

# Life Satisfaction and Perceived Meaningfulness of Learning Experience Among First-Year Traditional Graduate Social Work Students

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## Abstract

Knowledge about life satisfaction and learning experience among first-year graduate students is sparse, despite its relevance to instructional decisions, academic support, and success of students. Adequate knowledge is crucial, as it may help graduate students manage personal and professional life changes associated with graduate education. Using a convenience sample of 118 first-year traditional social work graduate students in a northeastern U.S. university the study examined associations of life satisfaction and peer support with perception of meaningfulness of learning experience, as well as associations of gender, marital status, family support and perceived stress with life satisfaction. Results suggest that receiving higher peer support was associated with perceived meaningfulness of learning experience, whereas being female, being married, having lower perceived stress, and receiving higher family support were associated with life satisfaction. Reciprocal predictive relationship between life satisfaction and perceived meaningfulness of learning experience was found. In general, findings suggest that stress and support are important variables to consider in understanding life satisfaction and learning experience of first-year traditional social work graduate students and highlight the importance of peer and family support to navigating challenges of graduate education. Most importantly, findings have implications for social work education, highlighting how instructor's utilization of instructional approaches that facilitate peer support may help ease transition into graduate education or help prevent drop out during the first year graduate students are most vulnerable to dropping out. Altogether, findings highlight why exploring perceived meaningfulness of learning experience and life satisfaction is crucial for identifying supportive needs of graduate students.

**Keywords:** Life satisfaction; learning experience; perceived stress; family support; peer support

## 1. Introduction

In recent years enrolment in graduate education has continued to increase (Allum, 2014). Increasing awareness of the importance of a graduate degree (e.g., increase in salary and lifetime earnings, opportunities for professional advancement and promotion) continues to fuel demand for graduate education. However, pursuit of a graduate degree brings with it drastic changes and challenges in personal and professional life that many graduate students fail to anticipate. Changes in personal and professional schedules, pressure to obtain good grades, time constraints, financial problems, and challenging relationships with peers, faculty, and family create psychological distress for students during university education (American College Health Association, 2005; Oswald & Riddock, 2007). Despite the stress that graduate education brings, knowledge about its impacts on academic and personal life of first-year graduate students is yet to be fully explored, as the current state of knowledge about stress among students is primarily derived from data focused on undergraduate students (Oswald & Riddock, 2007). Social support, often crucial to completion of graduate education, is less frequently examined, even though it affects the academic and personal life of graduate students.

This study examines the effects of personal characteristics, peer and family support, and perceived stress on perceived meaningfulness of learning experience and life satisfaction among first-year traditional social work graduate students in a northeastern university. The study derives from the premise that adequate knowledge about the effects of stress and social support on academic and personal life will inform understanding of how graduate students may cope with graduate studies, as well as how graduate programs and instructors may enhance learning experience and degree attainment by graduate students.

### 1.2 Rationale for Examining First-Year Graduate Students

The first year is an important period for graduate students, some of whom may have just returned to graduate school after many years of completing undergraduate degree. The first year marks a period during which graduate students reflect on the new academic experience and consider whether the right choice was made in pursuing a graduate degree. During the period, some graduate students may struggle with academic work or drop out of university, which in itself may have financial implications for universities and students (Murphy, 2010; Tinto, 1993). Experience during the first year may set the pace or tone for the remaining years of graduate studies and determine whether students will be able to attain the desired graduate degree. Thus, "the first year is a promising point for intervention..., as successful transition in the first year may have a causal influence on subsequent retention and performance" (Murphy, 2010, p. 3, emphasis added).

Traditionally, research on university students has focused on academic performance (Xiao, Tang, & Shim, 2009), generally on undergraduate students, to the neglect of the study of learning experience and life satisfaction of graduate students. Although undergraduate and graduate students face similar social and academic pressures, life and learning demands of graduate students differ from those of undergraduate students in many ways. For instance, graduate students report a lower level of life satisfaction than undergraduate students and undergraduate students report higher levels of social support (family and friends) than graduate students (Behlau, 2010). Life satisfaction was particularly lower among employed graduate students (Behlau, 2010), as full-time work and full-time study share conceptual similarities (Cotton, Dollard, & de Jonge, 2002; Rode et al., 2005).

Compared to undergraduate students, graduate students occupy multiple roles and responsibilities. They are more likely to be older (Behlau, 2010) married, have children, and be employed on a full-time or part-time basis. They are more likely to encounter major changes in personal and professional life and be faced with financial, marital, and occupational challenges that may threaten their ability to complete a graduate program. Women are particularly more likely to lack social and institutional support (Park & Choi, 2009) and may be forced to drop out of graduate programs. Thus, the demands of graduate studies presuppose that graduate students will benefit from social support to manage stressful life experiences, maintain life satisfaction, and enhance learning experience.

It is true that current knowledge about undergraduate students provides a guide regarding what to examine among graduate students: knowledge about learning experience, perceived stress, social support, and life satisfaction for undergraduate students. However, these factors may not necessarily capture the complexities of life and academic experiences of graduate students to inform instructional decisions. Although social support was recently associated with life satisfaction among graduate students (Mahanta & Aggarwal, 2013; Malinauskas, 2010; Matheny et al., 2002), examination of its effects on learning experience in the context of perceived stress is sparse. Since attainment of a graduate degree is often the primary goal of university students, knowledge about the effects of perceived stress and social support on academic and personal life is crucial. Such knowledge will not only have implications for educational interventions but also influence recruitment, dropout prevention, curriculum design, and course instruction delivery in a graduate program.

### **1.3 Conceptual Framework**

The conceptual framework (Figure 1) that guided this study is derived from the premise that events occurring inside and outside the classroom can influence students' perceptions of learning experience and that the events and perceptions may be greatly related to students' satisfaction with life. Specifically, the premise is derived from bottom-up theories that conceive life satisfaction in terms of an aggregated appraisal of satisfaction with conditions and situations about every aspect of life (Diener, 1984; Schimmack, Diener, & Oishi, 2002; Voicu & Pop, 2011) as well as fit models (e.g., person-environment fit) that view student satisfaction with learning experience as an indicator of a "fit between the student and his or her environment..., a function of the discrepancy between the students' expectations and his or her experiences..., or the extent that university experience matches the specific needs of students (Murphy, 2010, p. 20; Witt & Handal, 1984). Altogether, these models help describe the impacts of personal, situational, and organizational factors including peer, faculty, and family support and perceived stress on life satisfaction and learning experience (Arric, Young, Harris, & Farrow, 2011; Baron, 2003; Boonying, George, & Fon, 2014; Cutrona, Cole, Colangelo, Assouline, & Russell, 1994; Dorahy et al., 2000; Garriott et al., 2014; Ginsburge-Block, Rohrbeck, & Fantuzzo, 2006; Joshanloo & Afshari, 2011; Malinauskas, Dumciene, & Lapeniene, 2014; Ozben, 2013; Weinstein & Laverghetta, 2009). As a determinant of learning experience and life satisfaction, personal, stress, and support factors have significant implications for determining students' ability to complete an academic program and obtain the desired degree.

#### **1.3.1 Life Satisfaction, Peer Support, and Learning Experience**

Life satisfaction remains an important variable that has generally been associated with many variables related to learning experience of adults including job satisfaction, social support, peer support, and perceived stress. It has generally been treated as a dependent variable in research (Rode et al., 2005) and its association with academic performance remains inconsistent (Crede, Wirthwein, McElvany, & Steinmayr, 2015; Malik, Nordin, Zakaria, & Sirum, 2013; Rode et al., 2005). Regrettably, research linking life satisfaction with learning experience is sparse (Suldo, Riley, & Shaffer, 2006), even though more is known about life satisfaction and academic performance of high school and undergraduate students than graduate students. Similar to undergraduate students, students enrolled in graduate studies have distinct needs and capabilities that instructors could integrate and utilize to enhance learning experience. Instructors could make learning meaningful by ensuring that instructional strategies meet student expectations, knowledge gained is useful for solving practical problems in the real world, teaching strategies are consistent with learning styles of students, adequate support is provided to meet learning challenges, teaching and learning are collaborative, and students have a voice in course content development and delivery (Gregory & Chapman, 2002; Meyers, 2014).

