric disorders. The GHQ-12 evaluates two dimensions: (1) an individual's inability to function in daily tasks, and (2) the emergence of new psychological distress.

Social or familial support for a student can be observed as a positive or negative influence. Family enhancement and family interference include the dimensions of time, energy, strain, and behavior upon an individual (Sloan, 2000) in relation to both school and non-school situations .

Role commitment is defined by the expected attention to parental, marital, and homecare commitment roles. Role expectations stemming from role stress can be used to predict involvement in different roles. These expectations include beliefs and attitudes concerning the amount of personal resources, such as time and energy, needed to effectively fulfill a role. The items taken used in this survey are designed to measure individuals who are anticipating or who are currently engaged in life roles (Amatea, Cross, Clark, & Bobby, 1986).

These constructs along with the review of literature has prompted the following series of hypotheses concerning the quality of life for graduate students.

*H<sub>1</sub> Life satisfaction will be related to lower psychological strain and higher family support.*

*H<sub>2</sub> School satisfaction will be related to lower psychological strain and higher family support.*

*H<sub>3</sub> The relationship between psychological strain and role commitment will be mediated by family support system.*

*H<sub>4</sub> Family enhancement will increase as role commitment increases.*

*H<sub>5</sub> Family interference will increase as role commitment decreases.*

## Chapter 3

### Method

#### *Sample*

The sample for this study included 133 (24 male, 109 female) students attending a comprehensive university located in the southern plains of the United States during the spring semester of 2007. The study was comprised of 15.3% (n=20) undergraduates and 84.7% (n=111) graduates. Missing data was not corrected using mean substitution in SPSS.

In regards to relationship status, 107 (80.5%) of the respondents reported that they were married or involved in a significant relationship. Among men, 66.7% were married or in a significant relationship and 33.3% were not. Among women, 83.5% were married or in a significant relationship and 16.5% were not. Of those students surveyed, 33.8% reported having at least one child under the age of 18 in the home. Among men, 33.3% had children and 66.7% did not. Among women, 33.9% had children and 66.1% did not.

The overall average age of the participants was 32.65 years (SD = 9.85). Male respondents ranged in age from 22 to 58 years ( $\bar{x}$  = 34.67; SD = 10.12); female respondents ranged in age from 20 to 62 ( $\bar{x}$  = 32.21; SD = 9.79). Of the 133 individuals who identified their ethnicity, 82% indicated being Caucasian followed by 7.5% Native American, 4.5% Hispanic, 3.8% African-American, and 2.3% Asian.

One hundred and thirty respondents indicated their college affiliation. Of these, 38.5% was in the College of Arts and Sciences, 20.8% was in the College of Pharmacy, 14.6% was in the College of Allied Health, 12.3% was in College of Nursing, and 8.5%

was in the College of Education, 1.5% was reported from the College of Architecture, the College of Engineering, and the College of Public Health. On average, 64.7% were receiving student loans and 35.3% were not. Additionally, 71.7% were employed full-time or part-time, 3.1% were self-employed, and 25.2% were unemployed or retired.

### *Procedures*

The researcher contacted the Office of Student Affairs, to obtain a letter of support (see Appendix A) for the research project. After the letter of support was received, the researcher submitted an IRB application to begin the study. Once IRB had granted permission (see Appendix B) to begin the study, the researcher sent a scripted e-mail in accordance with the university's IRB policy to the Office of Student Affairs that detailed the purpose of the study and asked for participation from interested students. A scripted email (see Appendix C), written by the researcher, was sent to all students (N= 1440) enrolled at the university for the current semester from the Office of Student Affairs. Those agreeing to participate in the survey were directed to a website hosting the questionnaire. Upon agreeing to an electronic version of an informed consent statement (see Appendix D), participants could complete the survey (see Appendix E) anonymously. Responses were received from 144 individuals; of these, 133 responses, representing roughly 9.2% of the sample contacted, produced usable data.

### *Measures*

All scales were presented with a Likert-Type response format and scored such that high scores reflect high levels of either positive (e.g., life satisfaction) or negative (e.g., role stress) perceptions.

*Role salience* was assessed using three dimensions (Parent Role Commitment, Marital Role Commitment, and Homecare Role Commitment) of the Life Role Salience Scale (Amatea et al., 1986). Parental Role Commitment was assessed using five items ( $\bar{x} = 21.54$ ;  $SD = 4.13$ ;  $\alpha = .85$ ). A sample item from the Parental Role Commitment dimension is, “My life would be empty if I never had children.” Marital Role Commitment was assessed using five items ( $\bar{x} = 20.08$ ;  $SD = 3.75$ ;  $\alpha = .78$ ). A sample item from the Marital Role Commitment dimension is, “Really involving myself in a relationship involves costs in other areas of my life which I am unwilling to accept.” Homecare Role Commitment was assessed using four items ( $\bar{x} = 17.98$ ;  $SD = 3.28$ ;  $\alpha = .79$ ). A sample item from the Homecare Role Commitment dimension is, “I expect to be very much involved in caring for a home and making it attractive.” Respondents were given a five point Likert-type response format (1=Disagree: 5= Agree). The terms “marriage” and “spouse” were replaced respectively with “significant relationship” and “partner.” One item (“Devoting significant amount of my time to managing and caring for a home is not something I expect to do.”) was removed from the Homecare Role Commitment dimension to enhance its reliability.

*Family- to-School Interference* was assessed with nine items ( $\bar{x} = 15.06$ ;  $SD = 4.40$ ;  $\alpha = .84$ ) adapted from the Sloan Work-Family Researchers Electronic Network (2000) using a four point Likert-type response format (1=Rarely: 4=Most of the time). Students were asked to respond to statements based on interference experienced during the past three months. A sample item is, “My family or personal life drained me of the energy I needed to complete responsibilities at school.”

*Family-to-School Enhancement* was assessed with seven items ( $\bar{x} = 17.18$ ;  $SD = 4.44$ ;  $\alpha = .81$ ) adapted from the Sloan Work-Family Researchers Electronic Network (2000) using a four point Likert-type response format (1=Rarely: 4=Most of the time). Again, students were asked to respond to statements based on enhancements experienced during the past three months. A sample item is, “I was in a better mood at school because of my family or personal life.”

*Psychological Strain* was assessed with the General Health Questionnaire-12 developed by Goldberg (1978) using a four point Likert-type response format. The 12 items ( $\bar{x} = 26.22$ ;  $SD = 5.43$ ;  $\alpha = .86$ ) measured symptoms associated with minor psychological distress. Permission was granted to the researcher by the publisher to use this copyrighted scale (see Appendix F).

*Life Satisfaction* was assessed with five items ( $\bar{x} = 24.07$ ;  $SD = 7.30$ ;  $\alpha = .91$ ) from the Satisfaction with Life Scale (Diener et al., 1985) using a seven point Likert-type response format (1=Strongly Disagree: 7=Strongly Agree). A sample item is, “If I could live my life over, I would change almost nothing.”

*School Satisfaction* was assessed with four items ( $\bar{x} = 17.14$ ;  $SD = 2.45$ ;  $\alpha = .83$ ) adapted from a previously developed scale by Greenhaus, Parasuraman, and Wormly (1990). Students responded using a five point Likert-type response format (1=Strongly Disagree: 5=Strongly Agree). A sample item is, “I am satisfied with the progress I have made toward meeting my overall educational goals.”

