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Nathalie Vaughn
The Relationship Between Financial
Stress and Academic and Social
Functioning of Undergraduate
Residential College Women

ABSTRACT

The purpose of this study was to examine the relationship between financial stress and academic and social functioning and satisfaction in a volunteering sample of undergraduate residential college women in Western Massachusetts, which included students who identified their enrollment status as either dependent or independent as defined by 2011-2012 federal financial aid guidelines. The main research question asked to investigate these relationships is "What is the relationship between financial stress and academic and social functioning and satisfaction in undergraduate residential college women's experiences?" The major findings in the study showed varying degrees of significance from moderate to strong that reflect both negative and positive correlations between the independent variable financial stress and the dependent variables, academic and social functioning and satisfaction. However, because of the limited responses received, and the study's small sample, these findings are inconclusive in regards to the research questions asked and the diversity of the population sampled. The applicability of the findings reported is limited to the respondents in this study and not generalizable to the target population of undergraduate residential college women attending schools in Western Massachusetts.

THE RELATIONSHIP BETWEEN FINANCIAL STRESS AND ACADEMIC AND SOCIAL FUNCTIONING OF UNDERGRADUATE RESIDENTIAL COLLEGE WOMEN

A project based upon an independent investigation, submitted in partial fulfillment of the requirements for the degree of Master of Social Work

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CHAPTER I

Introduction

The purpose of this study was to examine the relationship between financial stress and academic and social functioning and satisfaction in a volunteering sample of undergraduate residential college women in Western Massachusetts, which included students who identified their enrollment status as either dependent or independent as defined by 2011-2012 federal financial aid guidelines. To begin investigating the relationship between financial stress and academic and social functioning and satisfaction I asked the following: What is the relationship between financial stress and academic and social functioning and satisfaction in undergraduate residential college women's experiences? Moreover, what are undergraduate residential colleges women's attitudes about seeking professional help with issues related to financial stress and their academic and social functioning, including help from college counseling centers, financial aid offices, and other on and off campus resources? Further, do undergraduate residential college women identify their academic and social functioning and satisfaction as related to financial stress?

My interest in the relationship between financial stress and undergraduate college women's academic and social functioning and satisfaction evolves from my personal and professional interest in women's issues and in women's empowerment. However, directly related to this study is my second year field placement at an undergraduate residential women's

college counseling center where I worked with several students who presented with depression and somewhat debilitating anxiety symptoms seemingly related to financial issues, academic performance, familial issues and feelings of isolation from their campus population. Although familial dynamics helped to explain some of these students' struggles, more immediate were issues related to finances, academic performance, and feelings of isolation, but without any clear, direct connection between these variables. Further, although not directly related to the population surveyed in this study my prior experience doing preventative and supportive intervention work with young women who were primary caregivers for their families also suggested a connection between financial stress and these women's somewhat impaired functioning especially in interpersonal relationships to varying degrees. Social services considered this population of women "at risk" for child neglect and abuse, for domestic violence and for chronic psychologically impaired functioning. Observing and working with these women in different settings and examining similarities in various aspects of their psychosocial dynamics I saw how stress in general, but particularly financial stress, could be related to these women's somewhat impaired functioning and contributed to issues in their interpersonal relationships. Lastly, my post-graduate work will more than likely primarily be with women and I envision working with undergraduate college enrolled women as well as with the general population of women who access community mental health services.

While studies on students' academic success in college exists (Kitsantas, Winsler, & Huie, 2008; Mehta *et al.*, 2011) not many have focused on financial stress as a factor in academic success. My search for published studies on the impact of financial stress on academic functioning and satisfaction, and social functioning and satisfaction in undergraduate residential college women did not yield as much as I had hoped existed. Most of the literature I found on

financial stress is based on the general population, which has been studied extensively (Davidson, Robertson, Anderson & Ward, 2011; Garman *et al.*, 2005; Keith, 1993; Kenel, 2010; Pearlin, 2002; Zimmerman & Katon, 2005). In these studies, researchers sought to link the impact of financial stress to issues in psychosocial dynamics and identified emotional distress, low self-esteem, disrupted family dynamics, maladaptive coping including alcohol and drug use, severe depression, poor physical health, and suicide as some of its indirect major consequences. However, although this body of literature is not specific to my research question and subquestion, financial stress in the general population is relevant to financial stress experienced by undergraduate residential college women in a number of ways and so is applicable to this study.

In addition to literature on financial stress in the general population, a review of studies on financial related issues and college students (Joo, Durband & Grable, 2008; Kadison & DiGeronimo, 2004; Robb, 2011) provided some background information on the topic; however, there seems to be a lack of current research focused on this area of concern. My search for studies specific to undergraduate residential college women produced results mainly focused on interpersonal relationship issues and maladaptive coping and so did not yield as much as I had hoped existed specific to my research question and sub-questions. A few studies specific to non-white residential college students focused on socioeconomic, acculturation stressors, academic preparedness and the impact of stress on women in general also informed my research question(Crockett *et al.*, 2007; Matlin, Molock, and Tebes, 2011).

To answer the research question and sub-questions posed in this study, a mixed method anonymous survey questionnaire, administered online via the research survey tool "Survey Monkey," was researcher-designed to gather data on financial stress, academic and social functioning, and satisfaction, and other psychosocial information pertinent to understanding

participants' lived experiences. Financial stress was examined as the independent variable impacting two dependent variables: 1) academic functioning and satisfaction, and 2) social functioning and satisfaction associated with undergraduate women success in college. As was operationalized in this study the variable *financial Stress* referred to the amount of stress a student had about their financial situation and included a range of stress levels measured from "zero stress" to "very stressed" as the response choices to questions about personal and family socioeconomic standing for both dependent and independent participants.

Academic functioning as operationalized in this study, included a range of student functioning from low to high, which measured a student's capacity to maintain at least the minimal overall academic standards, operationalized more broadly by GPA on a 4.0 scale.

Academic satisfaction referred to a student's satisfaction with their academic performance and achievement, where academic functioning does not constitute academic satisfaction or dissatisfaction and vice versa. A few studies on college students' academic functioning suggested a significant relationship between levels of financial stress and levels of stress in general and students' academic performance while a few others reported no significant relationship between these variables (Joo et al., 2008; Kadison & DiGeronimo, 2004).

Further, as was operationalized in the current study *social functioning*, referred to the degree to which a student engages with sources of support, and included a range of engagement from zero engagement to high engagement, which measured a student's capacity to establish, access and maintain sources of support. *Social satisfaction* referred to the sense of benefit derived from engaging in relationships with the potential to evolve to formal and informal sources of support. Studies on college students' development noted peer relationships and social integration as crucial to college students overall success (Brisette *et al.*, 2002; Enochs & Roland,

2006; Kadison & DiGeronimo, 2004). Kadison & DiGeronimo (2004) report the "cost of peer approval" as an isolating factor connected to levels of financial stress and social functioning.

Although the studies in the literature I reviewed vary in the characteristics of the populations studied, they share the common theme that psychological health and daily functioning are often severely impacted by financial stress and by stress overall and so need to be considered in assessing the psychosocial dynamics of individuals and families. College students have many challenges navigating the expectations of higher education which when intensified by financial stress leaves some students with the experience of a domino effect of deficits in many areas, especially academics and social supports.

A study of undergraduate residential college women's academic and social experiences from a financial perspective is important to the dissemination of information on financial management, stress management, coping skills and the availability and access to resources for this population. It draws attention to and can potentially broaden social workers' perspectives about the relationships between psychosocial dynamics and the academic and social functioning of undergraduate residential college women. This information could also be a resource to undergraduate residential college women who may be experiencing financial stress but need support around seeking help and developing adaptive stress management coping skills, and could also be useful to women in the process of making the decision to enroll in a residential college. Moreover, the research findings could be a meaningful source of information to college financial aid and counseling center programs, and other student support services. Findings in such a study could also be of value to the budgetary and strategic planning decisions college administrators have to make for the health of the institution and for the social, academic, and psychological well-being and success of its students. Considering societal emphasis placed on higher

education as an important factor in socioeconomic success, the rising cost of attendance, student retention rates and the fact that my search for relevant literature did not yield studies matching the specificity of this study's research question is telling of the need for more current research in this area.

Chapter II of this thesis presents a review of the relevant literature intended to provide a basic knowledge base of the context within which financial stress, academic functioning, and satisfaction, and social functioning and satisfaction are interconnected as possible predictors of undergraduate residential college women success. The chapter begins with a brief review of Pearlin's (2002) conceptual framework for examining stress processes, and Mosher, Prelow, Chen, and Yackel's (2006) study on optimism as a predictor of positive outcomes of stressors. Chapter II then focuses on literature on the impact of financial stress in the general population with some studies specific to the population of residential college students. Chapter III explains the methodology used in this study and includes recruiting procedures and sample limitations and biases. Chapter III also describes the researcher's data collection procedures, precautions taken to safeguard participant's anonymity, the risk and benefits to participating, and the analysis used to evaluate the data collected. Chapter IV presents the study's findings, which describes the demographics of the sample used and notes the relationship between the major findings and the research question posed. Chapter V synthesizes the various components of this thesis and discusses the major findings of the study and its implications for clinical social work.

CHAPTER II

Literature Review

Considering financial stress as a possible predictor of issues in academic and social functioning and satisfaction among undergraduate residential college women, this chapter presents a review of literature related to research on financial stress in the general population as well as literature specific to the undergraduate college population. Studies on issues in college student's academic and social functioning and satisfaction, retention rates, and support networks including familial support, peer support, community, and professional support are also reviewed. In this study, financial stress was examined as the independent variable impacting two dependent variables: 1) academic functioning and satisfaction, and 2) social functioning and satisfaction associated with undergraduate women success in college. To investigate the relationship between the independent variable and the two dependent variables, I asked the following: What is the relationship between financial stress and academic and social functioning and satisfaction in undergraduate residential college women's experiences? Moreover, what are undergraduate residential colleges women's attitudes about seeking professional help with issues related to financial stress and their academic and social functioning, including help from college counseling centers, the college's financial aid office, and other on and off campus resources? Further, do undergraduate residential college women identify their academic and social functioning and satisfaction as related to financial stress? Hence, this literature review is intended to provide a basic knowledge base of the context within which financial stress,

academic functioning and satisfaction, and social functioning and satisfaction are interconnected as possible predictors of undergraduate residential college women success.

As noted in chapter I, *financial stress*, as was operationalized in this study, refers to the amount of stress a student had about their financial situation and included a range of stress levels measured from "zero stress" to "very stressed" as the response choices to questions about personal and family socioeconomic standing for both dependent and independent participants. From the early planning stages of this thesis, I knew I wanted to lay some groundwork for examining the psychosocial dynamics of issues potentially leading to psychological, emotional, and physical impairments in women's development and functioning beyond adolescence and into adulthood. In addition to my personal and professional interest and experience working with women (discussed in chapter 1), I chose to focus on undergraduate residential college women because, added to the developmental experiences of adolescence, marriage, and childbirth, residential college constitutes a major life adjustment and developmental stride for women (Mehta, Newbold and O'Rourke, 2011). Moreover, a few studies on financial stress in the general population had identified women as the population most vulnerable to financial stress and, as a result, impaired functioning (Davidson, et al., 2011; Keith, 1993; Kenel, 2010).

