The Efficacy of Financial Counseling for College Students

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Abstract

The purpose of this study was to determine if financial counseling is effective with college students. Effectiveness was measured by increases in participants' objective and subjective financial knowledge, increases in positive financial behavior, decreases in financial stress and anxiety, and increases in financial satisfaction. The results indicate that financial counseling with college students is effective in immediately reducing stress and maintaining lower levels of financial stress after two months. Other changes associated with attending a one-on-one financial counseling session included an increased sense of subjective financial knowledge and slight increases in positive financial management skills.

Introduction

Financial counseling is often reported as a method for improving financial behaviors with the assumption that increased knowledge gained through financial counseling will be correlated with improved financial behaviors. In times of economic distress, consumers' awareness of financial preparedness and well-being appears to rise. Financial well-being is a particularly important topic for college students. University administrators have reported that more students drop out of college due to financial distress than from academic failure (Borden, Lee, Serido, & Collins, 2008). Financial stress has also been tied to suicide (Holub, 2002) and reduced mental health status (Roberts, Golding, Towell, & Weinreb, 1999) in some university settings.

The purpose of this study was to determine if individual financial counseling is effective in reducing financial stress and increasing positive financial behaviors. Financial counselors and advisors may infer that financial counseling is an effective method for improving financial behavior; however, it appears that this recommendation has gone untested. Some evidence suggests that seminar participants experience an increase in financial knowledge immediately following a financial seminar (Borden et al., 2008). Without follow-up testing, it is not possible to determine if the apparent increase in financial knowledge is retained well enough to have a lasting effect. Other research has shown that taking a semester long course in personal finance does not increase financial knowledge among high school students (Mandell & Klein, 2009).

Of only a few studies to examine the efficacy of individual financial counseling, one found that individuals who completed an 18 month telephone-based debt management program reported improved financial behaviors and lower stress at the end of the program (Kim, Garman, & Sorhaindo, 2005) and another found that individuals who participated in credit counseling reported a substantial reduction in credit card debt three years post participation (Elliehausen, Lundquist, & Staten, 2007). The current study focused exclusively on individual financial counseling and assessed effects, both immediately following counseling and after a two-month follow-up survey. Survey respondents sought help for a variety of issues. Because of that, this study is unique in that it examined the effects of general financial counseling versus other studies which assessed a specific credit or debt management program.

Literature Review

Common characteristics measured in previous studies of financial counseling are reviewed below. Before analyzing the effectiveness of financial counseling, it is necessary to identify baselines of financial knowledge, behaviors, and attitudes of those seeking financial counseling. These categories are the basis for how the current study assessed the effectiveness of financial counseling.

Financial Knowledge

Knowledgeable consumers who can make informed choices are essential to an effective and efficient marketplace. Financial knowledge suggests basic knowledge of the financial concepts that allows one to function efficiently in the four activities of financial management including cash flow management, credit management, saving, and investment. Many of the subcategories would include banking, insurance, housing, autos, credit cards, taxes, and retirement (Hilgert, Hogarth, & Beverly, 2003). In general, the financial knowledge of college students is less than desired (Avard, English, Manton, & Walker, 2005; Chen & Volpe, 1998; Goldsmith & Goldsmith, 2006; Lyons, 2004). While the level of financial literacy appears to be low for college students, Chen and Volpe recognized that students with experience in personal financial management (regardless of age) scored better on financial literacy assessments. Given the low exposure to personal financial management for many college students, it is not surprising that financial knowledge scores are low and studies have shown an increase in literacy as students progress through college (Chen & Volpe, 1998; Chen & Volpe, 2002). For instance, Chen and Volpe (1998) found that graduate students exhibited more financial knowledge than undergraduates, while juniors and seniors showed more knowledge than freshmen and sophomores.