## Chapter 4

### Results

#### *Assumption Tests*

In order to test the hypotheses for this study, a series of multiple regression analyses were computed. However, prior to discussing these findings it is appropriate to test the statistical assumptions of regression (Ethington, Thomas, & Pike, 2002; Pedhazur, 1997). In order to test the assumption of linearity, scatter plots were computed between the dependent and independent variables. After examining scatter plots of scores for the independent and dependent variables, it was determined the assumption of linearity was not significantly violated.

The second assumption is to check for measurement error. Cronbach's alpha, a measure of internal consistency, is a lower bound estimate of measurement error (Gay, Mills, & Airasian, 2006). Score reliability estimates for each scale resulted in coefficient alpha's ranging from a low of .78 to a high of .91 suggesting acceptable levels measurement error and no significant violation of the second assumption.

Mean independence, looking at residuals for normal distribution ( $\bar{x} = 0$ ;  $SD = 1$ ), is assumption three. Mean independence for each dependent variable was examined after converting raw scores to z-scores. The observed mean of these z-scores was  $\bar{x} = 0$  with a standard deviation ranging from  $SD = 0.96$  to  $SD = 0.98$ . It was determined that this assumption had not been significantly violated.

Homoscedasticity for the dependent variables in the study is the fourth assumption and is defined as equal variance of residuals surrounding the regression line (Ethington, Thomas, & Pike, 2002). Standardized scatter plots of predicted and residual

values were used to assess homoscedasticity. The points were congruent suggesting variance of residuals was constant. A slight linear trend was observed at the extreme residual of -2.9 for the dependent variable Life Satisfaction. Overall, these findings suggest non-correlation of error. For the dependent variable School Satisfaction, an extreme score of -3.0 was observed but found to be within the acceptable range of standard population deviations (Gay, Mills, & Airasian, 2006). For the dependent variable GHQ-12, all residual scores fell within  $\pm 2.2$  standard deviations. With the above tests considered as a whole, I argue this assumption for regression has not been significantly violated.

Assumption five, uncorrelated errors, is used more for longitudinal studies and does not usually apply to cross-sectional studies. However, uncorrelated errors were assessed using scatter plots. The points were clustered relatively close to the regression line suggesting that variance of errors is relatively constant. Therefore, this assumption was assumed to have not been violated.

The sixth and last assumption, normally distributed errors, was assessed by graphing predicted scores against residuals scores for all dependent variables: Life Satisfaction, School Satisfaction, and Psychological Strain. Again, due to the tightness of residuals to the regression line, it was determined that this assumption for regression had not been violated. Based upon this information as a whole, I argue that the assumptions for regression have not been significantly violated.

### *Outliers*

Frequencies were computed for five variables: Sloan FE, Sloan FI, GHQ-12, Life Satisfaction, and School Satisfaction. First, raw scores were transformed into z-scores.

Second, a rank order of extreme scores, a z score of  $\pm 3.0$  (Gay, Mills, & Airasian, 2006), was tabulated for the five variables above. Third, an excel spreadsheet was created using the outliers from the second step and arranged according to the research model. Once the model was completed, the two extreme outliers were found.

One outlier was found with a score of  $z = 3.4$  on the Sloan FI scale. Additionally, a second outlier ( $z = -4.14$ ) was observed on the school satisfaction scale. However, the researcher believes the second outlier observed on the school satisfaction scale should be considered as a reasonable and acceptable response to the extreme scores measured with the Sloan FI ( $z = 2.26$ ) and the GHQ-12 ( $z = 2.35$ ).

#### *Distribution Characteristics*

The distribution of scores for the dependent variable school satisfaction had a range from 7 to 20. The mean of the distribution of the dependent variable school satisfaction was 17.14 (SD = 2.45; SE = .22), the median 17, and the mode 16. The distribution was negatively skewed ( $-0.921$ ; SE = 0.214) with kurtosis = 1.558 (SE = 0.425). The additional dependent variable of life satisfaction had a range of 5 to 35. The mean of the distribution of the dependent variable life satisfaction was 24.07 (SD = 7.29; SE = .64) and the median 26; the distribution was bi-modal (26, 32). The distribution was negatively skewed ( $-0.506$ ; SE = 0.214) with kurtosis =  $-0.547$  (SE = 0.425). Additional variable distribution is reflected in Table 1. Based upon information from the assumptions tests and distribution characteristics, it is appropriate to test the hypotheses using correlation and a series of multiple regressions.

Table 1. Distribution Characteristics

Scale	Mean	SD	Range		Skewness		Kurtosis	
			Minimum	Maximum	Statistic	SE	Statistic	SE
School Satisfaction	17.14	2.45	7	20	-.921	.214	1.558	.425
Life Satisfaction	24.07	7.29	5	35	-.506	.214	-.547	.425
Family Enhancement	26.22	5.43	17	40	.523	.213	-.315	.423
Family Interference	17.17	4.44	9	28	.236	.214	-.496	.425
Psychological Strain	15.06	4.40	9	30	.813	.215	.493	.427

*Hypotheses Testing*

In order to test the hypothesis stated in this study, zero-order correlations were examined in combination with results of multiple regressions (J. Cohen, 1990; Courville & Thompson, 2001; Hoyt, Leierer, & Millington, 2006). Table 2 displays the zero-order correlation matrix for the variables of interest in the current study. Internal consistency reliability (Cronbach’s Alpha) scores are reported on the diagonal.

Table 2. Zero-Order Correlations

Scale	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. Home Commitment	17.98	3.28	.80										
2. Home Reward	20.71	3.72	.67	.86									
3. Marital Commitment	20.08	3.75	.33	.27	.78								
4. Marital Reward	17.11	5.39	.19	.27	.50	.89							
5. Parent Role Commitment	21.54	4.14	.21	.06	.29	.08	.85						
6. Parental Reward	20.77	4.89	-.02	-.09	.21	.17	.79	.88					
7. School Satisfaction	17.14	2.45	.22	.17	.16	.02	-.06	-.10	.83				
8. Life Satisfaction	24.07	7.30	.31	.26	.44	.37	-.08	.10	.49	.91			
9. Family Enhancement	17.18	4.44	.18	.09	.40	.30	-.04	-.17	.38	.48	.81		
10. Family Interference	15.06	4.40	-.11	-.07	-.19	-.10	.01	.10	-.33	-.29	-.35	.84	
11. Psychological Strain	26.22	5.43	-.18	-.18	-.22	-.13	.10	-.05	-.41	-.50	-.36	.49	.86

\*Cronbach's Alpha Reliability reported on the diagonal.  $r + \text{or} - \geq .19$   $p < .05$

The first hypothesis stated *life satisfaction will be related to lower psychological strain and higher family support*. A medium-sized moderate negative correlation was observed between psychological strain and life satisfaction ( $r = -.50; p < .05$ ). Also, family enhancement was observed as having a moderate, positive medium-sized correlation with life satisfaction ( $r = .48; p < .05$ ), while family interference had a small negative correlation with life satisfaction ( $r = -.29; p < .05$ ).

Furthermore, the amount of variance explained by the full model is 37% [ $R^2 = .369; F(3, 121) = 23.54; p < .05$ ] and is statistically significant. As illustrated in Table 3, the standardized beta coefficients for psychological strain ( $\beta = -.383; p < .05$ ) and family enhancement ( $\beta = .386; p < .05$ ) were statistically significant with regards to the context of the sample population and life satisfaction. Thus,  $H_1$  was partially supported.

