

# Changes in Health, Negative Financial Events, and Financial Distress/Financial Well-Being for Debt Management Program Clients

Barbara O'Neill, Aimee D. Prawitz, Benoit Sorhaindo, Jinhee Kim, and E. Thomas Garman

*The study explored the relationship between health and financial distress/financial well-being and differences in health based on (a) time spent in a debt management program (DMP) and (b) occurrence of negative financial events. Spearman's rho indicated those with lower financial distress, higher financial well-being in 2005 reported better health ( $N = 1,119$ ,  $p < .001$ ). Wilcoxon ranked sums test indicated improved health for DMP clients ( $n = 819$ ) from 2003 to 2005 ( $p < .0001$ ). Median tests and Mann Whitney post hoc tests indicated better health for clients reporting fewer negative financial events ( $N = 1,169$ ,  $p < .05$ ). For DMP clients, health improves (a) over time, (b) with lower incidence of negative financial events, and (c) with lower financial distress and greater financial well-being.*

*Key Words: financial counseling, financial distress, financial well-being, health status, credit counseling clients*

## Introduction

Researchers have established that a relationship exists between health and levels of stress. In particular, researchers examining health in relationship to one's level of financial distress and worry about financial matters have found clear connections (Bagwell & Kim, 2003; Drentea & Lavrakas, 2000; Kim & Garman, 2003; Kim, Garman, & Sorhaindo, 2003; O'Neill, Sorhaindo, Xiao, & Garman, 2005a, 2005b, 2005c). In recent literature, financial distress has been defined as a reaction to the condition of one's personal financial state (Prawitz et al., 2006a, 2006b).

Financial distress is a subjective phenomenon. Two individuals with the same levels of income and economic resources may have different levels of perceived financial distress and financial well-being. Financial distress can last a short time, or it can become a persistent state for families at all income levels. Frequently, financial distress involves

a pileup of stressor events such that, before one event can be handled, another is already being felt (Garman, Lecch, & Grable, 1996; Kim, Garman, et al., 2003). Occurrence of stressor events, sometimes called negative financial events, can contribute to financial distress. Examples include receiving overdue notices from creditors and collection agencies, issuing checks with funds insufficient to cover them, getting behind on bill payments, family money squabbles, and worrying about whether one is prepared financially for emergencies or major life events such as college and retirement.

Evidence of progressively more financial distress is increasingly visible in U.S. society. Indications include high bankruptcy filings rates ("Bankruptcy filings," 2006), increasing credit card debt (\$9,312 in 2004) (Stat bank, 2005), low savings rate and asset accumulation (Bucks, Kennickell, Moore, Fries, & Neal, 2006; Lansing, 2005; "New report finds," 2002), and insufficient liquid savings

*Barbara O'Neill, Professor and Extension Specialist, Rutgers Cooperative Extension, Cook College Office Building Room 107, 55 Dudley Road, New Brunswick, NJ 08901, oneill@aesop.rutgers.edu, (732) 932-9155 x250*

*Aimee D. Prawitz, Associate Professor, Northern Illinois University, DeKalb, IL 60115-2854, aprawitz@niu.edu, (815) 753-6344*

*Benoit Sorhaindo, Director of Research, InCharge Education Foundation, Inc., 2101 Park Center Dr. Suite 310, Orlando, FL 32835, bsorhain@incharge.org, (407) 532-5704*

*Jinhee Kim, Assistant Professor and Extension Specialist, University of Maryland, Family Studies Department, 1204 Marie Mount Hall, College Park, MD 20742, jinkim@umd.edu, (301) 405-3500*

*E. Thomas Garman, Professor Emeritus and Fellow, Virginia Tech University, President, Personal Finance Employee Education Foundation, 9402 SE 174th Loop, Summerfield, FL 34491, ethomasgarman@yahoo.com, (352) 347-1345*

(Zhang & DeVaney, 2004). Researchers continue to find evidence of relationships among financial distress, negative financial events, and health (Drentea & Lavrakas, 2000; Kim, Garman, et al., 2003; O'Neill et al., 2005c). The purposes of the current study were to explore these relationships further and to track over time the health status of financially distressed consumers in a credit counseling agency's debt management program.

## **Literature Review**

A number of Americans can be described as financially distressed ("2<sup>nd</sup> American Express," 2004). Worry about money affects many aspects of a person's life, including health and job productivity (Kim & Garman, 2003). The current study sought to determine whether health status was related to the experiencing of specific negative financial events and consumers' reactions to their financial condition manifested as financial distress. The literature review examines past research about relationships among financial distress/financial well-being, health, and negative financial events.