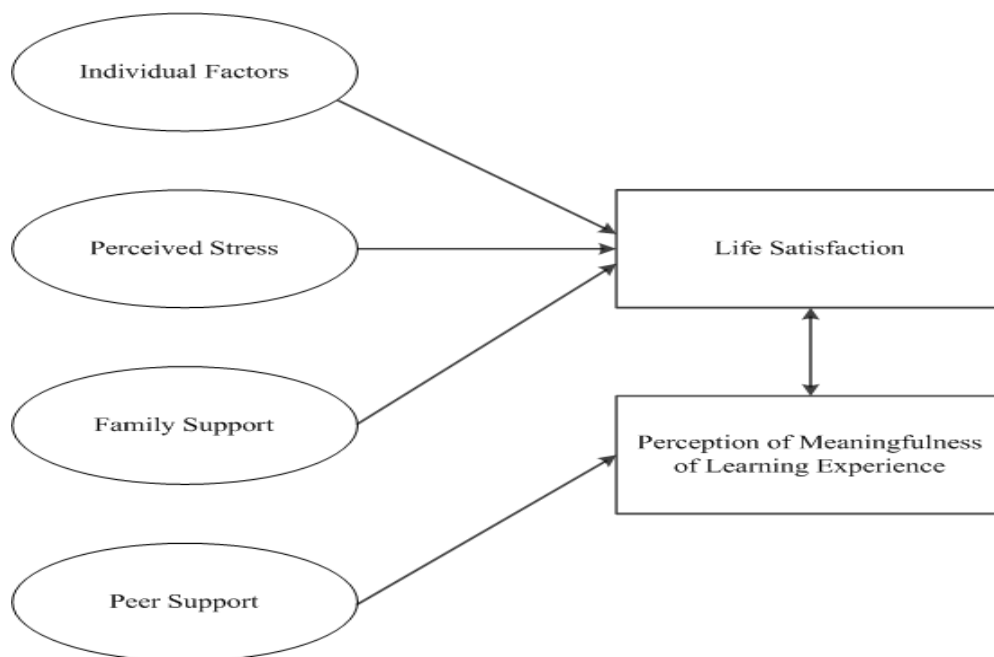


Figure 1: Conceptual Framework of Life Satisfaction and Perception of Meaningfulness of Learning Experience

Although a great deal of work has been done on novel approaches (e.g., inquiry-based, project-based, or problem-based learning) to enhance learning experience (Barron & Darling-Hammond, 2008), personal and social factors remain important determinants of whether learning experience is perceived as meaningful. For example, despite the importance of diversity to students' satisfaction with school (Zullig, Huebner, & Pun, 2009), White/Caucasian students have better learning experiences and academic outcomes (Aud et al., 2010) and are more satisfied with university than are minority students (Zullig et al., 2009). Nevertheless, association between race/ethnicity and learning experience among graduate students continues to receive limited attention because most research on learning experience has focused on White/Caucasian students (Garriott et al., 2014). Knowledge about minority students remains sparse because many minority students (especially Black males) do not attend university (Scott, Taylor, & Palmer, 2013), much less consider graduate education.

Similar to personal factors, social support (e.g., peer, parental, family support) has been associated with learning experience and academic outcomes (Cutrona et al., 1994; Garriott et al., 2014). Relationship with peers and quality of interactions are also deemed to have effects on learning experience (Barron, 2003; Ginsburg-Block, Rohrbeck, & Fantuzzo, 2006), although Mackinnon (2012) did not find any association between social support and academic achievement. To facilitate peer support, instructors may use instructional strategies (e.g., group work/activities) that are designed to generate maximum interactions among students (Carter, Cushing, Clark, & Kennedy, 2005; Chu & Chu, 2010; Ginsburg-Block et al., 2006), which in turn may influence perceived meaningfulness of the learning experience.

Perceived meaningfulness of learning experience may depend on instructional modality utilized to deliver course contents. For example, students may prefer "active learning" in the classroom (O'Connor & Cordove, 2010) rather than "online learning," especially among adult learners who may lack technological competence for online learning. It is not surprising that students who participate in traditional education are more likely to be satisfied with life than those who attend online universities (Hale, 2013). The level of independence associated with graduate studies, gap in years between completion of the undergraduate degree and initiation of graduate studies, and length of time required to gain mastery of instructional technology may compound students' concerns about online learning. A lack of "Internet self-efficacy" not only may affect satisfaction but also may distort perceived meaningfulness of learning experience, even in the context of peer support (Chu & Chu, 2010).

### 1.3.2 Gender, Marriage, and Life Satisfaction

To understand why graduate students perceive their learning experience as they do, one must understand their satisfaction with life, as perception of life satisfaction may be related to how learning experience is perceived. Yet, how satisfied one is about life may be related to personal characteristics and may differ between men and women by virtue of differences in exposure to stressors, as well as differences in emotional capacities to cope with stressors. For example, female graduate students juggle multiple roles and responsibilities (e.g., worker,

spouse, breadwinner, parent; Arric et al., 2011), which often predisposes them to more stress than men face. Arric et al. (2011) found that the major source of stress for female graduate students related to “family, finances, and health-related issues” (p. 144). Generally, women are more strongly affected by graduate studies and less likely to be supported socially and institutionally (Park & Choi, 2009). Nevertheless, women are generally more likely to be satisfied with life, although research on gender disparity in life satisfaction remains inconsistent. For example, many researchers have suggested that females are more likely to be satisfied with life (Joshanloo & Afshari, 2011; Malinauskas et al., 2014; Ozben, 2013), whereas Dorahy et al. (2000) found that female university students reported lower levels of life satisfaction. Matheny, Roque-Tovar, and Curlette (2008) did not find gender disparities in reported life satisfaction.

Marriage generally has a positive effect on life satisfaction (Boonying et al., 2014; Botha & Booyesen, 2013; Fugl-Meyer, Melin, & Fugl-Meyer, 2002; Ubesequera & Jiaojiang, 2008; Yuen, 2013), although the relationship between marriage and life satisfaction is particularly more valid for women (Botha & Booyesen, 2013; Ferdi & Frikkie, 2013). While several reasons may explain the effects of marriage on life satisfaction, factors include marital satisfaction, quality of marriage, and a support system associated with marriage (Botha & Booyesen, 2013; Ng, Loy, Gudmonson, & Cheong, 2009).

### 1.3.3 Perceived Stress, Family Support, and Life Satisfaction

Notwithstanding the association between personal characteristics and life satisfaction, graduate studies evoke significant stress on students to the extent of having a major effect on the student’s general appraisal of satisfaction with life. Stress is pervasive among students to the extent of being perceived as the norm, although its degree may vary by course of study. For example, “Clinical disciplines like psychology, social work, and family therapy coupled with classroom work and research with a clinical training component might evoke more stress than traditional graduate programs” (Dziegielewski, Turnage, & Roest-Marti, 2004, p. 106). Among social work students, stress may result from “interaction with different, often overwhelmed populations, which often taxes students beyond what they are prepared for in graduate school” (Kamya, 2000, p. 231). Stress may also arise from financial constraints (Hopkins, Deal, & Bloom, 2005; Lange & Byrd, 1998; Makinen & Pychyl, 2001; Weinstein & Laverghetta, 2009). For example, in a survey of female students it was found that “women students with lower incomes indicated they had more stress” (Home, 1997, p. 335). Stress also may result from conflict between professional commitments and academic responsibilities among graduate students who are enrolled part time or full time while being employed, such that challenges may be encountered in attempts to meet family demands and academic workload, as well as in attempts to integrate academic, family, and professional demands (Han, Lee, & Lee, 2012; Mirzaei, Oskouie, & Rafii, 2012). Stress may also arise from limited knowledge and skills in the technology utilized for course delivery.