Some of the demographic trends indicate that financial literacy differs according to gender, marital status, age, and race (Chen & Volpe, 1998; Goldsmith & Goldsmith, 2006; Henry, Weber, & Yarbrough, 2001). Both Chen and Volpe and Goldsmith and Goldsmith found that female participants scored lower than male participants on measures of financial literacy. However, females, married students, and older students are more likely to maintain and follow a budget (Henry et al.) meaning the knowledge may not be directly related to behavior.

The extent to which college students perceive their level of financial knowledge in comparison to their actual financial knowledge is rarely addressed directly by researchers. Some research has shown a low correlation between subjective and objective financial knowledge (Sages, Cumbie, & Britt, 2011), while other studies have shown some correlation between objective and subjective financial knowledge. Goldsmith and Goldsmith (2006) found that male college students were shown to believe they knew more about investing and they scored higher than female students on investing questions contained within a financial literacy survey. This finding could also be attributed to men having greater confidence regarding investing matters, which is not necessarily a positive move for one’s personal financial situation (Barber & Odean, 2001). Barber and Odean found that men exhibited much higher confidence then women regarding investment matters, but men actually experienced lower net returns due to their excessive trading behavior. On the other hand, women were found to employ more prudent investing strategies than men.

Financial Behaviors

Financial behavior can be assessed based on financial management techniques which are important components of financial well-being. Financial management includes (a) financial planning for short and long term financial goals (b) management of income and credit (c) purchases of housing, insurance, auto, and other durable and nondurable consumer goods, and services including banking, insurance, and investments and (d) investing for the future (Garman & Forgue, 2006; Mathus,1989; Xiao, 2008).

A vast number of characteristics can be used to explain college students’ financial behaviors. The current study explored financial behaviors related to financial awareness, goal-setting, budgeting behavior, and credit card behavior. Previous literature indicates that positive financial behaviors, such as keeping a budget, maintaining a savings plan, and avoiding excessive credit card use, are positively related to financial well-being and lower levels of financial stress (Gutter, Garrison, & Copur, 2010; Xiao, Sorhaindo, & Garman, 2006). Other research indicates that individuals who practice positive financial behaviors report a higher level of satisfaction with their personal finances (Xiao, Tang, & Shim, 2009).

College students are not proactively managing their money. According to a study by Henry et al. (2001), 58% of college students do not keep a budget. This study also found that women were more likely than men to have a budget, and married students were more likely to follow their budget. Additionally, students are spending money on items that they do not see as important in value. In a study of college sophomores enrolled in a personal finance course, 64.7% indicated that their spending on eating out was a problem and inconsistent with their values, followed by 15.9% of students who indicated that spending on clothes was an issue (Palmer, Bliss, Goetz, & Moorman, 2010). College students need support services that help them learn how to keep track of their money and spend in accordance with their values and goals.

Utilizing credit cards is a popular financial behavior among the college population. According to Robb and Sharpe (2009), 54% of college freshmen have a credit card, 92% of college sophomores have a credit card, and 96% of college students have a credit card by the time they are a senior. The percentage of freshmen having credit cards in their own names is likely to fall due to the recent regulatory changes enacted through the Credit Card Accountability Responsibility and Disclosure Act of 2009, though this rate is likely to remain high among the general college population. Interestingly, Lyons (2004) found that college students are largely able to manage credit cards responsibly with more than half of the students with credit cards reporting they repay their balances in full each month. However, the study also acknowledged that some college students with high debt levels are at high financial risk because of their inability to repay their debts or a lack of financial experience. The students most at risk were more likely to favor receiving financial information via the internet, pamphlets, and informational handouts rather than from live seminars, workshops, or counseling services.

Financial Attitudes

Financial attitudes can be assessed by how a person perceives objective attributes about a financial situation (i.e., income and family size, satisfaction with standard of living, satisfaction with savings and investments) after comparing them against some standard of comparison such as one's aspirations, time horizon, and prior experiences (Porter & Garman, 1993). Research has shown that financial satisfaction is associated with lower levels of financial stress and subjective finance knowledge (Joo & Grable, 2004). Furthermore, positive financial behaviors increase financial satisfaction, which in turn, positively influences academic and life satisfaction (Xiao et al., 2009). Satisfied students are less likely to drop out of school, therefore they tend to attain higher levels of education and generate greater revenue for universities. If financial counseling is able to increase financial satisfaction, and if students participate in financial counseling, higher levels of satisfaction among students would be a reasonable expectation.