Table 3. Regression Coefficients for Life Satisfaction

Variable	Beta	SE Beta	$\beta$	T-Value	Sig. T
Constant	25.09	4.381		5.728	.000
Psychological Strain	-.516	.114	-.383	-4.522	.000
Family Interference	.096	.142	.058	.679	.498
Family Enhancement	.635	.131	.386	4.831	.000

$R^2 = .369, F(3, 121) = 23.54; p < .05$  Adjusted  $R^2 = .353$

The second hypothesis stated *school satisfaction will be related to lower psychological strain and higher family support*. A medium-sized negative correlation was observed between psychological strain and school satisfaction ( $r = -.41; p < .05$ ). Also, a medium-sized positive correlation ( $r = .38; p < .05$ ) existed between family

enhancement and school satisfaction, and a medium-sized negative correlation was noticed between family interference and school satisfaction ( $r = -.33; p < .05$ ).

Furthermore, the amount of variance explained by the full model is 25% [ $R^2 = .247; F(3,121) = 13.197; p < .05$ ] and is statistically significant. As shown in Table 4, the standardized beta coefficients for psychological strain ( $\beta = -.268; p < .05$ ) and family enhancement ( $\beta = .271; p < .05$ ) were statistically significant with regards to the context of the sample population and school satisfaction. Thus,  $H_2$  was partially supported.

Table 4. Regression Coefficients for School Satisfaction

Variable	Beta	SE Beta	$\beta$	T-Value	Sig. T
Constant	18.482	1.607		11.502	.000
Psychological Strain	-.121	.042	-.268	-2.899	.004
Family Interference	-.049	.052	-.087	-.936	.351
Family Enhancement	.150	.048	.271	3.107	.002

$R^2 = .247, F(3, 121) = 13.197; p < .05$  Adjusted  $R^2 = .228$

The third hypothesis stated *the relationship between psychological strain and role commitment will be mediated by family support system*. A medium-sized negative correlation was observed between family enhancement and psychological strain ( $r = -.36; p < .05$ ). Additionally, a medium-sized positive correlation was noted between family interference and psychological strain ( $r = .49; p < .05$ ).

In addition, the amount of variance explained by the regression model is 34% [ $R^2 = .338; F(5,72) = 7.339; p < .05$ ] and is statistically significant. As seen in Table 5, the standardized beta coefficients for family interference ( $\beta = .432; p < .05$ ) and family

enhancement ( $\beta = -.263; p < .05$ ) were statistically significant with regards to the context of the sample population and psychological strain. Thus, H<sub>3</sub> was partially supported.

Table 5. Regression Coefficients for Psychological Strain

Variable	Beta	SE Beta	$\beta$	T-Value	Sig. T
Constant	24.559	5.054		4.859	.000
Family Interference	.530	.123	.432	4.315	.000
Family Enhancement	-.346	.145	-.263	-2.385	.020
Parental Role Commitment	.076	.151	.053	.501	.618
Marital Role Commitment	-.042	.177	-.028	-.240	.811
Homecare Role Commitment	-.053	.179	-.031	-.294	.770

$R^2 = .338, F(5, 72) = 7.339; p < .05$  Adjusted  $R^2 = .292$

The fourth hypothesis stated *family enhancement will increase as role commitment increases*. As reported in Table 2, there was a statistically significant, medium-sized, positive correlation between family enhancement and the marital role commitment dimension ( $r = .40; p < .05$ ). However, there was not statistically significant correlations found between family enhancement and the homecare role commitment dimension ( $r = .18; p > .05$ ) or the parental role commitment dimension ( $r = -.04; p > .05$ ).

As presented in Table 6, the amount of variance explained by the regression model is 19% [ $R^2 = .186; F(3, 75) = 5.717; p < .05$ ] and is statistically significant. The standardized beta coefficients for marital role commitment ( $\beta = .405; p < .05$ ) was statistically significant with regards to the context of the sample population and family enhancement. Thus, H<sub>4</sub> was partially supported.

Table 6. Regression Coefficients for Family Enhancement

Variable	Beta	SE Beta	$\beta$	T-Value	Sig. T
Constant	9.171	3.279		2.797	.007
Parental Role Commitment	-.182	.115	-.173	-1.576	.119
Marital Role Commitment	.462	.132	.405	3.487	.001
Homecare Role Commitment	.127	.147	.099	.864	.391

$R^2 = .186$ ;  $F(3, 75) = 5.717$ ;  $p < .05$  Adjusted  $R^2 = .154$

The final hypothesis involved in this study stated *family interference will increase as role commitment decreases*. As reported in Table 2, there was not statistically significant correlations between family interference and the marital role commitment dimension ( $r = -.11$ ;  $p > .05$ ) or the homecare role commitment dimension ( $r = -.19$ ;  $p > .05$ ) or the parental role commitment dimension ( $r = .01$ ;  $p > .05$ ).

As detailed in Table 7, the amount of variance explained by the regression model is only 4% [ $R^2 = .042$ ;  $F(3, 74) = 1.075$ ;  $p < .05$ ] and was not statistically significant with regards to the context of the sample population and family interference. Thus,  $H_5$  was not supported.

Table 7. Regression Coefficients for Family Interference

Variable	Beta	SE Beta	$\beta$	T-Value	Sig. T
Constant	20.228	3.852		5.251	.000
Parental Role Commitment	.050	.142	.043	.354	.724
Marital Role Commitment	-.220	.156	-.180	-1.406	.164
Homecare Role Commitment	-.092	.171	-.067	-.538	.592

$R^2 = .042$ ;  $F(3, 74) = 1.075$ ;  $p > .05$  Adjusted  $R^2 = .003$

## Chapter 5

### Discussion

#### *Purpose of Study*

The purpose of the current study was to investigate the relationship between role commitment, family support systems, psychological strain and the outcomes on life and school satisfaction among a sample of graduate students from a comprehensive university located in the southern plains. Based upon the available literature, five hypotheses were tested using correlations and multiple regressions. Prior to computing the correlations and regression analyses, statistical assumptions for regression were tested and it was determined that these assumptions had not been significantly violated.

The first four hypotheses were only partially supported with regards to the context of the sample and variables involved in this study. This conclusion is based upon the recommendations of Courville and Thompson (2001) who specify that beta weight interpretation is “. . . dependent on having an *exactly* correctly specified model, because adding or deleting a single predictor could radically alter all the weights and thus all the interpretations resulting from them” (p. 231). As recommended by Courville and Thompson, the beta weights were examined in relationship with correlations. Therefore, given the variables included in the study, the correlations were statistically significant and pragmatically meaningful, even when the beta coefficients were not.

J. Cohen (1992) defined effect size, the degree to which  $H_0$  is false ( $r \neq 0$ ), as measured by the discrepancy between the null and the stated hypothesis. Further, J. Cohen (1992) operationalized the Neyman-Pearson product moment correlation into

three distinct categories; the values of the effect size index are .10 for a small, .30 for a medium, and .50 for a large effect size (J. Cohen, 1992) .