Generally speaking, stress has negative effects on students, including poor academic performance and lower grades, physical health and mental health problems, lower perceptions of health, anger, irritability, and considerations of withdrawal from university (American College Health Association, 2005; Hawkins, Hawkins, Smith, & Grant, 2005; Oswalt & Riddock, 2007). Weinstein and Laverghetta (2009) found that “overall life satisfaction in university students is adversely influenced by college stress” (p. 1161). Thus, higher levels of stress are generally associated with lower levels of life satisfaction and vice versa (Alleyne, Alleyne, & Greenidge, 2010; Anna, Anna, Adam, Wiktorja, & Tamara, 2012; Mary, Philmore, & Dion, 2010; Matheny et al., 2008). Beyond its negative effect on life satisfaction, stress mediates the relationship between emotional intelligence and life satisfaction (Ruiz-Aranda, Extremera, & Pineda-Galan, 2014), as well as the association between social skills and life satisfaction (Segrin, Hanzal, Donnerstein, Taylor, & Domschke, 2007).

As damaging as its impact may be, stress is unavoidable but manageable through social (peer, faculty, friends, parents, family) and organizational support. Because graduate studies entail interactions with peers, faculty, and organizational structure, students are bound to experience stress from complex interactions with each entity. When students experience stress from high workload or challenging interactions, seeking ways to lessen course work may not necessarily be the best option. Instead, improving accessibility to general support may help to minimize effects of stress on psychological well-being. A major source of support during crisis is friends and family, who are often the first to be approached for support when the student faces challenges in school (Litvack, Mishna, & Bogo, 2010). Faculty could also be a source of support, not only by tapping into students’ abilities to facilitate academic success (Nordstrom & Segrist, 2009; Wilks & Spivey, 2010) but also by designing curriculum in ways that could facilitate access to peer support or create opportunities for social interactions (Lawson & Fuehrer, 1989; Litvack et al., 2010). Because relationship with faculty is the most important aspect of the quality of university experience for graduate students (Hartnett, 1976), faculty may provide needed support to students without sacrificing creativity and intellectual integrity.

According to Barry, Hudley, Kelly, and Cho (2009), “When students perceived themselves as needing and not receiving emotional support, their coping was the least successful. . . . The act of disclosing details of stressful life events reduces the stress and enhances both academic success and overall health” (p. 57). Students

with a broad network of support are generally more likely to manage stressful events effectively. Social support is particularly useful because of its effects on a range of aspects of the student's life, including stress, academic performance and satisfaction, school satisfaction, and life satisfaction (Cheng, Ickes, & Verhofstadt, 2012; Danielsen, Wold, Hetland, & Samdal, 2009; Edwards & Lopez, 2006; Hartnett, 1976; Herji & Sorenson, 1992; Home, 1997; Kapikiran, 2011; Kim & Sok, 2012; Malinauskas, 2010; Matheny et al., 2002; Siddall, Huebner, & Jiang, 2013; Strayhorn, 2008). Social support serves a protective function (Lawson & Fuehrer, 1989) and helps to moderate the effects of perceived stress on life satisfaction (Chao, 2012).

Of the myriads of socio-psychological variables related to life satisfaction and learning experience, identified variables in the conceptual framework were considered owing to ample evidence of their theoretical and empirical relevance to life satisfaction and learning experience. Nevertheless, empirical knowledge of the relationship among first-year traditional graduate students beyond high school and undergraduate students is sparse, despite the effects of school-related experience on life satisfaction (Akin, 2015). Empirical relevance of current framework will therefore provide knowledge upon which complex framework in future may draw.

#### **1.4 Present Study**

The present study describes the relationships between life satisfaction, peer support, and perceived meaningfulness of learning experience, as well as the relationships between gender, marital status, perceived stress, peer and family support, perceived meaningfulness of learning experience, and life satisfaction among first-year traditional graduate social work students at a university in a northeastern state of the United States. Based on the preceding discussion, the study examines the following hypotheses:

Hypothesis 1: Life satisfaction is associated with perceiving learning experience in university as meaningful.

Hypothesis 2: Peer support is associated with perceiving learning experience in university as meaningful.

Hypothesis 3: Being female is associated with life satisfaction.

Hypothesis 4: Being married is associated with life satisfaction.

Hypothesis 5: Lower perceived stress is associated with life satisfaction.

Hypothesis 6: Family support is associated with life satisfaction.

Hypothesis 7: Perceiving learning experience in university as meaningful is associated with life satisfaction and vice versa.

## **2. Methods**

### **2.1 Design**

For this cross-sectional study, 131 graduate social work students in a predominantly White/Caucasian university in the northeastern part of the United States completed an anonymous survey online using SurveyMonkey™ over a three-semester (3-year) period. The survey was completed at the end of Fall semester or beginning of Spring semester of each year. The graduate social work department operates a hybrid program that combines traditional face-to-face classes with online classes. Two cases of incomplete data, three (3) cases of undergraduate social work students, and (8) cases of students in advanced standing full-time and part-time program were deleted from the data. Graduate students in advanced full-time and part-time program comprise of those students who had bachelor in social work as the undergraduate degree. The remaining 118 cases comprise of traditional social work graduate students in their first year of the graduate program. The traditional program comprise of graduate students who did not have social work as their undergraduate degree. The Institutional Review Board of the target university approved the study.

### **2.2 Sample**

The sample of graduate students ( $N = 118$ ) was predominantly female ( $n = 103, 87.3\%$ ), White/Caucasian ( $n = 86, 72.9\%$ ) (Table 1). A majority was single, divorced, or widowed ( $n = 82, 69.5\%$ ), employed full time ( $n = 72, 61\%$ ), participated in traditional part-time program ( $n = 75, 63.6\%$ ), and earned less than \$40,000 ( $n = 77, 65.3\%$ ) per annum. The average age was 35 years ( $SD = 9.32$ ).



Table 1: *Demographic Characteristics of Respondents*

Sample characteristics	<i>n</i>	%
Age		
35 years (SD = 9.32)		
Gender		
Female	103	87.3
Male	15	12.7
Marital Status		
Single (never married) and others <sup>a</sup>	82	69.5
Married (living together)	38	30.5
Race		
White/Caucasian (Non-Hispanic)	86	72.9
Black or African American (Non-Hispanic) and others <sup>b</sup>	32	27.1
Employment status		
Full time	72	61
Part time	23	19.5
Self employed	12	10.2
Not employed/retired	11	9.3
Registration status		
Full-time	53	44.9
Part-time	65	55.1
Income		
Less than \$20,000	31	26.3
\$20,000–\$39,000	46	39
\$40,000–\$59,000	30	25.4
\$60,000 and above	11	9.3

<sup>a</sup>Others include married (currently separated), living together in a committed relationship, divorced, and widowed. <sup>b</sup>Others include American Indian or Alaska Native, Asian, Hispanic/Latino, Native Hawaiian or Other Pacific Islander, and Biracial/Multiracial.

### 2.3 Measures

**Family and peer support.** The authors developed and pilot tested two items to operationalize family and peer support. The items examined the level of family and peer support received by students since they had commenced graduate social work education in the university. These two items were (a) “*My family has been supportive of me*” (family support) and (b) “*I have found at least one classmate that is supportive of me*” (peer support). The items were rated on a 5-point Likert-type scale (5 = *strongly agree*, 4 = *agree*, 3 = *neither agree nor disagree*, 2 = *disagree*, 1 = *strongly disagree*). Higher scores in the form of *strongly agree* indicate higher receipt of family and peer support and lower scores in the form of *strongly disagree* indicate lower receipt of family and peer support.