### ***Financial Distress and Health***

Stress can cause numerous deleterious changes in health. Stress appears to accelerate the aging process by shortening the lifespan of cells, thereby opening the door to disease (Epel et al., 2004). Some examples of stress-related illnesses are tension headaches, nervous colitis, nausea, irritable bowel syndrome, anxiety, low self-esteem, depression, hives, insomnia, compulsive eating, fatigue, low back pain, stiff neck and shoulders, chest pains, and irritability (Koesten, 2005; Tangri, 2003; Weisman, 2002).

Research has continued to confirm the view that financial distress, in particular, contributes to various health disorders (Drentea & Lavrakas, 2000; O'Neill et al., 2005c). As financial distress increases, perhaps from preoccupation with issues such as calls from debt collectors or unpaid debt and bills, individuals may experience a myriad of stress-related mental and physical symptoms and illnesses. O'Neill et al. (2005c) studied the negative health effects of financial distress upon a sample of 3,121 credit counseling program clients. More than 4 in 10 (42.4%) answered yes to the question "Do you feel your health has been affected by your financial problems?" Self-reported health effects of financial problems included anxiety, insomnia, headaches, and depression, as well as an inability to afford or access recommended health maintenance practices and health care services. Additional examination of this same group of credit counseling clients revealed a

variety of positive associations among the self-reported health status and financial practices (O'Neill et al., 2005a, 2005b). Respondents in poor health had the highest financial stress level, and those in very good health had the lowest level.

Ironically, a cause of financial distress, which can result in negative health effects, is the cost of health care itself. Field and Vogt (2004) found that 54% of almost 1,000 respondents reported increases in financial distress ranging from "some" to "considerable," in response to rising health care costs. Nearly 3 in 4 (73%) were "somewhat" or "very" concerned about how rising health care costs might impact their ability to fund retirement and other financial goals.

Poor health can result from or result in financial distress, or both. For example, personal finances can negatively affect health (e.g., an overdue medical debt resulting in delayed or inadequate treatment and/or physical effects of stress) or be negatively affected by health (e.g., increased medical expenses resulting in lower asset accumulation and a poor credit history resulting from unpaid medical bills due to health problems). Drentea and Lavrakas (2000), for example, found that a high debt-to-income ratio was significantly related to worse physical health and health status, noting that the financial strain associated with this financial condition clearly constituted a stressor that affected health. Having more stress about overall debt also was associated with worse health, prompting concern that indebtedness may provide a source of chronic strain on financial well-being. Conversely, Lyons and Yilmazer (2005) found that poor health significantly increased the probability of financial strain, but found little evidence that financial strain contributed to poor health.

### ***Financial Distress/Financial Well-Being and Negative Financial Events***

Financial distress/financial well-being has been described as judgments about and responses to one's financial condition (Prawitz et al., 2006b). Although objective measures of the financial state (e.g., household income, debt-to-income ratio, etc.) give objective evidence of where one stands financially, the subjective measure of financial distress/financial well-being can help researchers examine consumers' perceptions about and reactions to their financial condition. Researchers then can determine whether increased financial distress and poor financial well-being are related to other conditions experienced by individuals and families, including the status of their health.

One large group of adults who exhibit financial distress is credit counseling agency clientele. Approximately 3.43 million adults, representing an estimated 9 million men, women, and children in families and households, make contact with non-profit credit counseling agencies each year seeking suggestions and advice about money problems and budgeting (Bayot, 2003; Schmitt, Timmons, & Cady, 2001). Many of these individuals view help from such agencies as the last source of assistance available before they see an attorney to declare personal bankruptcy. A majority of consumers who seek intervention from such agencies experience substantial or very high financial distress in their lives (Bagwell & Kim, 2003; Bailey, Woodiel, Turner, & Young, 1998; Garman et al., 1999; Kim, Garman et al., 2003; Kim, Sorhaindo, & Garman, 2003).

Financial distress is different from negative financial events, sometimes referred to as negative stressor events. Kim, Garman, et al., (2003) defined negative stressor events as incidents that had the capability of causing change, specifically to the level of financial stress experienced by an individual. Such events might include negative occurrences such as paying bills late or receiving unwanted contacts from creditors, including phone calls or notices about past-due bills. Kim, Garman, et al. found, in a study of financially distressed consumers, that those who experienced fewer financial stressor events reported better health. In a more recent study, Kim, Garman, and Sorhaindo (2005) examined whether credit counseling and debt management made a difference in the occurrence of financial stressor events. They found that consumers who remained active in a credit counseling agency's debt management program reported experiencing fewer financial stressor events 18 months after joining than did inactive clients.