Medium-sized, negative correlations were found between satisfaction, life (H<sub>1</sub>) and school (H<sub>2</sub>), and psychological strain. Indeed, higher scores on psychological strain were associated with lower scores on both life and school satisfaction. Research by Hamarat et al.(2001) showed perceived stress was a predictor of life satisfaction among younger adults ages 18-40. Likewise, research by Simons, Aysan, Thompson, Hamarat, and Steele (2002) found both perceived stress for students and the availability of coping resources can be used to predict life satisfaction. Family enhancement was also positively associated to a medium-sized effect with life (H<sub>1</sub>) and school (H<sub>2</sub>), satisfaction. Hence, a positive association was perceived by the student in regards to family support and satisfaction with school.

Family interference was also negatively associated to a small effect with life (H<sub>1</sub>) and a medium-sized effect with school (H<sub>2</sub>) satisfaction. This interference can manifest in many ways, such as a lowering of personal self-esteem (Norton, Thomas, Morgan, Tilley, & Dickens, 1998) and negatively affecting the student's grades (Andrews & Wilding, 2004; Dyrbye, Thomas, & Shanafelt, 2005).

The relationship between family enhancement and life satisfaction was statistically significant. Also, the relationship between family enhancement and school satisfaction was statistically significant. Research on marital satisfaction has shown that women, who place an emphasis on their family, receive higher support in their academic pursuits from their husbands (Van Meter, 1982). Thus, the findings from this study are consistent with previous results and are in congruence with current literature.

The third hypothesis was also partially supported by the medium-sized correlations and standardized betas found in this sample between psychological strain and family support. Family support, positively or negatively, was perceived by the student to influence psychological strain. The three dimensions of role salience (parental, homecare, marital) were not statistically significant for either correlation or regression in relation to the dependent variable psychological strain in the context of this sample population.

The fourth hypothesis was also partially supported by the medium-sized correlations and standardized betas found in this sample between family enhancement and the marital role dimension in the expected direction. This sample of students found the marital role dimension to be enhanced by family support. Empirical research has shown the positive effects that a significant other has on buffering stress (Coombs & Fawzy, 1982; Dyrbye, Thomas, & Shanafelt, 2005; Norton, Thomas, Morgan, Tilley, & Dickens, 1998). The two other dimensions of role salience, homecare and parental, were not statistically significant for either correlation or regression in relation to the dependent variable family enhancement in the context of this sample population.

The fifth hypothesis was not supported by either correlations or regression. Family interference was not shown to have significant correlations with the dimensions of parental, marital or homecare role commitment.

#### *Implications to Practice*

Previous research suggests that a formal orientation (Legako & Sorenson, 2000; Sutor, 1987) as well as counseling (Hooper, 1979) can benefit to a graduate student's significant relationships. Role strain (Goode, 1960) and changing role expectations

(McRoy & Fisher, 1982) often put the student in to role conflict (Rohr, Rohr, & McKenry, 1985) without warning. Research by Suitor (1987) has shown that married women tend to place the family role as more important to the student role at the beginning of her studies; however, toward the end of the first year, the role of student has become most salient. For this study, the type of support from a significant relationship was shown to have an impact on psychological strain along with life and school satisfaction.

With this type of empirically-researched information, universities can broaden their approach to student services. OU-Tulsa has developed a relationship with Family & Children Services, where students are allowed three counseling sessions per semester. This opportunity for counseling is extended to the student as an individual and as part of a couple. By investing in the relational lives of the students, the university can work to better the academic life of the student. Therefore, content specific information could be provided to students to enhance family support in regards to stress and its effect on school and family functioning.

#### *Next Steps*

Oklahoma has one of the highest divorce rates in the United States ("OMI History", n.d.). As a response to the high divorce rate, former Governor Frank Keating established the Oklahoma Marriage Initiative to lower the divorce rate by one-third by 2010. Houseknecht and Spainer's seminal 1980 research showed that the propensity for divorce was higher for women with more than five years of education. While Oklahoma's college-educated population is estimated to be 24%, implementing a program to educate graduate students might help curb divorce rates among higher

education graduates in Oklahoma. Current research shows the correlation between the educational achievement of one spouse and the effects on the non-student spouse in relation to marital distress (Scheinkman, 1988).

Most graduate students are in or have experienced a significant relationship while in school; yet, each graduate student's relationship is unique. The student services/affairs department at universities could address the needs and services offered to these students by implementing changes in the types of programs and services offered to students. Some suggestions for student support programs include individual workshops on time and stress management, family member orientations (Kirby, Biever, Martinez, & Gomez, 2004), and on-site childcare (Hammer, Grigsby, & Woods, 1998). In addition, services needed by the student, such as the bursar and campus bookstore, could be open late one night a week. However, if funding or time is not available, individual graduate programs could begin to offer resources, such as an orientation or organizing a voluntary support group, to their students.

### *Limitations*

In conducting this research project, the researcher encountered several limitations to survey response and test validity. Regarding survey response, there were four conditions observed by the researcher that could have negatively influenced student participation. First, the College of Medicine was inadvertently left off the College Affiliation question. Second, the email was forwarded by the Office of Student Affairs. Because the office sends a large quantity of mass emails to students each day, the students may have not read or seen a direct relevance to the study. Third, the email was sent to undergraduates and graduate students on campus; however, the title of the survey

was “Graduate Students and Stress,” which may have offended or have not seemed of interest to some undergraduates. Fourth, the email linking to the survey was sent during the month of April, a month in which students receive a large number of requests to participate in research opportunities in a short time period.

Additionally, the researcher was unable to pilot test the survey on a group of students prior to sending the actual survey to current students. This time constriction may possibly have had an effect on test reliability and validity. Nevertheless, the test measures themselves had all been used in prior research to this study and subsequent score reliabilities were in the acceptable range.

And lastly, due to a lack of congruence on relationship terminology, the researcher had to simplify the demographic categories for marital status and add a question relating to involvement in a significant relationship. This lack of clarity may have been confusing to individuals whose relationship status was atypical, such as same-sex, cohabitating, or married, separated couples.

### *Conclusion*

While limitations are important to consider, this research supports the idea that students who experience less stress tend to have more success in finding and maintaining significant relationships. In the United States, contemporary society values higher education and the status it provides. While the role of the university does not extend to students’ significant others, it is the responsibility of the university to ensure the holistic wellness of its students. As students matriculate through universities, they are faced with academic as well as relationship challenges. Universities can utilize this information on stress to assist with programs that support graduate students.

## References

- Amatea, E. S., Cross, E. G., Clark, J. E., & Bobby, C. L. (1986). Assessing the work and family role expectations of career-oriented men and women: The life role salience scales. *Journal of Marriage and the Family*, 48(4), 831-838.
- Andrews, B., & Wilding, J. (2004). The relation of depression and anxiety to life-stress and achievement in students. *British Journal of Psychology*, 95(4), 509-521.
- Averill, J. R. (1973). Personal control over aversive stimuli and its relationship to stress. *Psychological Bulletin*, 80(4), 286-303.
- Barnett, R. C., & Baruch, G. K. (1985). Women's involvement in multiple roles and psychological distress. *Journal of Personality and Social Psychology*, 49(1), 135-145.
- Bergen, G. R., & Bergen, M. B. (1978). Quality of marriage of university students in relation to sources of financial support and demographic characteristics. *The Family Coordinator*, 27, 245-250.
- Berkove, G. F. (1979). Perceptions of husband support by returning women students. *The Family Coordinator*, 28(4), 451-457.
- Brannock, R. G., Litten, M. J., & Smith, J. (2000). The impact of doctoral study on marital satisfaction. *Journal of College Counseling*, 3, 123-130.
- Buboltz, J., W.C., Brown, F., & Soper, B. (2001). Sleep habits and patterns of college students: A preliminary study. *Journal of American College Health*, 50(3), 131-135.