**Perceived stress.** Perceived stress was operationalized with the Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983). The scale contains 10 items that measure perceptions of stress about life in general. Examples include “*In the last month, how often have you found that you could not cope with all the things that you had to do?*” and “*In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?*” The 10 items were rated on a 5-point Likert-type scale (4 = *very often*, 3 = *fairly often*, 2 = *sometimes*, 1 = *almost never*, 0 = *never*) and scores were summed to measure perceived stress. Four items were reverse coded for analysis: Item 4 (“*In the last month, how often have you felt confident about your ability to handle your personal problems?*”), Item 5 (“*In the last month, how often have you felt that things were going your way?*”), Item 7 (“*In the last month, how often have you been able to control irritations in your life?*”), and Item 10 (“*In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?*”). Higher scores in the form of *very often* indicate higher experience of perceived stress and lower scores in the form of *never* indicate lower experience of perceived stress. The internal consistency estimate was approximately .86.

**Life satisfaction.** Life satisfaction was operationalized with the Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985). Participants indicated their level of agreement with 5 items that examined their cognitive appraisal of life and general well-being. An example is “*In most ways my life is close to my ideal and so far I have gotten the important things I want in life*”). The five items were rated on a 7-point scale (7 = *strongly agree*, 6 = *agree*, 5 = *slightly agree*, 4 = *neither agree nor disagree*, 3 = *slightly disagree*, 2 = *disagree*, 1 = *strongly disagree*). Higher scores in the form of *strongly agree* indicate higher experience of life satisfaction

and lower scores in the form of *strongly disagree* indicate lower experience of life satisfaction. The internal consistency estimate was approximately .89.

**Perceived meaningfulness of learning experience.** Perceived meaningfulness of learning experience in university was operationalized by asking respondents to describe their overall learning experience in graduate education. The item, “*My learning experience in college is meaningful,*” was rated on a 5-point Likert-type scale (5 = *strongly agree*, 4 = *agree*, 3 = *neither agree nor disagree*, 2 = *disagree*, 1 = *strongly disagree*). Higher scores in the form of *strongly agree* indicate higher perception of meaningfulness of learning experience and lower scores in the form of *strongly disagree* indicate lower perception of meaningfulness of learning experience.

## 2.4 Data Analysis

Analysis of data include descriptive analysis to describe demographic characteristics of respondents, bivariate correlations to describe relationships among examined variables, and multiple regression to examine associations between the dependent variables (i.e., perception of meaningfulness of learning experience and life satisfaction) and the independent variables (i.e., perceived stress, family and social support, life satisfaction, and perception of meaningfulness of learning experience), controlling for covariates (i.e., age, gender, marital status, and race/ethnicity). Peer and family support, perceived stress, perception of meaningfulness of learning experience, and life satisfaction were examined for skewness and kurtosis. Perceived stress approximated normal distribution, whereas peer and family support, perception of meaningfulness of learning experience, and life satisfaction did not. As a result, base-10 logarithm transformation (log transformation) technique was used to improve normalization. Other assumptions for conducting multiple regression analysis (e.g., linearity and homoscedasticity; Cohen, Cohen, West, & Aiken, 2003; Stevens, 2002) were fairly met. Data were analyzed using SPSS 20™ (IBM Corporation, 2011).

## 3. Results

### 3.1 Zero Order Correlations

Table 2 describes significant relationships among the examined variables. Perception of meaningfulness of learning experience correlated positively with life satisfaction ( $r = .311, p < .001$ ) and peer support ( $r = .364, p < .0005$ ) and negatively with perceived stress ( $r = -.200, p = .030$ ). Similarly, life satisfaction correlated positively with family ( $r = .421, p < .0005$ ) and peer support ( $r = .249, p = .006$ ) and negatively with perceived stress ( $r = -.406, p < .0005$ ). Family support correlated negatively with perceived stress ( $r = -.242, p = .008$ ) and peer support correlated negatively with perceived stress ( $r = -.235, p = .010$ ).

### 3.2 Associations Among Life Satisfaction, Peer Support, and Perception of Meaningfulness of Learning Experience

To determine whether life satisfaction and peer support were associated with perception of meaningfulness of learning experience, a multiple regression analysis was performed. Perception of learning experience as meaningful was the criterion variable. The covariates were age, gender, marital status, and race/ethnicity, and the independent variables were perceived stress, peer support, and life satisfaction. Simultaneous entry was used to enter the variables into the analysis. The overall model was significant,  $F(7, 117) = 5.324, p < .0005$ . As indicated in Table 3, receiving higher peer support ( $\beta = .306, p = .001$ ) and life satisfaction ( $\beta = .276, p = .007$ ) were significantly associated with perceiving learning experience in university as meaningful, supporting Hypotheses 1, 2, and 7. The model explained 25% of the variance in perception of learning experience as meaningful (adjusted  $R^2 = .21, p < .0005$ ).

Table 2: Correlations of Perception of Meaningfulness of Learning Experience, Life Satisfaction, Family and Peer Support, and Perceived Stress

Variable	Perception of meaningfulness of learning experience	Life satisfaction	Family support	Peer support	Perceived stress
Perception of meaningfulness of learning experience	1				
Life satisfaction	.311**	1			
Family support	.165	.421**	1		
Peer support	.364**	.249**	.202**	1	
Perceived stress	-.200*	-.406**	-.242*	-.235*	1

Table 3: Associations Among Perceived Stress, Peer Support, Life Satisfaction, and Perception of Meaningfulness of Learning Experience, Controlling for Demographic Factors

Predictor	$\beta$	<i>p</i>	95.0% Confidence Interval <sup>d</sup>	
			LB	UB
Age	.147	.109	.000	.004
Gender <sup>a</sup>	-.119	.172	-.089	.016
Marital status <sup>b</sup>	-.181	.057	-.081	.001
Race/ethnicity <sup>c</sup>	.131	.120	-.008	.068
Perceived stress	-.036	.704	-.040	.027
Peer support	.306	.001	.171	.602
Life satisfaction	.276	.007	.049	.298

Note: Age is reported in years.

<sup>a</sup>Female = 0; male = 1. <sup>b</sup>Single (never married) and others (living together in a committed relationship, divorced, widowed) = 0; Married = 1. <sup>c</sup>Race/ethnicity is dichotomized: Caucasian = 0; Black, African, or African American (Non-Hispanic) and Asian, American Indian or Alaska Native, Hispanic/Latino, and Biracial/Multiracial others = 1. <sup>d</sup>LB = Lower bound, UB = Upper bound.

### 3.3 Associations Among Gender, Marital Status, Perceived Stress, Family Support, Perception of Meaningfulness of Learning Experience, and Life Satisfaction

To determine whether gender, marital status, perceived stress, family support, and perception of meaningfulness of learning experience were associated with life satisfaction, a multiple regression analysis was performed. Life satisfaction was the criterion variable. The covariates were age, gender, marital status, and race/ethnicity, and the independent variables were perceived stress, family and peer support, and perception of meaningfulness of learning experience. Simultaneous entry was used to enter the variables into the analysis. The overall model was significant,  $F(8, 117) = 10.78, p < .0005$ . As indicated in Table 4, being female ( $\beta = -.182, p = .018$ ), being married ( $\beta = .272, p = .001$ ), lower perceived stress ( $\beta = -.287, p < .0005$ ), higher family support ( $\beta = .296, p < .0005$ ), and higher perception of meaningfulness of learning experience ( $\beta = .191, p = .020$ ) were significantly associated with life satisfaction, supporting Hypotheses 3 through 7. The model explained approximately 44% of the variance in life satisfaction (adjusted  $R^2 = .40, p < .0005$ ).