Financial attitudes, such as financial stress and financial satisfaction, are potentially mediated by financial counseling. Financial stress has been shown to have negative effects on the health and general well-being of college students (Northern, O'Brien, & Goetz, 2010). Financial stress has also been strongly linked to poor academic performance and retention (Joo, Durband, & Grable, 2008-2009). Crocker and Luhtanen (2003) found financial stress to be higher in students whose self-esteem was contingent on their academic performance. Adequate financial resources are important in creating an environment for students to excel academically. Without adequate financial resources, students must use their time and energy working or seeking financial support. Subsequently, this time and energy is not available to dedicate to academic performance. This relationship is further strengthened by Crocker and Luhtanen's finding that lower grades predicted financial problems in college students.

Just as financial stress is negatively related to academic performance, financial satisfaction is positively related to academic performance (measured by grade point average) and satisfaction (Xiao et al., 2009). Specifically, Xiao et al. found that positive financial behaviors increased financial satisfaction, which, in turn, influenced more positive academic and life satisfaction. Financial satisfaction was also associated with lower levels of financial stress and subjective financial knowledge (Joo & Grable, 2004). If financial counseling is able to increase financial satisfaction and decrease financial stress, *and* students seek financial counseling, it is reasonable to expect to see an increased number of happier students and university administrators on campus.

Method

Data

The data used for this study were obtained from a sample of 312 college students who sought free financial counseling from an on-campus financial counseling center at a large Midwestern university. The reasons students sought financial counseling included budgeting assistance, credit repair, credit establishment, debt repayment, savings questions, and other issues. Given the variety of issues clients sought help for, this sample represents what we consider to be a general financial counseling process versus a specific financial counseling program (e.g., debt management programs).

Thirty-nine respondents completed a follow-up survey two months after counseling. Thirty-nine percent of the sample was male and 61% were female. Respondents who sought help were, on average, 23 years old (s = 5.11); the age of the sample ranged from 18 to 60 years old. The average monthly income of respondents was \$877 (s = \$1,112) and respondents held, on average, \$988 (s = \$2,878) in credit card debt and \$24,440 (s = \$34,191) in student loan debt. The standard deviations of the debt statistics are large relative to their respective means. Because of this, it should be noted that the range of credit card debt was a rather large \$24,000. The range of student loan debt was also large at \$187,700 – other end of range; therefore, the median student loan debt of \$12,000 is more descriptive of the typical situation.

Financial Knowledge

For the financial knowledge assessment, participants were asked to respond to six questions regarding objective financial knowledge and one question regarding subjective financial knowledge. Respondents received one point for correctly answering each of the following questions:

(a) You may obtain a free copy of your credit report each year (TRUE);
(b) Higher insurance deductibles lead to lower insurance premiums (TRUE);
(c) An annuity is a contract issued by a financial institution that guarantees a series of payments over a lifetime (TRUE);

(d) A mutual fund is an investment company that invests its shareholders' money in a diversified portfolio of securities (TRUE);
(e) Social security and company pension plans are sufficient to meet retirement needs (FALSE); and
(f) Over 20 years, you will earn more money if you invest in bonds compared to stocks (FALSE).

Respondents' scores to these six items were summed to measure objective financial knowledge ($\alpha = .77$). Subjective financial knowledge was obtained by asking respondents how knowledgeable they were about personal finances compared to their peers. The response options ranged from 1 to 10 with 10 indicating a high level of subjective financial knowledge.