- Bumpass, L. L., & Sweet, J. A. (1972). Differentials in marital instability: 1970. *American Sociological Review*, 37(6), 754-766.
- Campbell, R. L., Severson, L., & Jarvis, G. (1992). Perceived level of stress among university students in Concordia College, Edmonton, Canada. *Perception Motor Skills*, 75(2), 552-554.
- Cinamon, R. G., & Rich, Y. (2002). Gender differences in the importance of work and family roles: Implications for work-family conflict. *Sex Roles*, 47(11/12), 531-541.
- Cohen, J. (1990). Things I have learned (so far). *American Psychologist*, 45(12), 1304-1312.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155-159.
- Cohen, S., Frank, E., & Doyle, W. J. (1998). Types of stressors that increase susceptibility to the common cold in healthy adults. *Health Psychology*, 17(3), 214-223.
- Coombs, R. H., & Fawzy, F. I. (1982). The effect of marital status on stress in medical school. *American Journal of Psychiatry*, 139(11), 1490-1493.
- Coser, R. L., & Rokoff, G. (1971). Women in the occupational world: Social disruption and conflict. *Social Problems*, 18(4), 535-554.

- Courville, T., & Thompson, B. (2001). Use of structure coefficients in published multiple regression articles:  $\beta$  is not enough. *Educational and Psychological Measurement, 61*(2), 229-248.
- Deckro, G. R., Ballinger, K. M., Hoyt, M., Wilcher, M., Dusek, J., Myers, P., et al. (2002). The evaluation of a mind/body intervention to reduce psychological distress and perceived stress in college students. *Journal of American College Health, 50*(6), 281-287.
- Degges-White, S., Myers, J. E., Adelman, J. U., & Pastoor, D. D. (2003). Examining counseling needs of headache patients: An exploratory study of wellness and perceived stress. *Journal of Mental Health Counseling, 25*(4), 271-290.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*(1), 71-75.
- Dixon, W. A., Rumsford, K. G., Heppner, P. P., & Lips, B. J. (1992). Use of different sources of stress to predict hopelessness and suicide ideation in a college population. *Journal of Counseling Psychology, 39*(3), 342-349.
- Dusselier, L., Dunn, B., Wang, Y., Shelley II, M. C., & Whalen, D. F. (2005). Personal, health, academic, and environmental predictors of stress for residence hall students. *Journal of American College Health, 54*(1), 15-24.
- Dyrbye, L. N., Thomas, M. R., & Shanafelt, T. D. (2005). Medical student distress: Causes, consequences, and proposed solutions. *Mayo Foundation for Medical Education and Research, 80*(12), 1613-1622.

- Dziegielewski, S. F., Turnage, B., & Roest-Marti, S. (2004). Addressing stress with social work students: A controlled evaluation. *Journal of Social Work, 40*(1), 105-119.
- Ethington, C. A., Thomas, S. L., & Pike, G. R. (2002). Back to the Basics: Regression as it should be. In J. C. Smart (Ed.), *Higher Education: Handbook of Theory and Research* (Vol. 12, pp. 263-294). New York: Agathon Press.
- Finkelstein, C., Brownstein, A., Scott, C., & Lan, Y. (2007). Anxiety and stress reduction in medical education: An intervention. *Medical Education, 41*, 258-264.
- Gay, L. R., Mills, G. E., & Airasian, P. (2006). *Educational Research: Competencies for Analysis and Applications* (8 ed.). Columbus, OH: Pearson.
- Gerson, J. M. (1985). Women returning to school: The consequences of multiple roles. *Sex Roles, 13*(1/2), 77-92.
- Goldberg, D. P. (1978). *Manual of the General Health Questionnaire*. Windsor, England: NFER-Nelson.
- Goode, W. J. (1960). A theory of role strain. *American Sociological Review, 25*(4), 483-496.
- Grace, T. (1997). Health problems of college students. *Journal of American College Health, 45*(6), 243-251.
- Guldner, C. A. (1978). Family therapy for the trainee in family therapy. *Journal of Marriage and Family Counseling, 4*, 127-132.

- Hamarat, E., Thompson, D., Zabucky, K. M., Steele, D., Matheny, K. B., & Aysan, F. (2001). Perceived stress and coping resource availability as predictors of life satisfaction in young, middle-aged, and older adults. *Experimental Aging Research, 27*(2), 181-196.
- Hammer, L. B., Grigsby, T. D., & Woods, S. (1998). The conflicting demands of work, family, and school among students at an urban university. *The Journal of Psychology, 132*(2), 220-226.
- Holmes, T. H., & Rahe, R. H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research, 11*(2), 213-218.
- Hooper, J. O. (1979). My wife, the student. *The Family Coordinator, 28*(4), 459-464.
- Houseknecht, S. K., & Spanier, G. B. (1980). Marital disruption and higher education among women in the United States. *Sociological Quarterly, 21*(3), 375-389.
- Hoyt, W. T., Leierer, S., & Millington, M. J. (2006). Analysis and interpretation of findings using multiple regression techniques. *Rehabilitation Counseling Bulletin, 49*(4), 223-233.
- Hudson, S. A., & O'Regan, J. (1994). Stress and the graduate psychology student. *Journal of Clinical Psychology, 50*(6), 973-977.
- Jose, O., & Alfons, V. (2007). Do demographics affect marital satisfaction? *Journal of Sex and Marital Therapy, 33*(1), 73-85.

- Katz, J., Monnier, J., Libet, J., Shaw, D., & Beach, S. (2000). Individual and crossover effect of stress on adjustment in medical student marriages. *Journal of Marital and Family Therapy*, 26, 341-351.
- Kerns, R. D., & Turk, D. C. (1984). Depression and chronic pain: The mediating role of the spouse. *Journal of Marriage and the Family*, 46(4), 845-852.
- Kirby, P. G., Biever, J. L., Martinez, I. G., & Gomez, J. P. (2004). Adults returning to school: The impact on family and work. *The Journal of Psychology*, 138(1), 65-76.
- Legako, M. A., & Sorenson, R. L. (2000). Christian psychology graduate school's impact on marriage: Nonstudent spouses speak. *Journal of Psychology and Theology*, 28(3), 212-220.
- Mallinckrodt, B., & Leong, F. T. L. (1992). Social support in academic programs and family environments: Sex differences and role conflicts for graduate students. *Journal of Counseling and Development*, 70(6), 716-723.
- McRoy, S., & Fisher, V. L. (1982). Marital adjustment of graduate school couples. *Family Relations*, 31(1), 37-41.
- Misra, R., & McKean, M. (2000). College students' academic stress and its relation to their anxiety, time management, and leisure satisfaction. *American Journal of Health Studies*, 2000(Winter), 20-33.