The literature reviewed here is presented in four sections: 1) stress processes, 2) financial stress, 3) academic functioning and satisfaction, and 4) social functioning and satisfaction. The first section, "stress processes" is a brief review of Pearlin's (2002) conceptual framework for examining stress processes, and Mosher, Prelow, Chen, and Yackel's (2006) study on optimism as a predictor of positive outcomes of stressors and are both applicable to this study of college students and financial stress. The second section, "financial stress" focuses on studies of the impact of financial stress in the general population with some studies specific to the population

of residential college students. The section, "academic functioning and satisfaction" captures studies specific to college students and academic functioning and notes the severity of the impact financial stress have on academic performance and thus the success and overall well-being of college students. The last section reviews studies on the importance of "social functioning and satisfaction" for establishing and maintaining a support network of family, friends and professionals as resources for problem solving, for coping with stress and for facilitating positive outcomes in student academic careers.

Stress Processes

Based on longitudinal studies of older adults and their caregivers in the general population Pearlin (2002) proposed an interconnected three-part conceptual framework for understanding stress processes described as "stressors, moderators, and outcomes," which is applicable to this study of the relationship between financial stress and academic and social functioning and satisfaction in undergraduate residential college women. According to Pearlin:

Stressors, of course, refer to the problems, hardships or threats that challenge the adaptive capacities of people; moderators are the social and personal resources that people can mobilize to contain, regulate, or otherwise ameliorate the effects of the stressors; and outcomes refer to the effects of the stressors that are observed after the moderating resources are taken into account. In the background of the three components, and potentially influencing the nature of each of them, are the person's various social and economic characteristics... indicating an individuals' placement in systems of inequality are particularly important. (Pearlin, 2002, p.3)

Although there is extensive social science research and analysis on stress, I chose to review Pearlin's analysis in particular because it presented a rather complex topic in a somewhat easy to absorb overview, which I had repeatedly referenced and found helpful in creating my online survey questionnaire for this thesis. Surveying demographic data including college students' family dynamics, socioeconomic status, race/ethnicity and environment/ community connections provides a sense of the psychosocial factors "potentially influencing" the stress processes in undergraduate student's financial stress. As Pearlin has stated, this person in environment framework "supports a dialectic: It helps to guide the research and to organize what information the research yields; in turn, the research findings help us modify the framework" (p.1).

Stressors and stressful life events

People experience an array of stressors in their lifetime, and although most social science research refers to stressors as stressful life events, not all stressors are eventful many are chronic (Pearlin, 2002). In other words, social stress is about person in environment where social status, defined by race/ethnicity, finances, education, gender, age, and ability, is fixed with little or no chance of placement status change in enduring systems of inequality (Pearlin, 2002). Therefore, when researchers examine all stressors as simply event related, measures used may not capture the "psychosocial causes of distress and ill health which will, in turn, compromise the effectiveness of any attempt at preventive intervention" (p.4). According to an NIMH definition, "stressful life events such as trauma, loss of a loved one, a difficult relationship or any stressful situation-whether welcome or unwelcome-often occur before a depressive episode" (NIMH, p.1). However, the inference that "any stressful situation" often precipitates a depressive episode is somewhat misleading in its lack of distinction of types of stressors especially those that are enduring.

The Holmes & Rahe (1967) Social Readjustment Rating Scale (SRRS), referenced in numerous studies on social stress, consists of 43 items with assigned values on a scale of 100 to

11, as a rough indicator of the amount of readjustment a person have to make because of stressful life events. This SRRS instrument includes a range of events from death of spouse 100 points, to minor legal issues 11 points, with "begin or end school/college at 26 points, marriage 50 points, change in financial state 38 points, change in work hours or conditions 20 points, and change in social activities 18 points," as potential stressors. The overall score is interpreted as high risk for becoming ill with a score of 300 points or more, with moderate risk assessed at 150 - 299 and a score of less than 150 as indicative of moderate to low risk for becoming ill. Although it is not an instrument used in this study, the SRRS provided a guide to the types of life events that could potentially be stressful to college students and to their families. The SRRS contains scheduled and unexpected, chronic and situational events that individuals may experience as stress inducing. The SRRS is well known and used with and without modification in many studies. However, Pearlin (2002) has noted that early research assumed "all eventful experiences are potentially stressful, with the degree of stressfulness varying with the magnitude of readjustment required by the specific event" but some researchers have since understood that "change and readjustment resulting from an event cannot alone explain its stressful effects" (p.4).

In the case of this thesis study, although sudden change in or loss of financial support is an unexpected, potentially stressful event, not all students may experience stress because of the amount of change and readjustment they need to make because of the loss of or change in financial support. For instance, loss of finances could mean, to some students who qualify, an increase in financial aid or scholarship awards and grants to help alleviate the deficit brought about by the financial loss. However, in the absence of such alternative resources, a student may have to cut back on study hours to seek or increase employment hours to help reduce their financial deficits, which in turn could impact her academic and social functioning (Joo *et al.*,

2008; Kadison & DiGeronimo, 2004). As Pearlin has suggested, in any assessment of stress, moderating resources need to be assessed within the persons' "various social and economic characteristics" (p.3).

Chronic stress

As previously mentioned, Pearlin's stress processes framework was conceptualized based on data from longitudinal studies and so was especially focused on the impact of chronic stressors, (as opposed to stressful events), on functioning, physical, and psychological health over time. Pearlin named four types of chronic stressors in the stress process, "status strains, role strains, contextual strains, and quotidian logistical strains" identified as pertinent to any study of social stress. Pearlin emphasized that all four strains relate to the social domains in which a person is located "built into the organization of people's daily existence," and are "tenacious because the multiple social domains in which they are rooted are themselves enduring" (p.6).

Although undergraduate college women may experience all four types of chronic stressors over time, relevant to this study of the impact of financial stress on academic and social functioning are status strains and role strains, which Pearlin described as interrelated. Status strains, Pearlin stated "are problems and hardships" people experience as a direct result of their "placement in stratified social structures," role strains are lasting stressors that comes from ascribed roles such as "family and occupational roles." Hence, financial stress qualifies as "a problem or hardship," and is certainly applicable to the current diverse college population, which includes students who, by virtue of their racial/ethnic, citizenship and other psychosocial demographics, experience financial stress related to their status placement in the socioeconomic realm. Referring to "Extreme economic deprivation" as example of how status placement operate in the stress process Pearlin pointed out that although status placement indirectly impacts

stress "it may also be a stressor directly leading to stress outcomes" (p.6). Pearlin reiterated that stressful life events in and of itself does not capture the breadth and variety of stressors a person experiences in their lifetime.

Moderators

Pearlin (2002) described moderators in the stress process as the resources people have available to them to help reduce, manage or alleviate the sometimes debilitating impact of stressors and notes "coping repertoires, social support, and mastery (one's sense of control over one's life)" as three major resources that helps to predict outcomes of stressors (p.12). A few studies specific to college students' coping strategies and social supports noted that optimism was a major factor in students' "adaptive capacities" in their adjustment to college and in navigating a number of stressors related and unrelated to their college careers (Brissette, Scheier, and Carver, 2002; Mehta, *et al.*, 2011; Mosher, Prelow, Chen, and Yackel 2006).

Coping, social support, and mastery

In a study of "the relation of optimism to depressive symptoms," Mosher, *et al.*, (2006) defined optimism as "the general expectation that good things will occur and bad things will not" (p.1) which the researchers explained allows for active coping, a skill favorable in regards to problem solving in stressful situations and ultimately promoting positive outcome. Similar to Pearlin's analysis of how the three central moderators in the stress processes operate to influence outcome, Mosher, *et al.*, (2006) examined "the mechanisms through which optimism may influence psychological adjustment among 133 Black college students," (p.1) 42 males and 91 females between the ages of 17 and 26 years. Mosher and colleagues focused on "active coping, avoidant coping, and social supports as mediators" between optimism and the impact of stressors on these student's well-being. The results of the research noted, "Avoidant coping and social

support mediated the relation between optimism and depressive symptoms, whereas active coping did not mediate this relationship" (p.1). Quoting a number of other studies on the topic these researchers noted that optimism has been associated with "mastery-oriented achievement, physical well-being and less mood disturbance in response to stressors," as well as "with academic, athletic, occupational, military, and political success" (p.3).

Examining social support as a moderator different from coping skills in the stress process, from a broader context, Pearlin (2002) emphasized the importance of such supports as a resource and noted that "Although in name and substance social support is a social phenomenon, it is typically studied a-socially" (p.14). In other words, researchers examine social support as a positive, welcome intervention only from the perspective of the recipient of support with little or no consideration of the provider and the relationship that exists between the two. Pearlin described social support as existing in two forms: "that is, strong ties involving frequent interaction may be particularly suited to emotional and affectively uplifting support and those that are weak and intermittent may be more appropriate for specialized instrumental support" (p.15).

Pearlin described mastery or "one's sense of control over one's life" as a significant moderator in the utilization of resources and outcomes and lends a sense of agency to persons who fall within the category of experiencing status placement strain and would otherwise be passive subject in the stress process. A person's sense of mastery then works to mobilize resources in their own behalf. In the case of undergraduate college students having a sense of mastery could facilitate their ability to problem solve and negotiate resources that would alleviate or reduce the impact of financial stress on their academic and social functioning.

Outcomes

Lastly, Pearlin referred to outcomes in the stress process as the "black box of the stress process" and pointed out that outcomes are multiple and dependant on available moderating resources. For undergraduate college students experiencing financial stress, one outcome could be impaired academic functioning, another could be impaired social functioning, and yet another could take a toll on physical and psychological health. Of course, each outcome has the potential to manifest in additional outcomes with even more severe impacts. On the other hand, as Mosher, et al., (2006) proposed students with optimism have the greater advantage over students with pessimism to alter stress outcomes by virtue of their problem solving attitudes in general.

Summary

The mechanisms of stress processes are as complex as the numerous stressors people experience in their lifetime. However, having a working conceptual understanding of these mechanisms are useful when planning for further research and interventions. Examining the relationship between financial stress and academic and social functioning from a stress processes perspective illuminates the multiple reasons these relationships may exist which could be helpful to students experiencing impaired functioning. For undergraduate college women, although coping repertoires, social support, and mastery as moderators are essential to adaptive adjustment to college and to retention and completion rates, these moderators are not always readily available or even sought after (Pearlin, 2002) by some students especially when financial stress is chronic.