Financial Behaviors

For the financial behavior assessment, participants were asked to respond to nine statements. The answers were measured on a five point Likert-type scale with choices ranging from 1 for almost never to 5 for almost always. The nine items were as follows:

(a) I make myself aware of the total amount of money I owe;
(b) When I borrow money (e.g. for a car, big purchase, or credit cards), I shop around for the lowest rate;
(c) I spend more money than I earn;
(d) I have difficulty paying bills because of not enough income;
(e) I pay my credit card bills in full and avoid finance charges;
(f) I reach the maximum limit on my credit cards;
(g) I obtain cash advances to pay money toward other credit balances;
(h) I have a weekly or monthly budget that I follow; and
(i) I have specific short-term, mid-term, or long-term written financial goals.

Financial Attitudes

Attitudinal variables were used to assess common characteristics thought to influence a student's decision to seek financial counseling. These included level of financial stress, satisfaction with one's financial situation, and financial anxiety. Financial stress was assessed immediately after the session with the following two questions:

(a) Where would you say your stress level was when you came in today? and
(b) Where would you say it is now (after discussing your situation)?

A score of 10 indicated high stress and a score of 1 indicated low stress. Financial stress was also assessed prior to the client meeting by asking clients to rank their stress on a 10-point scale where higher numbers represent greater stress. This same question was asked two months after the initial client meeting to assess sustained reductions in client stress. The financial satisfaction question asked respondents to rate their satisfaction with their "present financial situation" on a 10-point scale where higher numbers represented greater satisfaction.

Respondents were asked to indicate their level of anxiety, sleeping difficulty, ability to concentrate on school and/or work, level of irritability, difficulty in controlling worries, level of muscle tension, and level of fatigue experienced as a result of their financial situation. Questions were asked using a scale of 1 to 7, where 1 meant they never experienced any of the symptoms and 7 meant they always experienced the above symptoms. For the purposes of this study, the seven items were summed to create a variable labeled "anxiety" ($\alpha = .94$).

Data Analysis Method

The purpose of this study was to determine if financial counseling is effective in changing clients' financial status, including their knowledge, behavior, and attitudes. To accomplish this goal, paired samples *t*-tests were used to compare pre-counseling data to post-counseling and two month follow-up counseling data.

Results

The results of paired samples *t*-tests are shown in Tables 1 and 2. Financial counseling had a statistically significant association with reductions in immediate and lasting financial stress, increases in subjective financial knowledge, and increases in two specific financial behaviors (i.e., shopping around for the lowest interest rate when borrowing money and having specific written financial goals). Non-statistically significant improvements were indicated between the initial and two month follow-up scores in objective financial knowledge, financial satisfaction, anxiety, and remaining financial behaviors.

Specifically, a paired samples *t*-test revealed a statistically significant difference ($t(209) = 12.96, p < .001$) between the mean reported stress before the counseling session (M = 4.94, s = 2.64) and the mean reported stress immediately after the counseling session (M = 3.17, s = 2.03). To measure effect size, Cohen's *d* was used. It is calculated as the difference between means divided by standard deviation. Scaling this difference in terms of standard deviation is to use an internal criterion for the particular study, thereby eliminating the influence of sample size which can have a great effect when the standard error term in the *t*-test is used instead (Steinberg, 2011). A Cohen's d = .60 in this study indicates a medium effect size. Figure 1 shows this relationship graphically.