- Moffat, K. J., McMonnachie, A., Ross, S., & Morrison, J. M. (2004). First year medical student stress and coping in a problem-based learning medical curriculum. *Medical Education, 38*, 482-491.
- Morrison, R., & O'Connor, R. C. (2005). Predicting psychological distress in college students: The role of rumination and stress. *Journal of Clinical Psychology, 61*(4), 447-460.
- Network, S. W.-F. R. E. (2000). *The measurement of work-life tension: Recommendations of a virtual think tank*. Chestnut Hill, MA: Boston College Center for Work and Family.
- Norton, L. S., Thomas, S., Morgan, K., Tilley, A., & Dickens, T. E. (1998). Full-time studying and long-term relationships: Make or break for mature students? *British Journal of Guidance and Counselling, 26*(1), 75-89.
- Oklahoma Marriage Initiative. (n.d.). *OMI History*. Retrieved July 5, 2007, from <http://www.okmarriage.org/ProgramHighlights/MarriageProblems.asp>
- Pedhazur, E. J. (1997). *Multiple regression in behavioral research: Explanation and prediction* (3 ed.). New York: Holt, Rinehart, & Winston.
- Perlin, L. I., & Turner, H. A. (1987). The family as a context of the stress process. In S. V. Kasi & C. L. Cooper (Eds.), *Stress and health: Issues in research methodology* (pp. 143-165). New York: Wiley.

- Phinney, J. S., & Haas, K. (2003). The process of coping among ethnic minority first-generation college freshman: A narrative approach. *Journal of Social Psychology, 143*(6), 707-726.
- Rapoport, R., & Rapoport, R. (1965). Work and family in contemporary society. *American Sociological Review, 30*(3), 381-394.
- Rawson, H. E., & Bloomer, K. (1994). Stress, anxiety, depression, and physical illness in college students. *Journal of Genetic Psychology, 155*(3), 321-330.
- Reece, B. L., & Brandt, R. (2005). *Effective human relations: Personal and organizational applications* (9 ed.). New York: Houghton Mifflin Company.
- Rickinson, B., & Rutherford, D. (1995). Increasing undergraduate student retention rates. *British Journal of Guidance and Counselling, 23*(2), 161-173.
- Rogers, S. J. (2003). Spillover between marital quality and job satisfaction: Long-term patterns and gender differences. *Journal of Marriage and Family, 65*(May), 482-495.
- Rohr, E. G., Rohr, K. G., & McKenry, P. C. (1985). Role conflict in marriages of law and medical school students. *Journal of Legal Education, 56*, 56-64.
- Ross, S., Niebling, B., & Heckert, T. (1999). Sources of stress among college students. *College Student Journal, 33*(2), 312-317.

- Rozario, P. A., Morrow-Howell, N., & Hinterlong, J. E. (2004). Role enhancement or role strain: Assessing the impact of multiple productive roles on older caregiver well-being. *Research on Aging, 26*(4), 413-428.
- Sadeh, A., Keinan, G., & Daon, K. (2004). Effects of sleep on stress: The moderating role of coping style. *Health Psychology, 23*(5), 542-545.
- Scheinkman, M. (1988). Graduate student marriages: An organizational/interactional view. *Family Process, 27*(3), 351-368.
- Shirom, A. (1986). Students' stress. *Higher Education, 15*, 667-676.
- Sieber, S. D. (1974). Toward a theory of role accumulation. *American Sociological Review, 39*(4), 567-578.
- Simons, C., Aysan, F., Thompson, D., Hamarat, E., & Steele, D. (2002). Coping resource availability and level of perceived stress as predictors of life satisfaction in a cohort of Turkish college students. *College Student Journal, 36*(1), 129-141.
- Sisca, S. S., Walsh, A., & Walsh, P. A. (1985). Love deprivation and blood pressure levels among a college population: A preliminary investigation. *Psychology: A Quarterly Journal of Human Behavior, 22*(3/4), 63-70.
- Snoek, J. D. (1966). Role strain in diversified role sets. *American Journal of Sociology, 71*(4), 363-372.
- Stryker, S. (1994). Identity theory: Its development, research base, and prospects. *Studies in Symbolic Interaction, 13*(9), 9-20.

- Suitor, J. J. (1987). Marital happiness of returning women students and their husbands: Effects of part and full-time enrollment. *Research in Higher Education, 27*(4), 311-331.
- Suitor, J. J. (1988). Husbands' educational attainment and support for wives' return to school. *Gender and Society, 2*(4), 482-495.
- Szulecka, T., Springett, N., & de Pauw, K. (1987). General health, psychiatric vulnerability and withdrawal from university in first-year undergraduates. *British Journal of Guidance and Counselling, 15*, 82-91.
- Tate, S. R., Brown, S. A., Glasner, S. V., Unrod, M., & McQuiad, J. R. (2006). Chronic life stress, acute stress events, and substance availability in relapse. *Addiction Research and Theory, 14*(3), 303-322.
- Van Meter, M. J. S., Agronow, S.J. (1982). The stress of multiple roles: The case for role strain among married college women. *Family Relations, 31*(1), 131-138.

## Appendices

Appendix A

Letter of Support – Kathy Seibold, Director of Student Affairs



*The University of Oklahoma*

OU-TULSA STUDENT AFFAIRS

February 26, 2007

Office for Human Research Participant Protection  
660 Parrington Oval  
Evans Hall, Room 316  
Norman, OK 73019

To Whom It May Concern:

This letter verifies that Tara Young is conducting a student survey on our campus as part of her master's thesis in OU's human relations program. The population for the survey is the entire OU-Tulsa student body. Ms Young has presented the conceptual framework and a list of survey questions to me. I am granting her permission to conduct this survey through the Office of Student Affairs. The study is relevant to both human relations and higher education. In particular, it has the potential to contribute significantly to the current literature within student affairs.

Should you have further questions or need additional information, please feel free to contact me. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink that reads "Kathy Seibold".

Kathy Seibold  
Director of Student Affairs, OU-Tulsa  
Schusterman Center  
4502 East 41<sup>st</sup> Street, Room 1C53  
Tulsa, Oklahoma 74135  
Email: [kseibold@ou.edu](mailto:kseibold@ou.edu)  
Phone: (918) 660-3102

Appendix B

University of Oklahoma Internal Review Board Letter of Approval



*The University of Oklahoma*

OFFICE FOR HUMAN PARTICIPANT PROTECTION

**IRB Number: 11638**  
**Category: 2**  
**Approval Date: March 23, 2007**

March 26, 2007

Tara Young  
Human Relations-OU Tulsa  
4502 East 41st Street, SCH-TUL  
Tulsa, OK 74135

Dear Ms. Young:

**RE: Graduate Students and Stress: The Positive and Negative Effects of Significant Relationships**

On behalf of the Institutional Review Board (**IRB**), I have reviewed the above-referenced research project and determined that it meets the criteria in 45 CFR 46, as amended, for exemption from IRB review. You may proceed with the research as proposed. Please note that any changes in the protocol will need to be submitted to the IRB for review as changes could affect this determination of exempt status. Also note that you should notify the **IRB** office when this project is completed, so we can remove it from our files.

If you have any questions or need additional information, please do not hesitate to call the IRB office at (405) 325-8110 or send an **email** to [irb@ou.edu](mailto:irb@ou.edu).

Cordially,

A handwritten signature in black ink, appearing to read "Lynn Devenport".

Lynn Devenport, Ph.D.  
Vice Chair, Institutional Review Board

Lt\_Prov\_Fappor\_X

## Appendix C

### E-Mail Sent to Students

Going to school and maintaining a significant personal relationship can be stressful. I want to know how this stress is affecting your life.