Table 4: Associations Among Perceived Stress, Family and Peer Support, Perception of Meaningfulness of Learning Experience, and Life Satisfaction, Controlling for Demographic Factors

Predictor	$\beta$	<i>p</i>	95.0% Confidence Interval <sup>d</sup>	
			LB	UB
Age	-.153	.057	-.005	.000
Gender	-.182	.018	-.162	-.016
Marital status	.272	.001	.041	.151
Race/ethnicity	-.052	.480	-.072	.034
Perceived stress	-.287	< .0005	-.125	-.037
Peer support	.008	.921	-.301	.333
Family support	.296	< .0005	.287	.918
Perception of meaningfulness of learning experience	.191	.020	.050	.561

Note: Age is reported in years.



<sup>a</sup>Female = 0; male = 1. <sup>b</sup>Single (never married) and others (living together in a committed relationship, divorced, widowed) = 0; Married = 1. <sup>c</sup>Race/ethnicity is dichotomized: Caucasian = 0; Black, African, or African American (Non-Hispanic) and Asian, American Indian or Alaska Native, Hispanic/Latino, and Biracial/Multiracial others = 1. <sup>d</sup>LB = Lower bound, UB = Upper bound.

#### 4. Discussion

This study examined associations among personal characteristics, peer and family support, perceived stress, and perceived meaningfulness of learning experience and life satisfaction among first-year traditional graduate social work students in a northeastern university in the United States. Findings indicate some associations among life satisfaction, peer support, and perceived meaningfulness of learning experience, as well as among gender, marital status, perceived stress, family support, perceived meaningfulness of learning experience, and life satisfaction.

##### 4.1 Peer Support and Perceived Meaningfulness of Learning Experience

The finding that peer support was associated with perceived meaningfulness of learning experience is consistent with past research (Barry et al., 2009; Cheng et al., 2012; Cutrona et al., 1994; Danielsen et al., 2009; Hartnett, 1976; Litvack et al., 2010; Strayhorn, 2008). This is not surprising when one considers challenges and life adjustments that graduate studies bring. Graduate studies evoke stress on students to the extent that attainment of a graduate degree may be deemed impossible for many without peer support, which may be tangible or intangible, received or perceived, or situational or instrumental. For example, in the context of the classroom, group work or activities are mechanisms that facilitate students' ability to provide each other material support (e.g., sharing or giving textbooks or helping with concrete activities), informational support (e.g., sharing ideas, suggestions, or advice about tasks or assignments), and emotional support (e.g., sharing experiences about colleagues or instructors, listening to and giving advice or encouragement about grade or academic performance). An instructional environment that encourages peer support is more likely to enhance perceived meaningfulness of learning experience among graduate students.

##### 4.2 Gender, Marital Status, Perceived Stress, Family Support, and Life Satisfaction

Similar to finding associations of life satisfaction and peer support with perceived meaningfulness of learning experience, being female, being married, lower perceived stress, and higher family support were found to be associated with life satisfaction. These findings are consistent with past findings about these associations (Alleyne et al., 2010; Botha & Booysen, 2013; Fugl-Meyer et al., 2002; Joshanloo & Afshari, 2011; Liu, Li, & Feldman, 2013; Malinauskas et al., 2014; Ng et al., 2009; Oshio, 2012; Ozben, 2013; Salinas-Jimenez, Artes, & Salinas-Jimenez, 2013; Ubesekera & Jiaojiang, 2008; Weinstein & Laverghetta, 2009; Wilks & Spivey, 2010). Regarding the effects of gender on life satisfaction, several explanations may be offered for this association, one of which is gender disparities in help-seeking behaviors. For example, women have greater access to networks of social support and their tendency to seek support of friends and family during crisis enhances not only their emotional well-being but also their perception of life satisfaction, in contrast to men, whose life satisfaction may be dependent on better jobs, good earnings, task-oriented relationships, and personal accomplishments than on support from a large circle of friends and families. This is particularly true if one considers stress and life adjustments, as well as job and financial constraints, that graduate studies bring, such that men may face more challenges with navigating the negative effects of graduate studies on life satisfaction.

Another factor that may explain gender differences in life satisfaction relates to gender disparity in job satisfaction. Generally speaking, job satisfaction "is much more important to men's life satisfaction than women's" (Giusta, Jewell, & Kambhampati, 2011, p. 23). For example, a man's satisfaction with life may be examined through satisfaction with his sources of income, such that any endeavors that threaten his priority accorded to job or ability to earn a living may disrupt his emotional and economic well-being. One major source of such threat is the stressful demands of graduate studies. By design, graduate studies generally compete for available time for work, thereby threatening or diminishing a man's ability to earn a living. Unlike men, however, "Women have a better work-life balance and therefore while satisfaction with their job is important, it comes after many other factors that women see as more important" (Giusta et al., 2011, p. 23). The general ability of women to multitask, remain optimistic despite challenges, seek and accept friends and family support, and maintain work-life balance enhances their ability to remain satisfied with life despite all odds. It follows that life changes (e.g., graduate studies) that generally disrupt work-life commitments may have greater effects on life satisfaction for men than for women, who are better equipped emotionally to maintain work-life balance.

Similarly, the effects of being married and family support on life satisfaction may be understood through the buffering effects of marriage and family support. Social support helps to lower perceived stress, thereby increasing positive perceptions of life satisfaction (Matheny et al, 2002). It is understandably true that

graduate studies predispose graduate students to stress. However, marriage may help to buffer the pressure of graduate studies, which in turn enhances life satisfaction. Married couples are exposed to a large circle of relatives and friends who may provide needed support for graduate students. This is particularly true given the fact that many graduate students work part time and some are enrolled full time while working on a full-time basis. Without adequate support system, a graduate student's ability to cope with demands of work and school may be severely compromised and his/her quality of life may be affected. For example, spouses of graduate students may help with child care and domestic responsibilities, while unmarried graduate students may have to complete necessary tasks alone. Therefore, the socioeconomic and psychological benefits of marriage may translate to satisfaction with life among married students.

Although marital satisfaction is related to life satisfaction (Botha & Booysen, 2013; Ng et al., 2009), the effects of marriage on life satisfaction may differ for men and women. For example, Botha and Booysen (2013) concluded from investigating the relationship between marital status and life satisfaction that "marriage is positively associated with life satisfaction among women, but not among men" (p. 150). This is similar to findings by Ball and Robbins (1986) suggesting that, "for women, the married, widowed, and divorced are more satisfied with their lives than are the separated or single" (p. 389). It is also true that "for men, the married are the least satisfied persons of any category" (p. 389), although this varies across societies, as in some patriarchal societies the "quality of the marriage relationship affects women more than men" (Ng et al., 2009, p. 41).

Nevertheless, perceived stress in graduate students was negatively associated with life satisfaction, as indicated by findings in this study. This is not surprising because graduate students are generally confronted with academic and personal challenges that could compromise their psychosocial, economic, and physical well-being. Challenging interactions with faculty and peers may compound personal life challenges, which ultimately may affect perception of life satisfaction. However, giving and receiving peer and family support may strengthen the ability to regulate academic life (e.g., homework, projects, papers, field placement/internship) and personal and professional life (e.g., work and family responsibilities) to the extent of lowering perceived stress and increasing overall satisfaction with life. In summary, social support helps to moderate effects of stress on well-being and satisfaction with life, although these moderated relationships may be more prevalent in females than in males (Asberg, 2005; Chao, 2012).