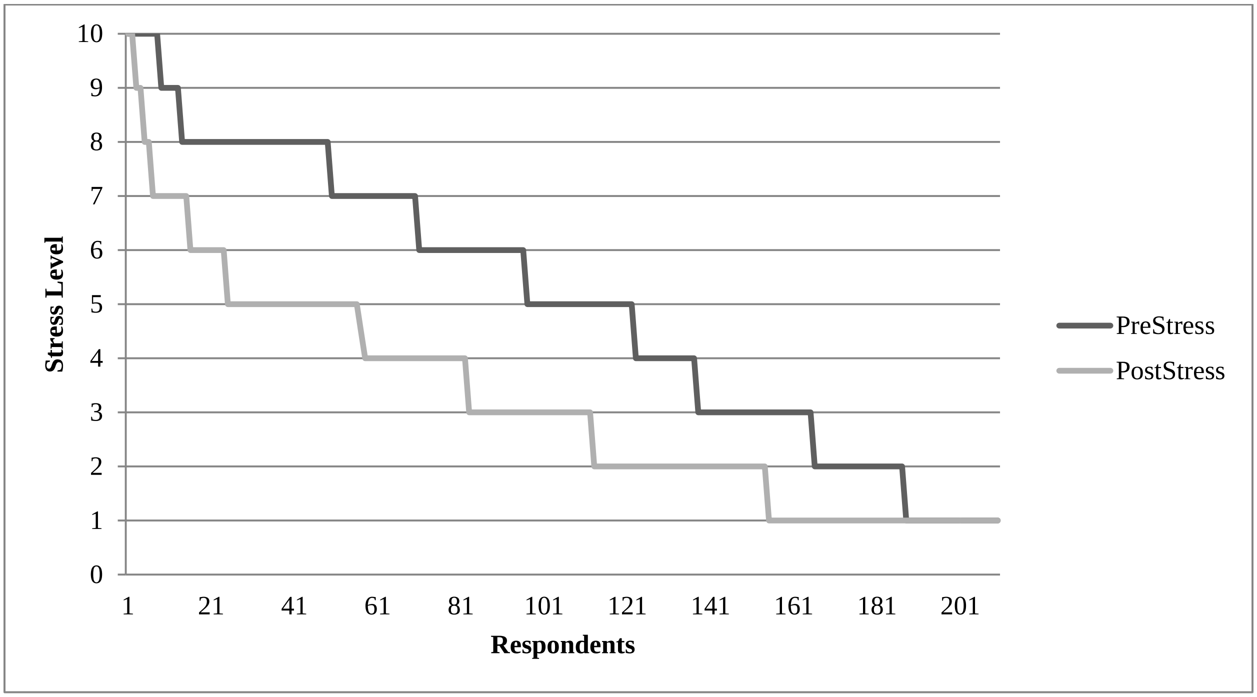

Figure 1. Pre and Post Counseling Stress Level

A limited number of responses were received for a follow-up survey two months after counseling. Statistically significant results indicated that the reduction in stress was lasting. A paired samples *t*-test revealed a statistically significant difference ($t(31) = 2.49$, $p < .05$) between the mean reported stress before the counseling session (M = 6.09, s = 2.13) and the mean reported stress two months after the counseling session (M = 5.26, s = 1.93). The Cohen's d = .38 indicates a small to moderate effect size.

Table 1

Comparison of stress levels reported at the end of the client session

Paired-Sample Variables	***n***	***t***	***p*-value**
Stress before versus immediately after	210	12.96	< 0.001

Among the remaining attitudes and financial behaviors surveyed, the results in Table 2 show that the only statistically significant improvements were in using cash advances. The lack of significance in several of the other behaviors is not particularly surprising after considering the difficulty that could meet efforts to change in just a two month period. For instance, it could be difficult for someone who has long engaged in a pattern of spending in excess of household income to begin paying credit cards in full each month within a two month time frame. The commitments to repay have already been incurred, and absent an increase in income, it could take a substantial amount of time to get within range of being able to pay credit cards off every month. In contrast, ceasing use of cash advances is a behavior change that can be implemented immediately. Beginning to follow a budget may take considerable effort and changes in lifestyle for those unaccustomed. What are less apparent are the reasons counseling did not increase participants' efforts to remain aware of amounts they owe.