My name is Tara Young. I am an OU-Tulsa Human Relations student. I am conducting a study for my thesis entitled “Graduate Students and Stress: The Positive and Negative Effects of Significant Relationships.” The survey should only take you about 15-30 minutes to complete. Your participation is voluntary [and there is no penalty if you do not participate]. However, your participation is essential in furthering research in this important area. Please take a moment to fill-out the online questionnaire at <http://www.zipsurvey.com/LaunchSurvey.aspx?suid=15968&key=005116EB>

If you have any questions or concerns about completing the questionnaire, you may contact me at 660.3485 or my advisor, Dr. Chan Hellman, at 660.3484. This project has been approved by the Institutional Review Board at The University of Oklahoma.

Thank you for your time and participation in the survey.

## Appendix D

### Informed Consent Letter

**University of Oklahoma  
Institutional Review Board  
Informed Consent to Participate in a Research Study**

**Project Title:** Graduate Students and Stress: The Positive and Negative Effects of Significant Relationships  
**Principal Investigator:** Tara Young  
**Department:** Human Relations

You are being asked to volunteer for this research study. This study is being conducted on the OU-Tulsa campus. You were selected as a possible participant because you are a student who is currently enrolled in classes at OU-Tulsa. Please read this form and ask any questions that you may have before agreeing to take part in this study.

#### **Purpose of the Research Study**

The purpose of this study is to measure the effects of stress upon the significant relationships of OU-Tulsa graduate students.

#### **Number of Participants**

About 1000 people will be asked to take part in this study.

#### **Procedures and Length of Participation**

If you agree to be in this study, you will be asked to respond to an 89-item survey on the internet. The survey should take approximately 15-30 minutes to complete. At anytime the participant wishes to end the survey, the participant may exit the survey.

#### **This study has the following risks:**

There is no degree of risk associated with participation in this study; however, the questions are sensitive in nature and may cause discomfort. Participants will provide information relative to their significant relationships and stresses related to being a graduate student.

### **Benefits of being in the study:**

As a participant, there is the potential for this research to contribute significantly to the current literature within student affairs. Additionally, the results could provide student service organizations with information that may influence program development in areas related to stress reduction for graduate students.

### **Confidentiality**

In published reports, there will be no information included that will make it possible to identify you. The survey being conducted is anonymous. Research records will be stored securely on computer servers operated by a third party provider. The survey will be administered online by an independent company Zip Survey. Individual responses by students will not be accessible by anyone within OU-Tulsa Student Affairs. Only the research team will have access to the data. The OU Institutional Review Board may inspect and/or copy research records for quality assurance and data analysis.

### **Costs and Compensation**

There is neither a cost nor compensatory benefits for participating in this study.

### **Rights**

Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. You can discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled.

### **Voluntary Nature of the Study**

Participation in this study is voluntary. If you decline to participate, you will not be penalized or lose benefits or services unrelated to the study. If you decide to participate, you may decline to answer any question and may choose to withdraw at any time.

### **Contacts and Questions**

If the participant has concerns or complaints about the research, the researcher conducting this study can be contacted at 918.660.3485 or by e-mail to [Tara.L.Young-1@ou.edu](mailto:Tara.L.Young-1@ou.edu). The student's advisor is Dr. Chan Hellman and may be contacted at 918.660.3485 or by e-mail at [chellman@ou.edu](mailto:chellman@ou.edu). Please contact the researcher(s) if you have questions.

If you have any questions, concerns, or complaints about the research and wish to talk to someone other than individuals on the research team or if you cannot reach the research team, you may contact the University of Oklahoma – Norman Campus Institutional Review Board (OU-NC IRB) at 405-325-8110 or [irb@ou.edu](mailto:irb@ou.edu)

***Please print a copy of this information to keep for your records.***

### **Statement of Consent**

By clicking the “I agree to participate” button, I am agreeing to participate in this study. If you choose not to take part in this study, please click the “I do not wish to participate” button below. Thank you.

## Appendix E

### Survey

1. Required
  - I agree to participate
  - I do not wish to participate
2. What is your gender?
  - Male
  - Female
3. What is your age in years?
4. What is your race?
  - African-American
  - Asian
  - Caucasian
  - Hispanic
  - Native American
5. College Affiliation
  - College of Allied Health
  - College of Architecture
  - College of Arts and Sciences
  - College of Education
  - College of Engineering
  - College of Liberal Studies
  - College of Nursing
  - College of Pharmacy
  - College of Public Health
6. Education Level
  - Undergraduate
  - Graduate
7. Number of Hours Currently Enrolled
8. Number of Credit Hours Earned
9. Current G.P.A.
10. Are you receiving students loans to pay for school?
  - Yes
  - No
11. What is your current employment status?
  - Employed full-time
  - Employed part-time
  - Self-employed
  - Unemployed- looking
  - Unemployed- not looking
  - Retired

12. What is the highest level of education attained by your mother?

- Unknown
- Less than 12<sup>th</sup> grade
- H.S./GED
- Technical
- Some college
- College graduate

13. What is the highest level of education attained by your father?

- Unknown
- Less than 12<sup>th</sup> grade
- H.S./GED
- Technical
- Some college
- College graduate

14. Do you have children under the age of 18 in the home?

- Yes
- No

15. Marital Status

- Single
- Married
- Separated
- Divorced
- Widowed

16. Are you currently in a significant relationship?

- Yes
- No

17. Within the next year, I intend to remain in this relationship.

- Strongly Disagree
- Disagree
- Slightly Disagree
- Neither Agree nor Disagree
- Slightly Agree
- Agree
- Strongly Agree

18. Overall, I am satisfied with this relationship.

- Strongly Disagree
- Disagree
- Slightly Disagree
- Neither Agree nor Disagree
- Slightly Agree
- Agree
- Strongly Agree

□

Considering the past few weeks, please select the response which you think most nearly applies to you. Remember that we want to know about present and recent conditions.

19. Have you recently been able to concentrate on what you're doing?
- Better than usual
  - Same as usual
  - Less than usual
  - Much less than usual
20. Have you recently lost much sleep over worry?
- Not at all
  - No more than usual
  - Rather more than usual
  - Much more than usual
21. Have you recently felt that you are playing a useful part in things?
- More so than usual
  - Same as usual
  - Less so than usual
  - Much less than usual
22. Have you recently felt capable of making decisions about things?
- More so than usual
  - Same as usual
  - Less so than usual
  - Much less than usual
23. Have you recently felt constantly under strain?
- Not at all
  - No more than usual
  - Rather more than usual
  - Much more than usual
24. Have you recently felt you couldn't overcome your difficulties?
- Not at all
  - No more than usual
  - Rather more than usual
  - Much more than usual
25. Have you recently been able to enjoy your normal day-to-day activities?
- More so than usual
  - Same as usual
  - Less so than usual
  - Much less than usual
26. Have you recently been able to face up to your problems?
- More so than usual
  - Same as usual
  - Less so than usual
  - Much less than usual

27. Have you recently been feeling unhappy or depressed?

- Not at all
- No more than usual
- Rather more than usual
- Much more than usual

28. Have you recently been losing confidence in yourself?

- Not at all
- No more than usual
- Rather more than usual
- Much more than usual

29. Have you recently been thinking of yourself as a worthless person?

- Not at all
- No more than usual
- Rather more than usual
- Much more than usual

30. Have you recently been feeling reasonably happy, all things considered?

- More so than usual
- Same as usual
- Less so than usual
- Much less than usual

□

How often have you experienced each of the following during the past three months?