Financial Stress

Financial stress in the general population

In general, the literature defined financial stress as stemming from a persons' dissatisfaction with their financial situation. Davis and Mantler (2004) described financial stress as "The subjective, unpleasant feeling that one is unable to meet financial demands, afford the necessities of life, and have sufficient funds to make ends meet" but noted that people's perception of their financial situation "is implicated in the negative outcomes" (p.v). However, the literature varies on the causation of dissatisfaction. For instance, Davidson et al., (2011) reported, "financial stress is heavily correlated with poor money management skills, with a very direct relationship between the degree of financial stress someone faces and their ability to manage their expenses, control their debt, and pay their bills on time" (p.3) suggesting causation as directly related to a persons' money management behaviors. On the other hand, some studies have identified a persons' placement in systems of inequality or "social causation" as the ultimate cause of financial stress for persons of low socioeconomic status (Simmons, Braun, Charnigo, Havens & Wright, 2008; Pearlin, 2006; Garman et al., 2005; Zimmerman & Katon, 2005; Pearlin, 2002). Although the social causation perspective is favorable to blame the individual scenarios, I chose to draw on both definitions in my analyses, especially since low socioeconomic status is not the only determinant of financial dissatisfaction.

In a report on financial stress in the general population, Garman *et al.* (2005) noted "25% of working adults—that's one in four—are seriously financially distressed. This amounts to 30 million workers in America"(p.3) and although low income, unemployment and poverty is in part a factor in levels of financial stress, consumer debt to income ratio and financial satisfaction are also significant indicators. Quoting a 2001 Census Bureau report Belle & Doucet (2003)

noted that "over 31 million Americans live below the poverty line" (p.1) which is extremely low and an inadequate marker between making ends meet and poverty which does not consider the reality of how much income and resources it takes to raise a family. The report pointed out that the majority of Americans living in poverty are women and single women headed households.

Although this body of literature is not specific to my research question and sub-question, financial stress in the general population is relevant to financial stress experienced by undergraduate residential college women in a number of ways and so is applicable to this literature review. For one, financial stress of parent(s) of dependent residential college students affects their contribution to the cost of residential college and has implications for academic functioning, retention and completion rates (Kadison & DiGeronimo, 2004). The economic well-being of the country is also a factor related to student's financial stress because it directly impacts tuition and other educational expenses as well as the level of federal student financial aid made available to qualifying students (Curran, 2009; Farrell, 2005; The guide to Federal Student Aid 2001-12).

Financial stress in the college population

Some of the literature suggested, and rightly so, financial stress is not a sole determinant of academic outcomes, however, when financial hardships present as a significant challenge to students' sense of stability and adaptive capacities the socioeconomic status of the general student body and the ranking of the institution should also be taken into account (Mehta, *et al.*, 2011; Pryor, Hurtado, DeAngelo, Palucki & Tran, 2010; Kadison & DiGeronimo, 2004) in any assessment of stress. As Kadison & DiGeronimo (2004) and others have pointed out, the makeup of the college student population has drastically changed to include many students from oppressive/ poor households and communities. According to the writers, at elite institutions like

Harvard, some students of low socioeconomic status struggle to fit into a life often marked by excessive spending to match their peers at the cost of credit card debt and reduced course load and study time to accommodate jobs to support efforts at fitting in with their peers (Kadison & DiGeronimo 2004). In other words, feeling pressured by the material circumstances that seems to define most of the population at elite institutions students of low socioeconomic status are forced to make compromises detrimental to their overall purpose and benefit of being at an elite institution.

As noted previously, financial stress in the general population is relative to the financial stress undergraduate residential college women experience in a number of ways. For one, financial stress of the families of dependent undergraduate residential college women has an impact on family contribution to the cost of college and so has implications for academic functioning, retention and completion rates (Mehta, *et al.*, 2011; Kadison & DiGeronimo, 2004; Pryor, et al., 2010; Robb 2011). In many families prior to enrolling in college some undergraduate residential college students worked and contributed to family budgets and so attending college not only increases family expenses, it reduces family income (Giancola, Grawitch & Borchert, 2009; Greer & Brown, 2011; Joo *et al.*, 2008; Pryor *et al.*, 2010; Robb, 2011). Considering the inadequate threshold of the federal poverty line a family's income may not be high enough to make ends meet, but may be too high for their student to qualify for federal assistance, which uses household income standards to determine eligibility for financial aid (Robb, 2011). Financial aid packages are usually a combination of grants, work-study benefit, and loans that enter repayment six months after graduation.

Further, the literature also suggests that the U.S. economic wellness as a whole has an impact on the level of federal financial assistance, need based and merit scholarships available to

students. However, allotted funds for federal financial aid does not match the rising cost of a college education, and does not cover expenses beyond the direct cost of attendance (Curran, 2009; Farrell, 2005; Joo *et al.*, 2008; Pryor *et al.*, 2010; Robb, 2011). Some students have had to find jobs beyond the limited scope of the federal work-study program to supplement financial aid and or family contribution (Joo *et al.*, 2008; Pryor *et al.*, 2010; Robb, 2011; Scott-Clayton, 2011). In their 2010 report on college freshman norms Pryor, *et al.* surveyed 201,818 first-time, full-time, first-year students at 279 four-year colleges where more than half of the respondents reported having financial concerns about funding their college education. These respondents also report that their choice of schools to attend was influenced by the "current economic downturn" (p.).

In a spring 2007 survey of two large universities, one in the Southeast and one in the Midwest, Robb (2011) asked students "83 questions dealing with personal and financial characteristics" (p.2) results and analysis of which was published as advice from current students to incoming freshman about paying for college and financial management. The survey was mainly quantitative with one qualitative question "about financial management, paying for college, and advice they would offer to incoming freshmen" (p.1). Of the combined 6,577 responses to the survey, 45% responded to the qualitative question. Robb noted 6 broad themes which emerged from these responses: 1)the cost of attending college and methods of payment, 2) spending, 3) credit card use, 4) time management, 5) financial knowledge and education and 6) personal feelings and family impact (p.5-7). Some respondents acknowledge the issue of rising costs of a college education and limited means of payment, insufficient federal financial aid, and the burden of debt repayment on both federal and private loans post graduation. Most respondents suggested budgeting of time and money and reducing or eliminating impulsive,

unnecessary spending like eating out, giving into peer pressure to spend, as well as not using credit cards altogether or at least paying in full monthly instead of making minimum payments, which incur excessive interest rates. Robb stated that overall students in their senior year suggested a mandatory financial management class for incoming students and that most students' advice followed standard financial management guidelines.

The literature on financial stress overall indicate a link between levels of financial stress in the general population and levels of financial stress that undergraduate residential college women may be experience. These studies note that consequently, undergraduate residential college students have had to seek employment in addition to their academic course load and thus affect academic performance as well as restrict and limit opportunities for social networking and building friendships. The extensive use of credit cards by first year residential college students is also noted as a major factor in levels of financials stress (Joo *et al.*, 2008; Kadison & DiGeronimo, 2004; Mehta, *et al.*, 2011).

Academic functioning and satisfaction

Academic functioning, as operationalized in this study, refers to a student's capacity to maintain the minimal overall academic standards, which for most institutions of higher education is measured by a student's grade point average of at least 2.0 on a 4.0 scale. Academic satisfaction refers to a student's satisfaction with their academic performance and achievement, where academic functioning does not constitute academic satisfaction or dissatisfaction and vice versa.

Studies on college students' academic functioning suggested a significant relationship to levels of financial stress and to levels of stress in general, and in some findings there was no significant relationship found (Joo *et al.*, 2008; Mehta, *et al.*, 2011). Joo *et al.* (2008) examined

the impact of financial stress on college students academic functioning in a sample of 540 university students of which 53% were women and more than half of the respondents were very stressed or somewhat stressed by their financial situation. Many of the respondents had heavy credit card debt, which exacerbated their financial stress while for others the cost of college and family income was the main cause of financial stress. However, overall, the findings did not indicate a significant relationship between levels of financial stress and academic functioning and academic satisfaction with less than half of the participants being somewhat worried about academic functioning and only 5% reported impaired academic functioning.

Social functioning and satisfaction

Social functioning, as operationalized in the current study, refers to an individual's capacity to engage with and maintain sources of support in their environment. Social satisfaction refers to an individual's sense of benefit derived from engaging in relationships, which becomes formal and informal sources of support. Studies on college students' development note that peer relationships and social integration is crucial to college students overall success (Brisette et al., 2002; Enochs & Roland, 2006; Kadison & DiGeronimo, 2004). In an analysis of first generation college students' (FGS) academic success Mehta, et al., 2011 surveyed 496 students from a large southern university to gauge their coping and social skills and support. The researchers found that FGS "are less involved, have less social and financial support, and do not show a preference for active coping strategies" and they reported "less social and academic satisfaction as well as lower grade point average" (p.1). The study also stated that FGS account for more than "50%" of college students today and of the student population FGS have a high rate of academic failure and have a low retention and completion rate (Mehta, et al., 2011).

Kadison & DiGeronimo (2004) report the "cost of peer approval" as an isolating factor connected to levels of financial stress and social functioning. They note the many assumptions made about student's financial resources in elite institutions like Harvard University. One assumption was that although about "50 percent of the students at Harvard receive an average college scholarship of over half the cost of attendance" (p.73) students on financial aid felt pressured to match the excessive spending in which their peers with less college expense engaged. Some students felt isolated and even withdrew from school while others signed up for the numerous credit cards banks offer to college students during orientation, creating greater financial stress in order to reduce the rich student, poor student perceived difference between their peers and themselves. In attempts to remedy this seemingly disparaging financial status difference in addition to their full academic course loads students have to find employment to pay credit card debt and/or to keep up with the social scene of their peers. Consequently, such overburdened schedules take a toll on their academic functioning, ultimately jeopardizing their chances at successful completion of their undergraduate education, and for those who do graduate the financial burden of student loan repayment becomes a barrier to pursuing graduate studies (Kadison & DiGeronimo, 2004).

Summary

Although the studies in this literature review vary in the characteristics of the populations studied, they share a common theme that psychological health and daily functioning are often severely impacted by financial stress and by stress in general and need to be considered in assessing the psychosocial dynamics of individuals and families. The literature on financial stress overall indicate a strong relationship between financial stress and psychological functioning, academic performance and social functioning. The literature in this review was not

entirely specific to my research question and sub-question however, it provided enough feedback that levels of stressors, moderating resources and outcomes all intersect to help define possible explanations for how individuals navigate their circumstances in light of psychological, social and physical challenges that comes with everyday living. College students have many challenges, especially the challenge of fulfilling academic expectations and overall success in college. When these challenges are intensified by financial stress many students experience a domino effect of deficits in many areas of their lives including psychological and social emotional functioning. An essential part of college success for most students is social supports which consist of a number of different types of supports including relationship with professors, peers, social organizations, health services, counseling service and student affairs just to name a few. The fact that my search did not yield much in regards to levels of financial stress in undergraduate residential college women is telling of the need for more research in this area.