#### **4.3 Reciprocal Predictive Relationship between Life Satisfaction and Perceived Meaningfulness of Learning Experience**

In the analyses, life satisfaction was found to be associated with perceived meaningfulness of learning experience and vice versa. Although little is known about the effects of life satisfaction on perception of meaningfulness of learning experience among graduate students, many reports suggest that being satisfied with life is associated with academic performance (e.g., Crede et al., 2015; Rode et al., 2005). Given the possible relationship between academic performance and learning experience, it is reasonable to assume the relevance of the association between life satisfaction and perception of meaningfulness of learning experience in this study. Despite this possibility, the question remains why reciprocal predictive relationships exist between life satisfaction and perception of meaningfulness of learning experience among the graduate students. Many factors may be attributed to this finding including personal, peer and family support, university, departmental, and instructional factors. For example, most graduate students in this study are adults who were gainfully employed full-time and earned reasonable income. Instead of their preexisting state of life satisfaction being disrupted by graduate studies during the first year, affordability of graduate education at the university, quality of instruction, and level of support (peer, family, faculty, and departmental support) was likely helpful in minimizing the pressures associated with graduate studies, which subsequently may have contributed to better ratings of meaningfulness of learning experience.

Graduate studies constitute a facet in graduate students' life and, by implications, graduate studies have a great potential to affect students' satisfaction with life. Anecdotal evidence suggests that many graduate students unable to cope with the stress of graduate studies usually drop out before the end of first semester to avoid getting a poor grade (see person-fit environment model - Murphy, 2010; Witt & Handal, 1984). Therefore, those who were satisfied with life by virtue of being able to preserve subjective well-being through general support were likely able to perceive learning experience as meaningful and those who had a meaningful learning experience by virtue of receiving peer and departmental support were likely able to maintain satisfaction with life (see bottom-up theories - Diener, 1984; Schimmack et al., 2002; Voicu & Pop, 2011), thus presupposing a reciprocal relationship between life satisfaction and perception of learning experience. The cumulative effects of peer and family support provide stabilization mechanism to the extent that the stress associated with graduate studies is not only neutralized but also rendered of little effect on satisfaction with life and perception of meaningfulness of learning experience.

#### 4.4 Strengths and Limitations

This study has acknowledged strengths and limitations. Its strength relates to its validation of the effects of peer support on perception of meaningfulness of learning experience. By demonstrating the influence of peer support on perception of learning experience, the study provides pedagogical guidance for instructors of graduate students on how to enhance learning experience. For example, instructors could enhance peer support by integrating group work or assignments into their teaching. Although some students may favor independent work rather than face the challenges of a group project, the pedagogical approach of group work may help to minimize the pressure and perceived stress associated with graduate education. It also may help improve life satisfaction among graduate students. Similarly, graduate students could enhance their learning experience by seeking support from peers.

Unequivocally, the relation of peer support to perceived meaningfulness of learning experience provides unique opportunity for graduate programs to promote peer support to enhance students' learning experience and prevent them from dropping out during the first year when they are most vulnerable to dropping out. Similarly, the relevance of family support to life satisfaction and the reciprocal relationship between life satisfaction and perceived meaningfulness of learning experience presupposes that graduate programs will achieve positive students' learning experience by exploring ways to enhance peer and family support.

Despite the above strengths, the study has acknowledged limitations. It was not possible to control for some important variables that are crucial to understanding graduate students' perception of meaningfulness of learning experience in university. For example, it is possible that some organizational variables not examined in this study (e.g., class size, faculty size, organizational support, instructional approaches [online versus face to face], faculty practices) may have had some effects on perceived meaningfulness of learning experience. Given that the participants were in their first year of graduate studies, it is possible that perceived meaningfulness of learning experience and life satisfaction may change over the period of their graduate studies. Similarly, although data were collected over a three-semester (3-year) period, findings cannot be generalized to a larger population of graduate students by virtue of the cross-sectional design of the study. Findings also may not be generalizable to male or non-White/Caucasian given the realization that majority of respondents were female and White/Caucasian.

#### 4.5 Implications for Social Work Education and Research

Findings in this study have implications for social work education and research. To conduct an effective program that could have positive impact on graduate students, social work programs must arm graduate students with knowledge that could enhance their progress and academic success. Approaches (e.g., group work, peer mentoring) that enhance learning experience may be integrated into social work programs and instructional repertoires with the goal of providing a supportive environment for meaningful learning experience and completion of graduate education. Similarly, social work programs and instructors may share with incoming students during orientation information about the effects of peer and family support on learning experience to allow them to be prepared for and cope with challenges associated with graduate education. Such information could instill the realization that they are not alone in their academic endeavors, enhance their academic performance, and prevent them from dropping out of a graduate program.

Furthermore, students and graduate programs may be encouraged to realize that interventions geared toward improving perception of learning experience may have spillover effects on life satisfaction and vice versa, such that supportive services and activities aimed at improving academic performance may not only influence learning experience but also life satisfaction of graduate students.

To enhance validity of current findings, future studies could integrate organizational variables (e.g., diversity of students, faculty, class size, academic services) into understanding perception of meaningfulness of learning experience in graduate programs in relation to its effects on life satisfaction. Comparative studies on perception of learning experience and life satisfaction between first-year and second-year graduate students as well as between undergraduate and graduate students will shed further light on the impacts of graduate studies on life satisfaction and on the reciprocal relationships between life satisfaction and perception of learning experience.

Finally, future studies may compare perception of learning experience and life satisfaction of first-year graduate students across institutions to determine any differential effects of organizational factors. Such studies may be well positioned to identify not only the differential effects but also the effects of similarities and differences in organizational factors on drop out and graduation from the university.

#### References

- Akin, U. (2015). Do school experiences predict life satisfaction in Turkish college students? *International Online Journal of Educational Sciences*, 7(1), 87-96. doi: <http://dx.doi.org/10.15345/iojes.2015.01.008>
- Alleyne, M., Alleyne, P., & Greenidge, D. (2010). Life satisfaction and perceived stress among university students in Barbados. *Journal of Psychology in Africa*, 20, 291-298.