Table 2

Comparison of pre to two month follow-up data

Paired-Sample Variables	***n***	***t***	***p*-value**
Financial Knowledge			

Objective financial knowledge	30	1.07	NS
Subjective financial knowledge	32	-1.46	NS
Financial Behaviors			
Aware of money owed	33	1.04	NS
Shop for lowest APR when borrow money	32	-1.23	NS
Spend more than earn	33	-0.41	NS
Have difficulty paying bills	33	-1.00	NS
Pay credit card in full each month	28	0.94	NS
Reach the maximum on credit cards	29	1.72	NS
Obtain cash advances to pay other bills	30	2.52	<0.05
Follow a budget	33	1.03	NS
Have specific written financial goals	32	-1.88	NS
Financial Attitudes			
Financial stress	32	2.49	< 0.05
Financial satisfaction	32	-0.58	NS
Anxiety	27	-0.99	NS

Discussion

The encouraging findings are that financial counseling does appear to be working to help clients feel more positive about their personal financial situations. Results indicated that individual financial counseling had a significant and lasting effect on reduced financial stress. Financial counseling appeared to increase respondents' self-assessed level of financial knowledge and certain beneficial financial behaviors. The less encouraging findings however are that the results indicated that financial counseling did not have a statistically significant effect on changes in objective financial knowledge, other financial behaviors, financial satisfaction, or anxiety.

It is interesting to note that although pre and post measures of financial satisfaction show a dramatic increase, the difference is not statistically significant. It is reasonable to assume that students who do not feel more satisfied about their personal financial situation do not complete the two month follow-up survey. Combined with previous research that shows a direct relationship between lower financial satisfaction and lower academic and life satisfaction (Xiao et al., 2009), it is possible that some who did not experience an increase in their financial satisfaction may have decided to quit school. We were not able to confirm the specific reasons for failure to complete the follow-up surveys with our data.

The unchanged objective financial knowledge may not be as problematic as appears at first glance. Previous literature indicates that financial knowledge is not predictive of financial behaviors (Borden et al., 2008). Furthermore, most respondents saw a counselor only on a single occasion. If the respondent was seeking help for an issue unrelated to the financial knowledge questions, it is reasonable to assume an unchanged level of financial knowledge.

Conclusion and Implications

This analysis produced some encouraging indications that individual financial counseling not only tends to reduce stress immediately, but the benefits tend to endure. This is particularly interesting in the current economic environment characterized by persistently high unemployment and stagnant wage growth against a backdrop of rising consumer prices. These factors underscore the importance of individuals and families making the best use of their financial resources without having their decision processes hampered by stress and confusion. The finding that even a single counseling session can be effective at addressing obstacles is encouraging.

Although the findings were heartening, there is more work to be done. A sample consisted of the number of respondents who completed the initial survey when they sought financial counseling and also responded to the two month follow-up survey. Having a larger sample size would allow for more in-depth comparisons of the pre and post counseling data. Respondents did not attend an additional counseling session at the university between the pre and post data collection, although it is unknown whether they sought other help or attended a financial counseling class or seminar. Future research should attempt to control for this factor. Despite the limitations of this study, there are important policy implications to consider.

Prior research has established that students with less stress, particularly financial stress, are less likely to drop out of college (Joo et al., 2009). Findings of the current study suggest that students who seek financial counseling experience an immediate decrease in their financial stress levels and maintain reduced stress levels in the months following their financial counseling session. Policies designed to require some form of financial counseling at the college and university level would seek to improve college retention rates. Based on cost-benefit analysis it may not be feasible to provide free individual financial counseling to every student. In addition, the link between financial knowledge and behavior is tenuous. However, Peng, Bartholomae, Fox, and Cravener (2007) replicated results from Bernheim, Garrett, and Maki (2001), who found that adults that had financial education exposure were shown to have higher savings rates and to have accumulated more wealth than adults that were not exposed to financial education in high school and college. Peng et al. also stated that it is reasonable to expect that as college students take on more personal financial responsibility by paying bills, using credit cards, working, and managing their student debt, their interest in personal finance increases and learning takes place. Providing personal finance courses in colleges and universities may be a cost effective approach to financial education for college students. Offering and targeting free financial counseling to at-risk students would also be a less expensive alternative for colleges and universities to implement. For instance, requiring first generation students to seek financial counseling would likely yield higher retention rates for that group of students.

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