The perspectives in these studies offer an understanding of the numerous factors that need to be considered in any assessment of stress and outcomes of stress from a psychodynamic perspective. Examining the ways in which moderators could be direct predictors of outcomes of stress is important when considering prevention or intervention plans / programs. This type of information will inform and ideally influence public health care policies and practices about mental health service availability, service delivery and service accessibility for college women. Findings in such a study will also be of value to the budgetary and strategic planning decisions college administrators have to make for the health of the institution and for the social, academic and psychological well-being and success of its students. This information could be a resource to residential college enrolled women who may be experiencing financial stress but need support around seeking help and developing adaptive stress management coping skills, and to women in

the process of making the decision to enroll in a residential college. In addition, with awareness, peers will become more informed about the symptomology and the impact of stress on academic and social functioning, which can manifest in adverse functioning, and be able to identify such symptoms when they encounter or experience them. Further, a study of levels of stress and its impact on women's functioning have implications for the practice of clinical social work in most settings, especially college counseling services, and outpatient and social services settings that women access.

The next chapter presents the methodology used in this study. The chapter explains the mixed methodology and includes recruiting procedures and sample limitations and biases.

Chapter III also describes the researcher's data collection procedures, precautions taken to safeguard participant's anonymity, the risk and benefits to participating, and the analysis used to evaluate the data collected

CHAPTER III

Methodology

Research Purpose and Question

The purpose of this study was to explore the relationship between financial stress and academic and social functioning and satisfaction in a volunteering sample of undergraduate residential college women in Western Massachusetts. To begin exploring the relationship between financial stress and academic and social functioning and satisfaction I asked the following: What is the relationship between financial stress and academic and social functioning and satisfaction in undergraduate residential college women's experiences? Moreover, what are undergraduate residential colleges women's attitudes about seeking professional help with issues related to financial stress and their academic and social functioning, including help from college counseling centers, the college's financial aid office, and other on and off campus resources? Further, do undergraduate residential college women identify their academic and social functioning and satisfaction as related to financial stress?

Research Design

To answer my research question and sub-questions I used a mixed method anonymous survey questionnaire, administered online via the research tool "Survey Monkey" to gather data on financial stress, academic and social functioning, and satisfaction, and other psychosocial information pertinent to understanding participants' lived experiences. Although primarily quantitative, the survey instrument constitutes a mixed method design because of the semi-open-

ended comment boxes provided for participants to elaborate on their answers to closed-ended questions; comment box responses were content theme analyzed using a qualitative methodology.

I chose a mixed method design for a number of reasons. For one, a quantitative approach increases the feasibility of obtaining a large and diverse sample size, which could yield a sample representative of the identified population (Rubin & Babbie, 2007) of undergraduate residential college women from schools in Western Massachusetts. In addition, the quantitative aspect of the survey allowed for the use of structured mostly closed-ended questions and because the survey was administered online and did not require any unique identifying information from participants it was ideal for providing and for preserving participants' anonymity. On the other hand, the qualitative aspect of the survey design was useful for illuminating data, for capturing lived experiences unique to, and shared by participants. The comment boxes provided participants with the opportunity to elaborate on or explain their answers to the closed-ended questions. Hence, a mix of quantitative and qualitative approaches captures both the statistical and the narrative significance of financial stress on academic and social functioning and satisfaction in the target population.

Recruitment, Sample and Limitations

Participants in this study were from a volunteering sample of 18 undergraduate residential college women, which included 6 independent students and 12 dependent students as defined by 2011-2012 federal financial aid guidelines. Twenty-nine responses were collected but only 18 met the eligibility criteria to participate in the study. The 18 respondents were all women. To be eligible for this study a participant had to be an undergraduate college woman 18 years or older, be able to read and respond to the survey questions in English, be attending a

residential college in Western Massachusetts with on-campus or off-campus living arrangements, and had to have had access to a computer and to the internet. Women who were under 18 years old, who were not attending a residential college in Western Massachusetts, who were unable to read and respond to the survey questions in English, and men, were ineligible to complete the online survey. Further cleanup of the collected data occurred after preliminary frequencies were generated. It was found that 2 respondents in the dependent group and 2 respondents in the independent group did not answer about 75% of the survey questions and so results shown are mostly from data from the 14 completed surveys out of the 18 eligible responses presented in tables 1. However, the data from the 4 incomplete surveys are utilized in the frequencies and correlations that include questions answered by the 4 respondents.

The catchment area for this study was Western Massachusetts. The desired sample size was 100, however, for several reasons the survey did not yield enough responses representative of the target population. For one, the Human Subjects Review (HSR) application approval (see appendix A) process was much longer than I had anticipated and although my research advisor granted an extension on data collection, recruitment and data gathering was limited to less than four weeks in order to meet the mandatory extended data collection deadline. Moreover, the recruitment and data gathering period was toward the end of the school year for most Western Massachusetts residential colleges and so more than likely recruitment efforts competed with final exams, with students' summer planning, with seniors' preparation for graduation and other end of year college activities. In addition to the short data gathering and recruitment period, I was unaware that permission to recruit on college campuses had to be obtained in writing from individual colleges prior to submitting my HSR application and so HSR reviewers did not approve direct recruitment on campuses and college listservs as proposed in my original

application. HSR reviewers also advised me that, by history, some schools in the area do not give permission to recruit on their campuses.

Given the limited time between my application approval (see appendix A), and the extended deadline, recruitment was limited to flyer postings in public areas college students frequent, including the local shopping malls, coffee houses and other such public spaces within the vicinity of several college campuses in Western Massachusetts. I also sent emails with a recruitment flyer to colleagues, friends, and my SSW classmates asking their help in distributing my survey information by word of mouth and/or by email. In addition, I posted my recruitment flyer on Face book and Craigslist to capture the population of students who use these forums. No direct recruitment took place on any college campuses.

By the data gathering extended deadline I had received 29 responses to my survey of which 18, from two colleges, were eligible for inclusion in the study and so recruitment efforts did not yield a representative sample of women attending undergraduate residential colleges in Western Massachusetts. In hindsight, to resolve this turnaround time conflict I would have planned to submit my HSR application much earlier than I did, perhaps before the end of the fall semester. An earlier start would have allowed me time to respond to HSR concerns about the recruitment methods by securing permission from individual colleges to recruit on their campuses, which would have provided direct, wider access to my target population. In addition, considering the short turnaround time between HSR approval and the data gathering deadline as well as students' competing end of the year priorities, if more funding was available for this study, I could have offered incentives such as bookstore discount coupons and café gift certificates to encourage more responses.

Data Collection

Data was collected electronically using Survey Monkey, a convenient and economical internet survey program widely used by researchers, educators, employers and businesses. For a minimal monthly fee, survey monkey was used to design, and administer the survey questionnaire, and to export data in aggregate to excel spreadsheets for analysis. This electronic form of data collection provided a level of anonymity and confidentiality reassuring to survey participants.

As was discussed in the previous section, participation in this study was voluntary and respondents were recruited through flyer postings in public areas college students frequent, by word of mouth and/or by email to colleagues, friends and my SSW classmates. I also posted my recruitment flyer to Face book and to Craigslist. The recruiting materials directed participants to the survey on Survey Monkey. The first page welcomed participants and restated a brief description of the study. Participants were asked to respond to four eligibility-screening questions. Based on their responses to the eligibility screening questions participants were either directed to an end page, which thanked them for their time and interest in the study and informed them that they were not eligible to take the survey; or participants were advanced to the informed consent form (see appendix B).

After reading the informed consent form, participants who selected the "I disagree" link at the end of the form were directed to another ineligibility page, which thanked and informed them that because they did not agree with the terms outlined in the informed consent form they were ineligible to take the study at that time. Participants who click the "I agree" link were advanced to the first page of survey questions. A message placed right before the "I agree" and "I disagree" options on the informed consent form explained to participants that by clicking the

"I agree" button, they were electronically agreeing to participate in this study and that they were giving their consent for the researcher to use their information according to the informed consent form (see appendix B). A list of referral resources was provided at the end of the informed consent form and participants were instructed to print both the informed consent form and the referral list before clicking "I agree" and advancing to the survey questions.

After electronically agreeing to the conditions outlined in the informed consent form participants were advanced to the first page of the survey questions where they were asked to identify their student enrollment status as either dependent or independent. The enrollment status page provided a description of 2011-2012 federal financial aid guidelines used to determine if a student is independent or dependent. Participants then advanced to either 46 survey questions specific to dependent students or to 50 survey questions specific to independent students based on their response to the enrollment status question. All questions were based on participants' experiences during the fall 2011 semester. The survey was designed to be completed in less than 25 minutes.

Researcher-designed scales, Level of Financial Stress Scale (LFSS), Academic Functioning and Satisfaction (AFSS), and Social Functioning and Satisfaction scale (SFSS), were used to measure the independent variable, financial stress and the two dependent variables, academic functioning and satisfaction and social functioning and social satisfaction. Dialogue boxes were provided after each question in the researcher-designed measures, LFSS, AFSS and SFSS, for participants to elaborate on their responses.

The *Financial Stress Scale* (LFSS) is a 0 to 4 point scale, which measured participants' responses to four questions about the independent variable financial stress, and was assessed in conjunction with the socioeconomic information reported in the demographic section of the

questionnaire. An example of questions to which the LFSS applied is "how stressed or worried are you about tuition and other educational expenses? (e.g. travel, books, computer expenses, fees)" and (0) not at all stressed (1) rarely stressed (2) somewhat stressed (3) stressed (4) very stressed, indicated the level of stress participants had about financial obligations. Using the same scale of measurement, participants who identified their enrollment status as dependent were also asked, "How stressed or worried are you about your parent(s) financial ability to pay for your educational expenses?"

The Academic Functioning and Satisfaction Scale (AFSS) is a 0 to 3 point scale used in conjunction with participants' reported grade point average (GPA) to measure the dependent variable academic functioning and satisfaction based on four questions including an open response question about participants GPA. Participants' reported GPA was assessed using the standard minimum and maximum GPA of 2.0 to 4.0 for undergraduate students. An example of the questions to which the AFSS applied is "how satisfied are you with your academic performance?" and satisfaction was measured as (0) not at all satisfied, (1) somewhat satisfied, (2) satisfied (3) very satisfied. "

The Social Functioning and Satisfaction Scale (SFFS) is a 0 to 4 point scale used to measure the dependent variable social functioning and satisfaction based on three questions about participants' social interactions with peers in formal and informal campus encounters, interactions with family members and interactions with on-campus professionals including college counselors, faculty and staff. An example of the questions to which the SFSS applied is "how often did you get together socially with peers?" measured by (0) never (1) rarely (2) sometimes (3) often (4) very often.

The survey concluded with demographic questions including age, gender, race/ ethnicity/ culture, religion, and marital status, level of income, support network and name of college. The last two questions on the survey asked participants "How could the student financial experience at your college be improved" and "Are you the first in your family to attend college?"

Risks of participation

The informed consent (see appendix B) form explained to participants that a potential risk to participating in this study is that they may experience emotional distress while reflecting on and writing about their experiences. A list of referral resources of college counseling centers, financial aid offices, private and community mental health providers and national crises hotline was provided at the end of the informed consent form as a follow-up resource, for if they had experienced any emotional distress during or after completing the survey or if they are interested in mental health services in general. The informed consent form also recommended that participants contact the counseling center and/or financial aid office on their college campuses for follow-up.