- Allum, J. (2014). *Graduate enrollment and degrees: 2003 to 2013*. Washington, DC: Council of Graduate Schools.
- American College Health Association. (2005). American College Health Association-National College Health Assessment (ACHA-NCHA) spring 2003 reference group. *Journal of American College Health*, 53, 199-210.
- Anna, T., Anna, G., Adam, P., Wiktorja, O., & Tamara, P. (2012). The sense of life satisfaction and the level of perceived stress in the midwifery profession: A preliminary report. *Archives of Psychiatry & Psychotherapy*, 14(3), 35-43.
- Arric, L., Young, K., Harris, S., & Farrow, V. (2011). An analysis of stress levels of female graduate students in an online program. *Advancing Women in Leadership*, 31, 144-152.
- Asberg, K. K. (2005). *Perceived stress, coping, and adequacy of social support: Implications for subjective well-being in college students* (Unpublished master's thesis). University of Central Florida, Orlando, FL.
- Aud, S., Hussar, W., Planty, M., Snyder, T., Bianco, K., Fox, M., . . . Drake, L. (2010). *The condition of education 2010* (NCES 2010-028). Washington, DC: U.S. Department of Education.
- Ball, R. E., & Robbins, L. (1986). Marital status and life satisfaction among Black Americans. *Journal of Marriage and Family*, 48, 389-394. Retrieved from [http://scroll.lib.westfield.ma.edu:2077/stable/352406?seq=1#page\\_scan\\_tab\\_contents](http://scroll.lib.westfield.ma.edu:2077/stable/352406?seq=1#page_scan_tab_contents)
- Barron, B. (2003). When smart groups fail. *Journal of the Learning Sciences*, 12, 307-359.
- Barron, B., & Darling-Hammond, L. (2008). *Teaching for meaningful learning: A review of research on inquiry-based and cooperative learning*. San Francisco, CA: Jossey-Bass.
- Barry, L. M., Hudley, C., Kelly, M., & Cho, S. J. (2009). Differences in self-reported disclosure of college experiences by first-generation college student status. *Adolescence*, 44(173), 55-68.
- Behlau, S. A. (2010). *Life satisfaction: A study of undergraduate and graduate students* (Unpublished master's thesis). Rowan University, Glassboro, NJ.
- Boonying, K., George, P., M., & Fon, S. (2014). Understanding the relationships between age, gender, and life satisfaction: the mediating role of stress and religiosity. *Journal of Beliefs & Values: Studies in Religion & Education*, 35, 340-358. doi:10.1080/13617672.2014.980120
- Botha, F., & Booyesen, F. (2013). The relationship between marital status and life satisfaction among South African adults. *Acta Academica*, 45(2), 150-178.
- Carter, E. W., Cushing, L. S., Clark, N. M., & Kennedy, C. H. (2005). Effects of peer support interventions on students' access to the general curriculum and social interactions. *Research & Practice for Persons with Severe Disabilities*, 30(1), 15-25.
- Chao, R. C. (2012). Managing perceived stress among college students: The roles of social support and dysfunctional coping. *Journal of College Counseling*, 15, 5-21.
- Cheng, W., Ickes, W., & Verhofstadt, L. (2012). How is family support related to students' GPA scores? A longitudinal study. *Higher Education*, 64, 399-420. doi:10.1007/s10734-011-9501-4
- Chu, R. J., & Chu, A. Z. (2010). Multi-level analysis of peer support, internet self-efficacy and e-learning outcomes: The contextual effects of collectivism and group potency. *Computer & Education*, 55(1), 145-154. doi:10.1016/j.compedu.2009.12.011
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Erlbaum.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 385-396.
- Cotton, S. J., Dollard, M. F., & de Jonge, J. (2002). Stress and student job design: Satisfaction, well-being, and performance in university students. *International Journal of Stress Management*, 9(3), 147-162.
- Crede1, J., Wirthwein, L., McElvany, N., & Steinmayr, R. (2015). Adolescents' academic achievement and life satisfaction: the role of parents' education. *Frontiers in Psychology*, 6, 1-8. doi: 10.3389/fpsyg.2015.00052
- Cutrona, C. E., Cole, V., Colangelo, N., Assouline, S. G., & Russell, D. W. (1994). Perceived parental social support and academic achievement: An attachment theory perspective. *Journal of Personality and Social Psychology*, 66, 369-378.
- Danielsen, A., Wold, B., Hetland, J., & Samdal, O. (2009). School-related social support and students' perceived life satisfaction. *Journal of Educational Research*, 102, 303-320.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95, 542-575.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, 49, 1-5.
- Dziegielewski, S. F., Turnage, B., & Roest-Marti, S. (2004). Addressing stress with social work students: A controlled evaluation. *Journal of Social Work Education*, 40(1), 105-119.
- Dorahy, M. J., Lewis, C. A., Schumaker, J. F., Akuamoah-Boateng, R., Duzé, M. C., & Sibiya, T. E. (2000). Depression and life satisfaction among Australian, Ghanaian, Nigerian, Northern Irish, and Swazi university students. *Journal of Social Behavior and Personality*, 15, 569-580.
- Edwards, L. M., & Lopez, S. J. (2006). Perceived family support, acculturation, and life satisfaction in Mexican American Youth: A mixed-methods exploration. *Journal of Counseling Psychology*, 53, 279-287. doi:10.1037/0022-0167.53.3.279
- Ferdi, B., & Frikkie, B. (2013). The relationship between marital status and life satisfaction among South African adults. *Acta Academica*, 45(2), 150-178.
- Fugl-Meyer, A. R., Melin, R., & Fugl-Meyer, K. S. (2002). Life satisfaction in 18- to 64-year-old Swedes: In relation to gender, age, partner and immigrant status. *Journal of Rehabilitation Medicine*, 34, 239-246. doi:10.1080/165019702760279242
- Garriott, P. O., Flores, L. Y., Prabhakar, B., Mazzotta, E. C., Liskov, A. C., & Shapiro, J. E. (2014). Parental support and underrepresented students' math/science interests: The mediating role of learning experiences. *Journal of Career Assessment*, 22, 627-641. doi:10.1177/1069072713514933



- Ginsburg-Block, M. D., Rohrbeck, C. A., & Fantuzzo, J. W. (2006). A meta-analytic review of social, self-concept, and behavioral outcomes of peer-assisted learning. *Journal of Educational Psychology, 98*, 732-749.
- Giusta, M. D., Jewell, S. L., & Kambhampati, U. S. (2011). Gender and life satisfaction in the UK. *Feminist Economics, 17*(3), 1-34.
- Gregory, G. H., & Chapman, C. (2002). *Differentiated instructional strategies: One size doesn't fit all*. Thousand Oaks, CA: Corwin Press.
- Hale, J. C. (2013). *Differences in life satisfaction among graduate students from online and traditional universities* (Unpublished doctoral dissertation). Walden University, Minneapolis, MN.
- Han, M., Lee, P. A., & Lee, S. E. (2012). Burnout among entering MSW students: Exploring the role of personal attributes. *Journal of Social Work Education, 48*, 439-457. doi:10.5175/JSWE.2011.201000053
- Hartnett, R. T. (1976). Environments for advanced learning. In J. Katz & R. T. Hartnett (Eds.). *Scholars in the making: The development of graduate and professional students* (pp. 49-84). Cambridge, MA: Ballinger.
- Hawkins, C. A., Hawkins, R. C., II, Smith, M. L., & Grant, D. (2005). The relationships among hours employed, perceived work interference, and grades as reported by undergraduate social work students. *Journal of Social Work Education, 41*(1), 13-27.
- Herji, F., & Sorenson, G. (1992). Life satisfaction among Iranian and American graduate students. *Counseling Psychology Quarterly, 5*, 291-297.
- Home, A. M. (1997). Learning the hard way: Role strain, stress, role demands, and support in multiple-role women students. *Journal of Social Work Education, 33*, 335-346.
- Hopkins, K. M., Deal, K. H., & Bloom, J. D. (2005). Moving away from tradition: Exploring the field experiences of part-time, older, and employment-based students. *Journal of Social Work Education, 41*, 573-585.
- IBM Corp. (2011). *IBM SPSS Statistics for Windows*, Version 20.0. Armonk, NY: Author.
- Joshanloo, M., & Afshari, S. (2011). Big five personality traits and self-esteem as predictors of life satisfaction in Iranian Muslim university students. *Journal of Happiness Studies, 12*(1), 105-113. doi:10.1007/s10902-009-9177-y
- Kamya, H. (2000). Hardiness and spiritual well-being among social work students: Implications for social work education. *Journal of Social Work Education, 36*, 231-240.
- Kapikiran, N. A. (2012). Positive and negative affectivity as mediator and moderator of the relationship between optimism and life satisfaction in Turkish university students. *Social Indicators Research, 106*, 333-345. doi:10.1007/s11205-011-9807-8
- Kim, S., & Sok, S. R. (2012). Relationships among the perceived health status, family support and life satisfaction of older Korean adults. *International Journal of Nursing Practice, 18*, 325-331. doi:10.1111/j.1440-172X.2012.02050.x
- Lange, C., & Byrd, M. (1998). The relationship between perceptions of financial distress and feelings of psychological well-being in New Zealand university students. *International Journal of Adolescence and Youth, 7*, 193-209.
- Lawson, T. J., & Fuehrer, A. (1989). The role of social support in moderating the stress that first-year graduate students experience. *Education, 110*(2), 186-193.
- Liu, H., Li, S., & Feldman, M. W. (2013). Gender in marriage and life satisfaction under gender imbalance in China: The role of intergenerational support and SES. *Social Indicators Research, 114*, 915-933. doi:10.1007/s11205-012-0180-z
- Litvack, A., Mishna, F., & Bogo, M. (2010). Emotional reactions of students in field education: An exploratory study. *Journal of Social Work Education, 46*, 227-243. doi:10.5175/JSWE.2010.200900007
- Mackinnon, S. P. (2012). Perceived social support and academic achievement: Cross-lagged panel and bivariate growth curve analyses. *Journal of Youth and Adolescence, 41*, 474-85. doi:10.1007/s10964-011-9691-1
- Mahanta, D., & Aggarwal, M. (2013). Effect of perceived social support on life satisfaction of university students. *European Academic Research, 1*, 1083-1094.
- Makinen, J. A., & Pychyl, T. A. (2001). The differential effects of project stress on life satisfaction. *Social Indicators Research, 53*(1), 1-16.
- Malik, M., Nordin, N., Zakaria, A., & Sirum, N. (2013). An exploratory study on the relationship between life satisfaction and academic performance among undergraduate students of UiTM, Shah Alam. *Procedia - Social and Behavioral Sciences, 90*(10), 334-339.
- Malinauskas, R. (2010). The associations among social support, stress, and life satisfaction as perceived by injured college athletes. *Social Behavior and Personality, 38*, 741-752
- Malinauskas, R., Dumciene, A., & Lapeniene, D. (2014). Social skills and life satisfaction of Lithuanian university students. *Social Behavior and Personality, 42*, 285-294. doi:10.2224/sbp.2014.42.2.285
- Mary, A., Pilmore, A., & Dion, G. (2010). Life satisfaction and perceived stress among university students in Barbados. *Journal of Psychology in Africa, 20*, 291-297.
- Matheny, K. B., Curlette, W. L., Aysan, F., Herrington, A., Gfroerer, C. A., & Thompson, D. (2002). Coping resources, perceived stress and life satisfaction among Turkish and American university students. *International Journal of Stress Management, 9*, 81-97. doi:10.1023/a:1014902719664
- Matheny, K. B., Roque-Tovar, B., & Curlette, W. (2008). Coping resources, perceived stress, and life satisfaction among Mexican and American university students: A cross-cultural study. *Anales de Psicología, 24*(1), 1-9.
- Meyers, S. A. (2014). *Three strategies for creating meaningful learning experiences*. Retrieved from <http://www.facultyfocus.com/articles/effective-teaching-strategies/three-strategies-creating-meaningful-learning-experiences/>
- Mirzaei, T., Oskouie, F., & Rafii, F. (2012). Nursing students' time management, reducing stress and gaining satisfaction: A grounded theory study. *Nursing & Health Sciences, 14*(1), 46-51. doi:10.1111/j.1442-2018.2011.00661.x
- Murphy, S. C. (2010). *The first-year student experience: Examining student satisfaction and the use of learning communities in the first year of college*. (Unpublished Dissertation). University of Minnesota.
- Ng, K., Loy, J. T., Gudmonson, C. G., & Cheong, W. (2009). Gender differences in marital and life satisfaction among Chinese Malaysians. *Sex Roles, 60*, 33-43. doi:10.1007/s11199-008-9503-6