31. I was too tired to be effective at school because of things I had to do at home.

- Rarely
- Sometimes
- Often
- Most of the time

32. My family or personal life drained me of the energy I needed to complete responsibilities at school.

- Rarely
- Sometimes
- Often
- Most of the time

33. I was preoccupied with personal responsibilities while I was at school.

- Rarely
- Sometimes
- Often
- Most of the time

34. My personal responsibilities made it difficult to get along with my professors and other students the way that I would like.

- Rarely
- Sometimes
- Often
- Most of the time

35. The amount of time my personal responsibilities took made my school performance lower.

- Rarely
- Sometimes
- Often
- Most of the time

36. The schedule demands of my personal responsibilities kept me from getting tasks completed for school.

- Rarely
- Sometimes
- Often
- Most of the time

37. My school responsibilities made me behave in ways that were unacceptable at home.

- Rarely
- Sometimes
- Often
- Most of the time

38. Behavior that was effective and necessary for me at school was counterproductive for me at home.

- Rarely
- Sometimes
- Often
- Most of the time

39. I sacrificed school in favor of a personal goal or commitment.

- Rarely
- Sometimes
- Often
- Most of the time

How often have you experienced each of the following during the past months?

40. My family or personal life gives me the energy to do my school work.

- Rarely
- Sometimes
- Often
- Most of the time

41. I was in a better mood at school because of my family or personal life.

- Rarely
- Sometimes
- Often
- Most of the time

42. My home life helped me relax and feel ready for the next day of school.

- Rarely
- Sometimes
- Often
- Most of the time

43. The problem-solving approaches I use at home help me deal with problems at school.

- Rarely
- Sometimes
- Often
- Most of the time

44. Skills I used at home helped me deal with practical issues at school.

- Rarely
- Sometimes
- Often
- Most of the time

45. Talking with someone at home helped me deal with problems at school.

- Rarely
- Sometimes
- Often
- Most of the time

46. My family and friends gave me support that helped me face difficulties at school.

- Rarely
- Sometimes
- Often
- Most of the time

□

Please select the answer that best reflects the extent to which you agree or disagree with each statement.

47. In most ways, my life is close to my ideal.

- Strongly Disagree
- Disagree
- Slightly Disagree
- Neither Agree nor Disagree
- Slightly Agree
- Agree
- Strongly Agree

48. The conditions of my life are excellent.

- Strongly Disagree
- Disagree
- Slightly Disagree
- Neither Agree nor Disagree
- Slightly Agree
- Agree
- Strongly Agree

49. I am satisfied with my life.

- Strongly Disagree
- Disagree
- Slightly Disagree
- Neither Agree nor Disagree
- Slightly Agree
- Agree
- Strongly Agree

50. So far, I have gotten the important things I want in life.

- Strongly Disagree
- Disagree
- Slightly Disagree
- Neither Agree nor Disagree
- Slightly Agree
- Agree
- Strongly Agree

51. If I could live my life over, I would change almost nothing.

- Strongly Disagree
- Disagree
- Slightly Disagree
- Neither Agree nor Disagree
- Slightly Agree
- Agree
- Strongly Agree

□

Please select the answer that best reflects the extent to which you agree or disagree with each statement.

52. I am satisfied with the success I have achieved in my education.

- Strongly Disagree
- Disagree to some extent
- Uncertain
- Agree to some extent
- Strongly Agree

53. I am satisfied with the progress I have made toward meeting my overall educational goals.

- Strongly Disagree
- Disagree to some extent
- Uncertain
- Agree to some extent
- Strongly Agree

54. I am satisfied with the progress I have made toward meeting my goals for advancement.

- Strongly Disagree
- Disagree to some extent
- Uncertain
- Agree to some extent
- Strongly Agree

55. I am satisfied with the progress I have made toward meeting my goals for the development of new skills.

- Strongly Disagree
- Disagree to some extent
- Uncertain
- Agree to some extent
- Strongly Agree

□

Please select the answer that best reflects the extent to which you agree or disagree with each statement.

56. Although parenthood requires many sacrifices, the love and enjoyment of children of one's own are worth it all.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

57. If I chose not to have children, I would regret it.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

58. It is important to me to feel I am (will be) an effective parent.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

59. The whole idea of having children and raising them is not attractive to me.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

60. My life would be empty if I never had children.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

61. It is important to me to have some time for myself and my own development rather than have children and be responsible for their care.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

62. I expect to devote a significant amount of my time and energy to the rearing of children of my own.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

63. I expect to be very involved in the day-to-day matters of rearing children of my own.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

64. Becoming involved in the day-to-day details of rearing children involves costs in other areas of my life which I am unwilling to make.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

65. I do not expect to be very involved in childrearing.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

66. My life would seem empty if I never had a significant relationship.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

67. Having a successful significant relationship is the most important thing in life to me.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

68. I expect a significant relationship to give me more real, personal satisfaction than anything else in which I am involved.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

69. Being in a significant relationship to a person I love is more important to me than anything else.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

70. I expect the major satisfactions in my life to come from my significant relationship.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

71. I expect to commit whatever time is necessary to making my partner feel loved, supported, and cared for.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

72. Devoting a significant amount of my time to being with or doing things with a partner is not something I expect to do.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

73. I expect to put a lot of time and effort into building and maintaining a significant relationship.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

74. Really involving myself in a relationship involves costs in other areas of my life which I am unwilling to accept.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

75. I expect to work hard to build a good, significant relationship even if it means limiting my opportunities to pursue other personal goals.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

76. It is important to me to have a home of which I can be proud of.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

77. Having a comfortable and attractive home is of great importance to me.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

78. To have a well-run home is one of my life goals.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

79. Having a nice home is something to which I am very committed.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

80. I want a place to live, but I do not really care how it looks.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

81. I expect to leave most of the day-to-day details of running a home to someone else.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

82. I expect to devote the necessary time and attention to having a neat and attractive home.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

83. I expect to be very much involved in caring for a home and making it attractive.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

84. I expect to assume the responsibility for seeing that my home is well kept and well run.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

85. Devoting significant amount of my time to managing and caring for a home is not something I expect to do.

- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Strongly Agree

Please select the answer that best reflects the extent to which you agree or disagree with each statement.

86. It is important for my family to be involved in my educational experience.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

87. Having a campus environment that fosters family involvement is important to me.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

88. I am satisfied with the level of involvement my family has on campus.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

89. Family engagement with other individuals/families on campus appeals to me.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

90. It is important for the university to provide family activities.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Neither Agree nor Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Your responses have been received. Thank you for participating in this study.

## Appendix F

### Permission Letter for GHQ-12

**From:** Katri MALTE [kmalte@mapi.fr]  
**Sent:** Thursday, March 15, 2007 8:51 AM  
**To:** Tara.L.Young-1@ou.edu  
**Subject:** 5730\_GHQ

**Follow Up Flag:** Follow up  
**Flag Status:** Red

**Attachments:** English UK GHQ-12.doc  
Dear Mrs. Young,

Thank you very much for the original User Agreement which we received by post. Please accept my apologies for the delay in getting back to you!

I regret to inform you that the GHQ-12 has not been adapted in the USA. Therefore I'm sending you attached the original UK English version.

I hope this helps.

Please don't hesitate to come back to me should you have any questions.

Kind Wishes,

Katri

Katri Malte  
Information Unit Assistant  
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69003 Lyon - France  
Tel: +33 (0) 4 72 13 65 75 - Fax: +33 (0) 4 72 13 66 68