Benefits of participation

Participation in this study was voluntary. There was no material compensation for participating. However, completing the survey questionnaire provided participants with the opportunity to gain insight to how their financial stress may be affecting their academic and social functioning and satisfaction as they reflected on and answered questions about these experiences. In addition, participants' contribution to this study is potentially helpful to other undergraduate residential college women who may be experiencing financial stress and academic and social functioning issues and are in need of support around seeking help.

Precautions taken to safeguard confidentiality and identifiable information

Participation in this study was anonymous. The online survey questionnaire did not ask participants to provide their names or any other unique identifying information. The informed consent form (see appendix B) asked participants to make sure they did not include any identifying information in their answers to open ended questions in order to preserve anonymity. Data gathered in the study is being stored electronically in a protected file for the next three years and will be destroyed thereafter. Data was used for the purpose of this thesis requirement and so was presented in aggregate to my research advisor and it will be catalogued in the Smith College library system and used for presentation and publication. In addition to my Master's thesis, the data may be used in other educational activities, professional and popular publications. If I need the data beyond the three-year period, I will continue to keep them secure and will destroy them when no longer needed.

Data Analysis

Descriptive and inferential statistics were used to analyze the data collected for this thesis. Content analysis was used to analyze qualitative portions of the data for emerging themes, which were coded and integrated throughout the findings chapter (next chapter) to illuminate the story behind the statistics. In addition, correlations were performed to measure the relationship between financial stress and the two dependent variables, academic functioning and satisfaction, and social functioning and satisfaction.

CHAPTER IV

Findings

This mixed-method primarily quantitative study was an examination of the relationship between financial stress and academic and social functioning based on the following questions: What is the relationship between financial stress and academic and social functioning and satisfaction in undergraduate residential college women's experiences? Moreover, what are undergraduate residential colleges women's attitudes about seeking professional help with issues related to financial stress and their academic and social functioning, including help from college counseling centers, the college's financial aid office, and other on and off campus resources? Further, do undergraduate residential college women identify their academic and social functioning and satisfaction as related to financial stress?

The major findings are presented here in two sections defined by research type: 1) quantitative results which includes four sub-sections of findings: a) demographics, b) financial stress c) academic functioning and satisfaction d) social functioning and satisfaction, and 2) qualitative results which, although few, includes qualitative responses collected from the dialogue boxes included in the survey questionnaire. The sub-section demographics present descriptions of the demographic characteristics of the sample. The next three sub-sections in the quantitative results present correlations between the variables financial stress, and academic functioning and satisfaction, financial stress and social functioning and satisfaction.

The study's data collection resulted in 29 responses of which 18 respondents met the eligibility criteria to be included in this study (show in table 1). Ineligible responses included 3 respondents who answered "2=male" in response to the first eligibility question "Are you "(1) female or (2) male?" In response to the third eligibility question, "Do you attend a residential college in Western, Massachusetts," 7 respondents answered "2=No." One respondent who was eligible to participate in the study selected "I Disagree" to the terms outlined in the informed consent form (see informed consent form in appendix B) and so did not advance to the main survey questions in the study. Data collected on the 11 ineligible respondents were removed from the data set prior to generating preliminary frequencies and correlations.

Further cleanup of the collected data occurred after preliminary frequencies were generated. It was found that 2 respondents in the dependent group and 2 respondents in the independent group did not answer about 75% of the survey questions and so results shown are mostly from data from the 14 completed surveys out of the 18 eligible responses presented in tables 1. However, the data from the 4 incomplete surveys are utilized in the frequencies and correlations that include questions answered by the 4 respondents.

Quantitative Findings

Demographics

The findings presented in this section are the demographic data collected from the remaining 18 respondents who answered "1=female," and "1=Yes" to all four eligibility questions (see table 1) and had agreed to the terms outlined in the informed consent agreement used in this study (see informed consent form in appendix B). Eligibility questions included, gender, age, ability to read and to respond in English, and location of school criteria.

Eligible respondents included 12 students who identified their enrollment status as dependent and 6 students who identified as independent (shown in table 1). The 18 Eligible respondents were from 2 residential schools, a private liberal arts college and a large public university in Western Massachusetts.

Table 1

Eligibility and Enrollment Status

		Valid
Are you:	Frequency	Percent
Female or Male?	18	100.0
18 years or older?	18	100.0
Able to read and respond in English?	18	100.0
Attending college in Western Massachusetts?	18	100.0
Total	18	100.0
Respondents by Student Enrollment Status		
		Valid
Student Enrollment Status	Frequency	Percent
Dependent	12	66.7
Independent	6	33.3
Total	18	100.0

Percentages reported here were calculated based on the total number of respondents in the study. Of the 18 eligible respondents, 66.7% identified their student enrollment status as dependent, and 33.3% identified as independent (shown in table 1 above). Of the 12 eligible dependent students, only 9 responded to the question on age: 11.1% or 2 were 20 years old, 27.87% or 5 were 21 years old, 5.6% or 1 was 22 years old, and 5.6% or 1 was 23 years old. The median age for the dependent group of 9 reported ages was 21 years. The minimum age for the dependent group was 20 years and the maximum was 23 years. Of the 6 eligible independent students only 4 responded to the question on age: 22.2% or 4 were 21, 22, 42, and 43 years old.

The median age for the independent group was 32 years, the maximum age was 43, and the minimum age was 21 years (shown in table 2). In regards to marital status, of the 6 respondents in the independent group 11.1% or 2 were single, 5.6% or 1 was divorced, and 5.6% or 1 had a partner but not married. Respondents were asked if they had children who lived with or received more than half their financial support from them, 5.6% or 1 respondent had 2 children, 10 and 13 years old living with her, and 5.6% or 1 respondent had 1 child who was 20 years old and also living with her.

Table 2 presents demographic characteristics on age, race/ethnicity and the importance of religion for the 13 respondents who answered these questions. In regards to questions on race/ethnicity, 10 dependent students responded: 33.3% or 6 were African American/Black, 5.6% or 1 was biracial, 5.6% or 1 was Latino/Hispanic and 11.1% or 2 were White/Caucasian. For the independent group 16.7% or 3 were African American/Black and 5.6% or 1 was White/Caucasian.

As shown in table 2, 10 dependent students responded to question on the importance of religion: 11.1% or 2 respondents reported that religion was "not at all important," for 11.1% or 2 respondents it was "rarely important," for 5.6% or 1 respondent religion was "somewhat important." For 16.7% or 3 respondents religion "important," and 11.1% or 2 respondents reported that religion was "very important" to them. For the 4 respondents in the independent group: 11.1% or 2 reported that religion was "somewhat important," and for 11.1% or 2 respondents religion was "very important." Table 3 shows respondents employment status, income, household size, and financial aid status.

Table 4, shows the remaining demographic characteristics of the sample. Of the 10 dependent respondents, based on reported expected graduation year it was found that 44.4% or 8

were in their senior year, and 11.1% or 2 were sophomores. In the independent group 11.1% or 2 were in their senior year, 5.6% or 1 was a junior and 5.6% or 1 was a sophomore. On the question about their GPA 13 respondents answered, and reported GPAs included a range from 2.7 to 3.7. For the dependent group the median GPA was 3.4, the minimum GPA was 2.7 and the maximum was 3.7. For the independent group the median GPA was 3.0, the minimum was 2.8 and the maximum was 3.4. In a total 4 responses of "1=yes" 2 respondents from the dependent group and 2 from the independent group reported that they were the first in their family to attend college.

Table 2

Demographics Characteristics of Respondents -1

		Dependent	Independ	lent		
Statistics on age		Status	Status			
N	Valid	9	4			
	Missing	9	14			
Mean		21.1	32.0			
Median		21.0	32.0			
Minimum		20	21			
Maximum		23	43			
	Dep	endent Statu	s	Independe	ent Status	
			Valid			Valid
Age	Frequency	Percent	Percent	Frequency	Percent	Percent
20	2	11.1	22	2.2	n/a	n/a n/a
21	5	27.8	55	5.6	1	5.6 25.0
22	1	5.6	11	1.1	1	5.6 25.0
23	1	5.6	11	1.1	n/a	n/a n/a
42	n/a	n/a	1	n/a	1	5.6 25.0
43	n/a	n/a	1	n/a	1	5.6 25.0
Total	9	50.0	100	0.0	4 2	2.2 100.0
Missing	9	50.0			14 77	7.8
Total eligible responses	18	100.0			18 100	0.0
			Valid			Valid
Race/ Ethnicity	Frequency	Percent	Percent	Frequency	Percent	Percent
African						
American/Black	6	33.3	60.0	3	16.7	75.0
Asian/Pacific Islander	n/a	n/a	n/a	n/a	n/a	n/a
Biracial	1	5.6	10.0	n/a	n/a	n/a
Latino/Hispanic	1	5.6	10.0	n/a	n/a	n/a
Native American	n/a	n/a	n/a	n/a	n/a	n/a
White/Caucasian	2	11.1	20.0	1	5.6	25.0
Other (please specify)	n/a	n/a	n/a	n/a	n/a	n/a
Total	10	55.6	100.0	4	22.2	100.0
Missing	8	44.4		14	77.8	
Total eligible responses	18	100.0		18	100.0	

Table 2

Demographics Characteristics of Respondents -1

How important is			Valid			Valid
religion?	Frequency	Percent	Percent	Frequency	Percent	Percent
Not at all important	2	11.1	20.0	n/a	n/a	n/a
Rarely Important	2	11.1	20.0	n/a	n/a	n/a
Somewhat important	1	5.6	10.0	2	11.1	50.0
Important	3	16.7	30.0	n/a	n/a	n/a
Very important	2	11.1	20.0	2	11.1	50.0
Total	10	55.6	100.0	4	22.2	100.0
Missing/ Not						
Applicable	8	44.4		14	77.8	
Total eligible responses	18	100.0		18	100.0	

Table 3

Demographics Characteristics of Respondents - 2

Dependent Independe

Status nt Status

			Valid Perce			Valid
Is student employed	Frequency	Percent	nt	Frequency	Percent	Percent
yes	8	44.4	80.0	3	16.7	75.0
no	2	11.1	20.0	1	5.6	25.0
Total	10	55.6	100.0	4	22.2	100.0
Missing/ Not Applicable	8	44.4		14	77.8	
Total eligible responses	18	100.0		18	100.0	

Dependent Student (Parent's)

Independent Student

			Valid			Valid
Income levels	Frequency	Percent	Percent	Frequency	Percent	Percent
less than 14998	n/a	n/a	n/a	1	5.6	25.0
25,000-34,999	1	5.6	11.1	1	5.6	25.0
35,000-49,999	5	27.8	55.6	1	5.6	25.0
50,000-74,999	1	5.6	11.1	n/a	n/a	n/a
75,000-99,999	2	11.1	22.2	n/a	n/a	n/a
More than 100,000	n/a	n/a	n/a	1	5.6	25.0
Total	9	50.0	100.0	4	22.2	100.0
Missing/ Not Applicable	9	50.0		14	77.8	
Total eligible responses	18	100.0		18	100.0	