- Nordstrom, C. R., & Segrist, D. J. (2009). Locus of control predicts likelihood of pursuing graduate studies. *College Student Journal*, 43, 200-206.
- O'Connor, B., & Cordove, R. (2010). Learning: The experiences of adults who work full-time while attending graduate school part-time. *Journal of Education for Business*, 85, 359-368. doi:10.1080/08832320903449618
- Oshio, T. (2012). Gender differences in the association of life satisfaction with family and social relations among the Japanese elderly. *Journal of Cross-Cultural Gerontology*, 27, 259-274. doi:10.1007/s10823-012-9169-y
- Oswalt, S. B., & Riddock, C. C. (2007). What to do about being overwhelmed: Graduate students, stress and university services. *College Student Affairs Journal*, 27(1), 24-44.
- Ozben, S. (2013). Social skills, life satisfaction, and loneliness in Turkish university students. *Social Behavior and Personality*, 41(2), 203-214. doi:10.2224/sbp.2013.41.2.203
- Park, J., & Choi, H. J. (2009). Factors influencing adult learners' decision to drop out or persist in online learning. *Journal of Educational Technology & Society*, 12, 207-217.
- Rode, J. C., Arthaud-Day, M. L., Mooney, C. H., Near, J. P., Baldwin, T. T., Bommer, W. H. et al., (2005). Life satisfaction and student performance. *Academy of Management Learning and Education*, 4(4), 421-433
- Ruiz-Aranda, D., Extremera, N., & Pineda-Galan, C. (2014). Emotional intelligence, life satisfaction and subjective happiness in female student health professionals: The mediating effect of perceived stress. *Journal of Psychiatric and Mental Health Nursing*, 21, 106-113.
- Salinas-Jimenez, M. D., Artes, J., & Salinas-Jimenez, J. (2013). How do educational attainment and occupation and wage-earner statuses affect life satisfaction? A gender perspective study. *Journal of Happiness Studies*, 14, 367-388. doi:10.1007/s10902-012-9334-6
- Schimmack, U., Diener, E., & Oishi, S. (2002). Life-satisfaction is a momentary judgment and a stable personality characteristic: The use of chronically accessible and stable sources. *Journal of Personality*, 70, 345-384.
- Scott, J. A., Taylor, K. J., & Palmer, R. T. (2013). Challenges to success in higher education: An examination of educational challenges from the voices of college-bound Black males. *Journal of Negro Education*, 82, 288-299.
- Segrin, C., Hanzal, A., Donnerstein, C., Taylor, M., & Domschke, T. J. (2007). Social skills, psychological well-being, and the mediating role of perceived stress. *Anxiety, Stress, and Coping*, 20, 321-329.
- Siddall, J., Huebner, E. S., & Jiang, X. (2013). A prospective study of differential sources of school-related social support and adolescent global life satisfaction. *American Journal of Orthopsychiatry*, 83(1), 107-114. doi:10.1111/ajop.12006
- Stevens, J. P. (2002). *Applied multivariate statistics for the social sciences* (4th ed.). Mahwah, NJ: Erlbaum.
- Strayhorn, T. (2008). The role of supportive relationships in facilitating African American males' success in college. *NASPA Journal*, 45(1), 26-48.
- Suldo, S. M., Riley, K., & Shaffer, E. J. (2006). Academic correlates of children and adolescents' life satisfaction. *School Psychology International*, 27, 567-582. doi: 10.1177/0143034306073411
- Ubeseke, D. M., & Jiaojiang, L. (2008). Marriage and family life satisfaction: A literature review. *Sabaramuwa University Journal*, 8(1), 1-17.
- Voicu, B., & Pop, C. (2011). Measurement models of life satisfaction: A structural equation modeling approach. *CALITATEA VIETII*, 22(2), 137-154.
- Weinstein, L., & Laverghetta, A. (2009). College student stress and satisfaction with life. *College Student Journal*, 43, 1161-1162.
- Wilks, S. E., & Spivey, C. A. (2010). Resilience in undergraduate social work students: Social support and adjustment to academic stress. *Social Work Education*, 29, 276-288. doi:10.1080/02615470902912243
- Witt, P. H., & Handal, P. J. (1984). Person-environment fit: Is satisfaction predicted by congruency, environment, or personality? *Journal of College Student Personnel*, 25, 503-508.
- Xiao, J. J., Tang, C., & Shim, S. (2009). Acting for happiness: Financial behavior and life satisfaction of college students. *Social Indicators Research*, 92, 53-68. doi:10.1007/s11205-008-9288-6
- Yuen, C. Y. M. (2013). Ethnicity, level of study, gender, religious affiliation and life satisfaction of adolescents from diverse cultures in Hong Kong. *Journal of Youth Studies*, 16, 776-791. <http://dx.doi.org/10.1080/13676261.2012.756973>
- Zullig, K. J., Huebner, E. S., & Pun, S. M. (2009). Demographic correlates of domain-based life satisfaction reports of college students. *Journal of Happiness Studies*, 10, 229-238. doi:10.1007/s10902-007-9077-y