Student's monthly			Valid			Valid
income	Frequency	Percent	Percent	Frequency	Percent	Percent
300	n/a	n/a	n/a	1	5.6	33.3
300-400	1	5.6	5.6	n/a	n/a	n/a
400	1	5.6	5.6	1	5.6	33.3
475	n/a	n/a	n/a	1	5.6	33.3
2500	1	5.6	5.6	n/a	n/a	n/a
300	1	5.6	5.6	n/a	n/a	n/a
400	1	5.6	5.6	n/a	n/a	n/a
500	1	5.6	5.6	n/a	n/a	n/a
675	1	5.6	5.6	n/a	n/a	n/a
Total	7	38.9	100.0	3	16.7	100.0
Missing/ Not Applicable	: 11	61.1		15	83.3	
Total eligible responses	18	100.0		18	100.0	

Do you have a			Valid			Valid
budget?	Frequency	Percent	Percent	Frequency	Percent	Percent
yes	2	11.1	20.0	3	16.7	75.0
no	8	44.4	80.0	1	5.6	25.0
Total	10	55.6	100.0	4	22.2	100.0
Missing/ Not Applicable	8	44.4		14	77.8	
Total eligible responses	18	100.0		18	100.0	

Table 3

Demographics Characteristics of Respondents - 2

Dependent Independe
Status nt Status

	Status			nt Status		
Do you spend less			Valid			Valid
than you earn?	Frequency	Percent	Percent	Frequency	Percent	Percent
yes	6	33.3	60.0	1	5.6	25.0
no	4	22.2	40.0	3	16.7	75.0
Total	10	55.6	100.0	4	22.2	100.0
Missing/ Not Applicable	8	44.4		14	77.8	
Total eligible responses	18	100.0		18	100.0	
Size of students'			Valid			Valid
household	Frequency	Percent	Percent	Frequency	Percent	Percent
2	1	5.6	5.6	n/a	n/a	n/a
3	n/a	n/a	n/a	2	11.1	50.0
4	3	16.7	16.7	n/a	n/a	n/a
5	2	11.1	11.1	2	11.1	50.0
6	1	5.6	5.6	n/a	n/a	n/a
8	1	5.6	5.6	n/a	n/a	n/a
4 bedroom house	1	5.6	5.6	n/a	n/a	n/a
I don't know	1	5.6	5.6	n/a	n/a	n/a
Total	10	55.6	100.0	4	22.2	100.0
Missing	8	44.4		14	77.8	
Total eligible responses	18	100.0		18	100.0	
Do you receive						
financial aid for			Valid			Valid
educational expenses?	Frequency	Percent	Percent	Frequency	Percent	Percent
yes	9	50.0	90.0	4	22.2	100.0
no	1	5.6	10.0	n/a	n/a	n/a
Total	10	55.6	100.0	4	22.2	100.0
Missing/ Not Applicable	le 8	44.4		14	77.8	
Total eligible responses		100.0		18	100.0	
roun engiere responses	, 10	100.0		10	100.0	
Do you live on or off			Valid			Valid
campus?	Frequency	Percent	Percent	Frequency	Percent	Percent
On campus	10	55.6	100.0	n/a	n/a	n/a
On campus alone	n/a	n/a	n/a	2	11.1	50.0
Within walking distance						
w/ children	n/a	n/a	n/a	1	5.6	25.0
Alone more than 10 mile	es					
_						25.0
from campus	n/a	n/a	n/a	1	5.6	25.0
from campus Total	n/a 10	n/a 55.6	n/a 100	1 4	5.6 22.2	25.0 100.0
Total	10	55.6		4	22.2	

Table 4 **Demographics Characteristics of Respondents -3**

Demog	Demographics Characteristics of Respondents -3							
	Dependent Status Independ				t Status			
First in family to attend			Valid			Valid		
college?	Frequency	Percent	Percent	Frequency	Percent	Percent		
yes	2	11.1	20.0	2	11.1	50.0		
no	8	44.4	80.0	2	11.1	50.0		
Total	10	55.6	100.0	4	22.2	100.0		
Missing	8	44.4		14	77.8			
Total eligible responses	18	100.0		18	100.0			
			Valid			Valid		
Expected year of graduation	Frequency	Percent	Percent	Frequency	Percent	Percent		
2012	8	44.4	80.0	2	11.1	50.0		
2013	n/a	n/a	n/a	1	5.6	25.0		
2014	2	11.1	20.0	1	5.6	25.0		
Total	10	55.6	100.0	4	22.2	100.0		
Missing	8	44.4		14	77.8			
Total eligible responses	18	100.0		18	100.0			
How many classes taken last			Valid			Valid		
How many classes taken last semester?	Frequency	Percent	vana Percent	Frequency	Percent	vana Percent		
3	n/a	n/a	n/a	1 Trequency	5.6	25.0		
4	11/a 4	22.2	40.0	3	16.7	75.0		
5	2	11.1	20.0	n/a	n/a	n/a		
6	3	16.7	30.0	n/a	n/a	n/a		
43	1	5.6	10.0	n/a		n/a		
		55.6	10.0		n/a 22.2	100.0		
Total	10	33.6 44.4	100.0	4		100.0		
Missing	8			14	77.8			
Total eligible responses	18	100.0		18	100.0			
			Valid			Valid		
GPA	Frequency	Percent	Percent	Frequency	Percent	Percent		
2.7	1	5.6	11.1	n/a	n/a	n/a		
2.8	1	5.6	11.1	1	5.6	25.0		
2.9	1	5.6	11.1	1	5.6	25.0		
3.1	1	5.6	11.1	1	5.6	25.0		
3.4	2	11.1	22.2	1	5.6	25.0		
3.5	1	5.6	11.1	n/a	n/a	n/a		
3.6	1	5.6	11.1	n/a	n/a	n/a		
3.7	1	5.6	11.1	n/a	n/a	n/a		
Total	9	50.0	100.0	4	22.2	100.0		
Missing	9	50.0		14	77.8			
Total eligible responses	18	100.0		18	100.0			
2 1								

Table 4

Demographics Characteristics of Respondents -3

Dependent Status Independent Status

			Valid			Valid
Major Declared	Frequency	Percent	Percent	Frequency	Percent	Percent
American Studies	1	5.6	5.6	n/a	n/a	n/a
Communication, minor in						
Education	1	5.6	5.6	n/a	n/a	n/a
Economics	3	16.7	16.7	n/a	n/a	n/a
Engineering	1	5.6	5.6	n/a	n/a	n/a
Environmental Science	1	5.6	5.6	n/a	n/a	n/a
English Lit/ African						
American studies	n/a	n/a	n/a	1	5.6	5.6
Neuroscience	n/a	n/a	n/a	2	11.1	11.1
I think Sociology	1	5.6	5.6	n/a	n/a	n/a
Sociology	1	5.6	5.6	n/a	n/a	n/a
Sociology	1	5.6	5.6	n/a	n/a	n/a
Total	10	55.5	100.0	3	16.7	100.0
Missing/ Not Applicable	8	44.4		15	83.3	
Total eligible responses	18	100.0		18	100.0	

Correlations

Except for questions that were only applicable to either dependent or independent respondents, the data analyzed in the following correlations were a combination of both dependent and independent student responses to questions specific to the three variables investigated, financial stress about tuition and living expenses, and academic functioning and satisfaction, and social functioning and satisfaction. A t-test was run to see if there was a difference in the mean response to how worried students were about tuition and living expenses, by whether they were independent or dependent students. No significant difference was found. The independent students did have a higher mean response to that question (m=3.33) than the dependent students (m=3.0) but the difference was not significant (see table 5).

Table 5	ble 5 Group Statistics					
	Student enrolment status	N	Mean	Std. Deviation	Std. Error Mean	
Financial stress about	Dependent	11	3.00	1.000	.302	
tuition and living expenses	Independent	6	3.33	1.033	.422	

Pearson's r correlation tests were run to investigate relationships between the three variables and results are presented below as follows: Financial stress is shown as the independent variable in correlation findings between question #7, "How stressed or worried are you about tuition and other living expenses," on the survey and the main financial related questions (see appendix). Results on the two dependent variables are correlations between the independent variable, financial stress, and the main questions, investigating academic functioning and satisfaction and social functioning and satisfaction. Pearson's correlations were also run on questions only applicable to dependent respondents.

Independent variable financial stress

The first test run was a Pearson correlation to determine if there was a relationship between stress about personal income and stress about tuition and other living expenses, and a significant, moderate, positive correlation was found (r=.566 p=.018, two-tailed) shown in table 6 below. A positive correlation means as respondents express more stress about their income they express more stress about tuition.

Table 6	Group Correlation 1	-	
		Stress about personal finances	Financial stress about tuition and living expenses
Canada ah and managa ah Garaga	Pearson Correlation	1	.566*
Stress about personal finances	Sig. (2-tailed)		.018
	N	17	17
Financial stress about tuition	Pearson Correlation	.566*	1
and living expenses	Sig. (2-tailed)	.018	
	N	17	17

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Next, Pearson's correlations were run to see if there was a relationship between stress about student income and how stressed respondents were about credit card debt. No significant correlation was found.

For the dependent group, a Pearson correlation was run to determine if there was a relationship between students' stress about their parents' ability to pay their tuition and educational expenses and the independent variable financial stress, and a significant, moderate, positive correlation was found (r=.642, p=.033, two-tailed) shown in table 7 below. A positive correlation means as students express more stress about their parents' ability to pay their tuition and educational expenses, they express more stress about tuition and living expenses.

Table 7	Dependent Correlation
	•

		Stress about parents' ability to pay	Financial stress about tuition and living expenses
Stress about parents' ability to pay	Pearson Correlation	1	.642*
1 10	Sig. (2-tailed)		.033
	N	11	11
Financial stress about tuition and living expenses	Pearson Correlation	.642*	1
	Sig. (2-tailed)	.033	
	N	11	11

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Financial stress and academic functioning and satisfaction

A Pearson correlation was run to determine if there was a relationship between respondents "financial stress about tuition and living expenses" and "how often a student meet w/ professors outside class" and a significant, negative, strong correlation was found (r=-.603, p=.022, two-tailed) shown in table 8 below. This suggests that as financial stress about tuition and living expenses increases students report meeting with professors outside class less often.

Table 8	Group Correlation 2		
		Financial stress about tuition and living expenses	How often student meet w/professors outside class
How often student meet w/professors outside class	Pearson Correlati	ion603*	1
	Sig. (2-tailed)	.022	
	N	14	14
Financial stress about tuitiand living expenses	Pearson Correlati	ion 1	603*
	Sig. (2-tailed)		.022
	N	17	14

^{*.} Correlation is significant at the 0.05 level (2-tailed)

In regards to financial stress and academic function, a Pearson correlation was run to determine if there was a relationship between stress about tuition and living expenses and how often respondents missed class, and a significant, moderate, positive correlation was found (r=.636, p=.016, two-tailed) shown in table 9. A positive correlation means as respondents express more stress about tuition and living expenses, they miss classes more frequently.

Table 9	Group Correlation 3		
		Financial stress about tuition and living expenses	How often students miss class
Financial stress about tuition and living expenses	Pearson Correlation	1	.630*
0 1	Sig. (2-tailed)		.016
	N	17	14
How often students miss class	Pearson Correlation	.630*	1
	Sig. (2-tailed)	.016	
	N	14	14

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Pearson's correlations were run to determine if there were relationships between financial stress about tuition and living expense, and 1) students' GPA, 2) students' need for extensions on assignments, and 3) students' academic satisfaction. No significant correlations were found. Another Pearson correlation was run to see if there was a relationship between the variables GPA and academic satisfaction. No significant correlations were found. Although too small a response rate to run a correlation with financial stress about tuition and living expenses, four people did report dropping a course, related to financial stress about tuition and living expenses.

Financial stress and social functioning and satisfaction

A Pearson correlation was run to see if there was a correlation between financial stress about tuition and living expense, and how much of support respondents thought professors were to them, and a significant, moderate, negative correlation was found (r=556, p=.039) shown in

table 10 below. This suggests that as stress about tuition increases respondents reported feeling less supported by professors.

Table 10	Group Correlation 4			
		Financial stress about tuition and living expenses	How supportive professors are to students	
Financial stress about tuition and living expenses	Pearson Correlation	1	556 [*]	
	Sig. (2-tailed)		.039	
	N	14	14	
How supportive professors are to students	Pearson Correlation	556 [*]	1	
	Sig. (2-tailed)	.039		
	N	14	14	

^{*} Correlation is significant at the 0.05 level (2-tailed)

Pearson correlations were run to determine if there were relationships between financial stress about tuition and living expense, and 1) how often student socialized w/peers, 2) how often students' connected with off-campus friends and family, and 3) if students belonged to any student clubs and/or student organizations. No significant correlations were found. In addition Pearson correlations were run to see if there were relationships between the independent variable, financial stress, and 1) the level of support students received from peers, and family members, and, 3) the level of support students received from campus counseling centers, financial aid offices and community mental health providers. No significant correlations were found.

Qualitative Findings

This study was designed with dialogue boxes, for each question asked, which invited respondents to explain or elaborate on closed-response questions. Qualitative results were too few to need thematic coding. However, responses included those quoted below.

In response to the question on stress about parents' financial ability to pay dependent students' tuition and living expenses one respondent explained: "I will be paying for my

education so it will be my responsibility, and another stated, "I personally pay for anything that is not covered by my financial aid and loans." Then in response to the question about who pay students' credit card debt if they had any, one respondent from the dependent group paid her own credit card debt and another explained, "Mother but with my money." Some respondents reported that they received stress management information from their colleges, which included "workshops on stress management, budget workshops through credit union" and "academic stress" management. Another respondent wrote, "There are the women in finance workshops but I never attended them." Most of these respondents found stress management information and workshops helpful, but one explained, "Standard reports of loans, created more stress."

On the question "What is your GPA one respondent explained, "I feel as though my GPA does not reflect my capabilities as a person." On the employment and income questions one respondent reported that her parents are retired but were employed," another explained, "My mother recently quit her job." One respondent explained, "A large part of my work study goes towards tuition."

In response to satisfaction with the level of financial aid received one respondent stated, "I am quite satisfied. I have had to take out loans however." Another wrote, "It is not enough. My father don't make that much money but I don't get enough financial aid to cover my expenses because they said his is income too high." The survey questionnaire ended with an open-ended, "How could the student financial experience at your college be improved?" and 9 respondents wrote:

"Communicating better with students and creating a more friendly environment for students and parents,"

"Give more money to students who need it"

"Give out more grant money."

"More money for the students"

"More work study"

"They are pretty accommodating, but can try to be more understanding towards family situations in which despite the parent's income they cannot or will not pay the expected family contribution."

"I have always had a great experience with them."

"Make more funds available to women with children"

"More financial aid to individuals whose parents have lost their jobs while the student is in college."

Although the qualitative response are few the information respondents provided adds to the understanding of the quantitative responses that would not have otherwise been known. The next chapter synthesizes the various components of this thesis and discusses the major findings of the study and its implications for clinical social work. It also discusses the limitations and bias of the study especially the generalizability of the sample size to the target population of undergraduate residential college women attending school in Western

CHAPTER V

Discussion

The purpose of this study was to examine the relationship between financial stress and academic and social functioning and satisfaction in a volunteering sample of undergraduate residential college women in Western Massachusetts, which included students' who identified their enrollment status as either dependent or independent as defined by 2011-2012 federal financial aid guidelines. What is the relationship between financial stress and academic and social functioning and satisfaction in undergraduate residential college women's experiences? Moreover, what are undergraduate residential colleges women's attitudes about seeking professional help with issues related to financial stress and their academic and social functioning, including help from college counseling centers, financial aid offices, and other on and off campus resources? Further, do undergraduate residential college women identify their academic and social functioning and satisfaction as related to financial stress? These are the questions posed to investigate the relationship between financial stress and academic functioning and satisfaction and social functioning and satisfaction.

The overall findings in this study show, and as some of the literature reviewed in chapter II have suggested (Joo *et al.*, 2008; Pryor *et al.*, 2010; Robb, 2011), that financial stress is associated with academic and social functioning for the respondents in this study. However, except for a few correlations of moderate to strong significance where there was sufficient data to run tests, overall the findings do not indicate strong significant correlations as was expected

between the variables in this study. The major findings shows varying degrees of significance from moderate to strong that reflect both negative and positive correlations between the independent variable financial stress and specific questions on the dependent variables, academic and social functioning and satisfaction. However, because of the limited responses received, and the small size of the study's sample, these findings are inconclusive in regards to the research questions asked and not representative of the diversity of the target population sampled. The applicability of the findings is limited to the respondents in this study and not generalizable to the target population of undergraduate residential college women attending schools in Western Massachusetts.

Findings

Descriptive Data

Frequency tables were generated and used to describe the demographic characteristics of the respondents and to assess responses to the survey questions mainly on a 0 – 4 scale measuring most responses on a range of "not at all" to "very often." All respondents are female. The Findings on age shows 11.1% or 2 respondents are 20 years old, 27.87% or 5 respondents are 21 years old, 5.6% or 1 respondent is 22 years old, and 5.6% or 1 is 23 years old. The median age for the dependent group of 9 reported ages is 21 years. The minimum age for the dependent group is 20 years and the maximum is 23 years. Of the 6 eligible independent students only 4 responded to the question on age: 22.2% or 4 respondents are 21, 22, 42, and 43 years old. The median age for the independent group is 32 years, the maximum age is 43, and the minimum age is 21 years (shown in table 2). Although ages 42 and 43 are outliers in the range, it was expected that ages of respondents would vary with some extremes because the study's eligibility criteria only specified being over 18 years old and the undergraduate

population includes older adults returning to college to complete their undergraduate education that may have been interrupted or they may be attending college for the first time (Giancola, Grawitch & Borchert, 2009). The groups were structured by the 2011-2012 federal financial aid guidelines and so a student of independent status could be 18 years or older. In addition, it is also noted that 2 respondents in the independent group are younger than the oldest respondent in the dependent group. Participants in a web-based quantitative study by Joo *et al.*, (2008) about the impact of financial stress on college students academic functioning in a sample of 540 university students had an age range of "17-34" (p.294) which is similar to the range in this study with a 9-year difference. Unlike the young adult college population of the past the current demographics of college students varies in age and life experience.

In regards to marital status, in the independent group, 11.1% or 2 are single, 5.6% or 1 is divorced, and 5.6% or 1 has a partner but is not married. Respondents were asked if they had children who lived with or received more than half their financial support from them, 5.6% or 1 respondent has 2 children, 10 and 13 years old living with her, and 5.6% or 1 respondent has 1 child who was 20 years old and also living with her. These general characteristics of the respondents in this study compares to literature describing similar characteristics in the current generation of college students (Giancola, Grawitch & Borchert, 2009; Mehta, *et al.*, 2011; Pryor, Hurtado, DeAngelo, Palucki & Tran, 2010; Kadison & DiGeronimo, 2004) many of whom are working and raising families while in school.

In regards to questions on race/ethnicity, 10 dependent students responded: 33.3% or 6 are African American/Black, 5.6% or 1 is biracial, 5.6% or 1 is Latino/Hispanic and 11.1% or 2 are White/Caucasian. For the independent group 16.7% or 3 are African American/Black and 5.6% or 1 is White/Caucasian. Again, this lack of diversity in race and ethnicity is biased in

regards to the 6 race/ethnicities and other categories listed on the survey response list. Four responses of "1=yes," 2 from the dependent group and 2 from the independent group, reported that they are the first in their family to attend college.

Of the 10 dependent respondents, based on reported expected graduation year, 44.4% or 8 are in their senior year, and 11.1% or 2 are sophomores. In the independent group, 11.1% or 2 are in their senior year, 5.6% or 1 is a junior, and 5.6% or 1 is a sophomore. On the question about their GPA 13 respondents answered. Reported GPAs include a range from 2.7 to 3.7 on the 4.0 GPA scale. For the dependent group the median GPA is 3.4, the minimum GPA is 2.7 and the maximum was 3.7. For the independent group the median GPA is 3.0, the minimum is 2.8 and the maximum is 3.4. A Pearson's correlation was run to determine the relationship between financial stress and GPA and between GPA and academic satisfaction and no significance is found. Again, the small sample size could account for these findings, which were expected to be significant. Other correlations of significance are reported in the next section.

Correlations

Pearson's r correlations were generated for a number of the variables used to measure financial stress, academic functioning, and social functioning to test the significance of these relationships. Moderate to strong, positive and negative significance were found in 5 of the Pearson's correlation testes run. Results on the relationship between stress about personal income and stress about tuition and other living expenses shows a significant, moderate, positive correlation (r=.566 p=.018). This positive correlation indicates that as students express more stress about their income they express more stress about tuition.

For the dependent group, a Pearson correlation was run to determine if there is a relationship of significance between students' stress about their parents' ability to pay their

tuition and educational expenses and the independent variable financial stress, and a significant, moderate, positive correlation was found (r=.642, p=.033, two-tailed). A positive correlation means as students express more stress about their parents' ability to pay their tuition and educational expenses, they express more stress about tuition and living expenses. This finding compares to the literature on first generation college students from low-income families where financial resources are inadequate for meeting the high and rising cost of education (Mehta, *et al.*, 2011).

A Pearson correlation was run to determine if there is a relationship between respondents "financial stress about tuition and living expenses" and "how often a student meet w/ professors outside class" and a significant, negative, strong correlation was found (r=-.603, p=.022, two-tailed). This suggests that as financial stress about tuition and living expenses increases students report meeting with professors outside class less often. This finding compares with the literature on optimism as a predictor of problem solving outcomes where active coping and avoidant coping were assessed in college students' response to stress (Mosher, *et al.*, 2006). In addition, this significant, strong correlation suggesting these respondents avoidance of meeting with professors in times of high stress is noted in the literature on FGSs and adjustment to college where the lack of cultural capital is obvious in the failing rates of FGS of concern in the Mehta, *et al.*, 2011 results.

Another Pearson correlation was run to see if there was a correlation between financial stress about tuition and living expense, and how much of a support respondents thought professors were to them, and a significant, moderate, negative correlation is found (r=556, p=.039) shown in table 10 below. This suggests that as stress about tuition increases respondents

reported feeling less supported by professors. This result is also indicative of avoidant coping in response to stress.

The fifth Pearson's r correlation test with significant findings was run to determine if there is a relationship between stress about tuition and living expenses and how often respondents missed class, and a significant, moderate, positive correlation is found (r=.636, p=.016, two-tailed). A positive correlation means as respondents express more stress about tuition and living expenses, they miss classes more frequently. Again the literature connects to this finding especially the literature on students juggling extra work hours with study time, class attendance and socializing with peers (Kadison & DiGeronimo, 2004; Mehta, *et al.*, 2011; Pryor, Hurtado, DeAngelo, Palucki & Tran, 2010; Robb, 2011). Although too small a response rate to run a correlation with financial stress about tuition and living expenses, four people did report dropping a course, related to financial stress about tuition and living expenses.

Further, Pearson's correlations were run to determine if there were relationships between financial stress about tuition and living expense, and 1) students' GPA, 2) students' need for extensions on assignments, and 3) students' academic satisfaction. No significant correlations are found. Another Pearson correlation was run to see if there was a relationship between the variables GPA and academic satisfaction. No significant correlations were found. Pearson correlations were also run to determine the relationships between financial stress about tuition and living expense, and 1) how often student socialized w/peers, 2) how often students' connected with off-campus friends and family, and 3) if students belonged to any student clubs and/or student organizations, and no significant correlations were found. No significant correlations are found in Pearson correlations between the independent variable, financial stress, and 1) the level of support students received from peers, and family members, and, 3) the level of

support students received from campus counseling centers, financial aid offices and community mental health providers. Significant correlations were expected between the above variables, however, I assess these findings as inclusive because of the small sample size which is also limited in the diversity of race/ethnicity, age, and experiences.

Lastly, a t-test was run to see if there was a difference in the mean response to how worried students were about tuition and living expenses, by whether they were independent or dependent students. No significant difference was found. The independent students did have a higher mean response to that question (m=3.33) than the dependent students (m=3.0) but the difference was not significant. This finding is consistent with the small sample size used in the study.

Limitations and Biases

Twenty-nine responses were collected of which 18 respondents met the eligibility criteria to be included (shown in table 1). Data collected on the ineligible respondents were removed from the data set prior to generating preliminary frequencies and correlations. After the initial clean up and preliminary frequencies were generated, however, it was found that 2 respondents in the dependent group and 2 in the independent group did not answer approximately 75% of the survey questions and so findings are mostly from data on 14 completed surveys. The data from the 4 incomplete surveys are utilized in the frequencies and correlations that include questions answered by these 4 respondents.

The catchment area for this study is Western Massachusetts. The desired sample size was 100, however as explained in chapter III, for several reasons the survey did not yield enough responses representative of the target population. For one, the Human Subjects Review (HSR) application approval (see appendix A) process was much longer than I had anticipated and

although my research advisor granted an extension on data collection, recruitment and data gathering was limited to less than four weeks in order to meet the mandatory extended data collection deadline. Moreover, the recruitment and data gathering period was toward the end of the school year for most Western Massachusetts residential colleges and so more than likely recruitment efforts competed with final exams, with students' summer planning, with seniors' preparation for graduation and other end of year college activities. In addition to the short data gathering and recruitment period, I was unaware that permission to recruit on college campuses had to be obtained in writing from individual colleges prior to submitting my HSR application and so HSR reviewers did not approve direct recruitment on campuses and college listservs as proposed in my original application. HSR reviewers also advised me that, by history, some schools in the area do not give permission to recruit on their campuses.

Given the limited time between my application approval (see appendix A), and the extended deadline, recruitment was limited to flyer postings in public areas college students frequent, including the local shopping malls, coffee houses and other such public spaces within the vicinity of several college campuses in Western Massachusetts. I also sent emails with a recruitment flyer to colleagues, friends and my SSW classmates asking their help in distributing my survey information by word of mouth and/or by email. In addition, I posted my recruitment flyer on Face book and Craigslist to capture the population of students who use these forums. No direct recruitment took place on any college campuses.

In hindsight, to resolve this turnaround time conflict I would have planned to submit my HSR application much earlier than I did, perhaps before the end of the fall semester. An earlier start would have allowed me time to respond to HSR concerns about the recruitment methods by securing permission from individual colleges to recruit on their campuses, which would have

provided direct, wider access to my target population. In addition, considering the short turnaround time between HSR approval and the data gathering deadline as well as students' competing end of the year priorities, if more funding was available for this study, I could have offered incentives such as bookstore discount coupons and café gift certificates to encourage more responses. The small percentage of participants in this research limits the generalizability of these findings to the target population of undergraduate residential college women attending schools in Western Massachusetts. In addition, the limited diversity of schools in the sample as well as the racial/ethnic diversity of respondents creates sampling biases in this regard.

Implications of this study to social work practice

A study of residential college women's academic and social experiences from a financial perspective is important to the dissemination of information on financial management, stress management, coping skills and the availability and access to resources for this population. It draws attention to and can potentially broaden social workers' perspectives about the relationships between psychosocial dynamics and the academic and social functioning of undergraduate residential college women. This information could be a resource to undergraduate residential college women who may be experiencing financial stress but need support around seeking help and developing adaptive stress management coping skills, and could also be useful to women in the process of making the decision to enroll in a residential college. Moreover, the research if replicated could be a meaningful source of information to college financial aid and counseling center programs, and other student support services. Findings in such a study could be of value to the budgetary and strategic planning decisions college administrators have to make for the health of the institution and for the social, academic, and psychological well-being and success of its students. Considering societal emphasis placed on higher education as an

important factor in socioeconomic success, the rising cost of attendance, student retention rates and the fact that my search for relevant literature did not yield studies matching the specificity of this study's research question is telling of the need for more current research in this area.

Because of these somewhat avoidable constraints on the limited response rate and sample size, with some modification to the survey questionnaire to elicit more open response, I plan to repeat this study in the future. I also encourage others to consider the value of this type of information in psychosocial and other assessments of undergraduate college student functioning, retention and completion rates.

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Appendix A

Human Subject Review Board Approval



School for Social Work Smith College Northampton, Massachusetts 01063 T (413) 585-7950 F (413) 585-7994

April 3, 2012

Nathalie Vaughn

Dear Nathalie,

Your project is now approved by the Human Subjects Review Committee and you can proceed. I wish you the best of luck with your research.

Please note the following requirements:

Consent Forms: All subjects should be given a copy of the consent form.

Maintaining Data: You must retain all data and other documents for at least three (3) years past completion of the research activity.

In addition, these requirements may also be applicable:

Amendments: If you wish to change any aspect of the study (such as design, procedures, consent forms or subject population), please submit these changes to the Committee.

Renewal: You are required to apply for renewal of approval every year for as long as the study is active.

Completion: You are required to notify the Chair of the Human Subjects Review Committee when your study is completed (data collection finished). This requirement is met by completion of the thesis project during the Third Summer.

Sincerely,

David L. Burton, M.S.W., Ph.D.

Chair, Human Subjects Review Committee

CC: Stacey Novack, Research Advisor

Appendix B

Informed Consent Form

Dear Participant:

My name is Nathalie Vaughn and I am a graduate student in the Smith College School for Social Work MSW program. As part of my master's thesis requirement, I am conducting this study on financial stress in undergraduate residential college women. The purpose of the study is to explore the relationship between financial stress and undergraduate residential college women's level of academic and social functioning and satisfaction. Information gathered in this study will be used for my thesis and so the research findings will be presented as a whole to my research advisor; it will be catalogued in the Smith College library system and it may be used for presentation and publication.

I am asking your participation in this study based on the following criteria: You are an undergraduate residential college woman 18 years or older in Western Massachusetts. You have access to a computer and the internet and can read and respond to the survey questions in English. As a volunteer participant in this study, you will complete an anonymous online survey questionnaire. The online questionnaire items include questions about your personal information including age, race/ethnicity/culture, religion, marital status, and about your income and your parent(s) income if your student enrollment status is dependent. The questionnaire also asks about your level of financial stress and about your academic and social functioning and satisfaction, and asks you to comment on your overall college experience from a financial perspective including suggestions for supports/interventions that could make your experience different. The survey should take no more than 25 minutes to complete.

The potential risk to participating in this study is that you might experience emotional distress while reflecting on and answering questions about your experiences. Should this be the case, and you feel that you need support I have included a list of referral resources including college counseling centers, student financial aid offices and some private and community mental health providers.. In addition, you could also contact the counseling center and financial aid office on your college campus. Your participation in this study is voluntary. There is no material compensation for participation in this study. However, your contribution to the study could be helpful to other undergraduate residential college enrolled women who may be experiencing financial stress and academic and social functioning issues and who may need support around seeking help and managing stress. In addition the survey questions helps you reflect on your experience and current situation with financial stress and your academic and social functioning and perhaps inspire you to seek help and make suggestions about what would make your overall college experience different. It could also inform and ideally influence financial aid and counseling center programs and other campus resources about mental health service availability, service delivery and service accessibility for college women.

This is an anonymous study. Once you have completed and submitted the questionnaire it will not be possible for you to withdraw from the study. To preserve anonymity please make sure you do not provide any identifying information with your answers. Data gathered in the study will be stored electronically in a protected file for a minimum of three years as required by Federal guidelines. If I need the materials beyond the three-year period, I will continue to keep them secure and will destroy them when no longer needed.

Participation in this study is voluntary and so you are free to skip any of the survey questions or withdraw from this study prior to hitting the submit button. If you have questions

about your rights and about any aspect of this study, please do not hesitate to contact me. You may also contact the Chair of the Human Subjects Review at Smith College

BEFORE CLICKING ON "I AGREE" BELOW PLEASE PRINT AND KEEP A COPY OF THIS FORM AND THE LIST OF REFERRAL SOURCES FOR YOUR RECORDS

BY CLICKING ON "I AGREE" BELOW YOU ARE INDICATING THAT YOU HAVE READ AND UNDERSTAND THE INFORMATION ABOVE AND THAT YOU HAVE HAD AN OPPORTUNITY TO ASK QUESTIONS ABOUT THE STUDY, YOUR PARTICIPATION, AND YOUR RIGHTS AND THAT YOU AGREE TO PARTICIPATE IN THE STUDY.

I Agree I Disagree