Financially distressed consumers often report no or low savings and high household debt. In the MetLife Study of Employee Benefit Trends (2003), 69% of employees surveyed were concerned with "having enough money to make ends meet." Furthermore, 52% reported that they managed their finances by "living paycheck to paycheck." Among those with household incomes of less than \$30,000 and those whose incomes were \$30,000 to \$49,999, 87% and 65%, respectively, reported they lived "paycheck-to-paycheck." A ComPsych study of over 700 employees found that half reported a general lack of financial health (Reality of financial trouble, 2004). When asked to describe their personal financial situation, 27% reported "I

am one major setback away from financial disaster," and 22% noted "I am worse off than last year, with less savings/income and more debt than before."

The purpose of the current study was to explore the health status, frequency of occurrence of negative financial events, and financial distress/financial well-being in a follow-up study of a sample of credit counseling agency clients. With a quarter of U.S. workers experiencing financial distress, often accompanied by physical symptoms such as insomnia and headaches (O'Neill et al., 2005c), findings of the study will be important to direct educational and counseling interventions.

## **Methodology**

### ***Data Collection***

The current study used data from a national sample of financially distressed adults who telephoned a large non-profit credit counseling agency seeking assistance with outstanding debt and subsequently became clients of its debt management program. In a debt management program arrangement, creditors often make concessions to overly indebted consumers (e.g., lower interest rates and/or waiving of late fees or other charges) to help them make payments and avoid bankruptcy; in exchange, the agency collects monies owed and disburses them to creditors on behalf of their clients.

Data collected for the study were from Waves I and II of a tracking study designed to obtain longitudinal information about credit counseling agency clients. The information is being used to understand the impact of the debt management program and to track changes in financial behaviors and other outcomes for program participants over time. Wave I was conducted in 2003 with a total of 3,121 respondents from 7,200 who were sent a survey, constituting an overall response rate of 43%. Of the 7,200 surveys sent, 443 were undeliverable; thus, the adjusted response rate was 46% (3,121/6,757).

Wave II surveys were mailed in mid-February 2005. Reminder postcards were sent in March 2005, and returns were accepted until mid-April 2005. The survey included 35 items, many of which were the same as those used in the Wave I study, which included 32 items. However, Wave II dropped some Wave I items and added several new items. The elapsed time between the two surveys was approximately 20 to 22 months (June-August 2003 to February-April 2005).

The Wave II sample began with the original mailing list of 7,200 clients used in Wave I, plus an additional 300 people who joined the debt management program at approximately the same time as the original respondents (7,500 total). Prior to mailing, the sample was cleaned by removing 1,171 incorrect or incomplete addresses for a total mailing of 6,329. Over 1,200 respondents returned usable questionnaires ( $N = 1,210$ ), for an overall response rate of 19%. A total of 954 surveys were returned as undeliverable, typically because an address was incomplete or a person had died or had moved without providing a forwarding address. Thus, 5,375 surveys were actually delivered to DMP clients, constituting an adjusted response rate of 23%.

### Variables

Variables were operationalized as indicated below.

**Financial distress/financial well-being.** Scores on the InCharge Financial Distress/Financial Well-Being (IFDFW) scale measured this variable. The IFDFW scale has undergone multiple tests to establish its validity and reliability (Prawitz et al., 2006a, 2006b). Factor analysis using data from the current study confirmed that the instrument was measuring only one construct (see Table 1). Cronbach's alpha for the items making up the IFDFW scale with this sample of financially distressed individuals was .935, indicating high internal consistency; the IFDFW national norming study Cronbach's alpha was .956 (Prawitz et al., 2006a).

Items included in the IFDFW scale are shown in Table 1. For each item, subjects indicated numerical responses in a

semantic differential-type format, ranging from negative (1) to positive (10). Each answer format displayed anchor terms at points 1, 4, 7, and 10. Refer to the Appendix for a copy of the instrument.

Scores on the IFDFW were computed by adding numerical responses for each of eight items, then dividing the total by eight. Resulting scores could range from 1 (*overwhelming financial distress/lowest financial well-being*) to 10 (*no financial distress/highest financial well-being*) (Prawitz et al., 2006b).

**Negative financial events.** Reported frequency of the occurrence of nine specific negative financial events during the recent past (past 12 months for Wave I, past 6 months for Wave II), such as "paid a late fee for paying a bill late" and "received an overdue notice from a creditor about a past due bill," measured this variable. Respondents were instructed to indicate the frequency of occurrence for each event as "never" (coded as 0), "once" (coded as 1), or "more than once" (coded as 2). The nine negative financial events chosen commonly have been cited as "red flags" in the vernacular of creditors and suggest a definite state of overindebtedness (Detweiler, 2003). The frequency of occurrence of such events, then, provided an indication of a respondent's financial condition.

**Perceived health status.** Responses to the question, "Would you say your health is..." measured this variable. For Wave I, response choices were 1 (very good), 2 (good), 3 (satisfactory), and 4 (poor); for Wave II, response choices ranged from 1 (*poor*) to 10 (*excellent*), with anchor terms placed at points 4 (fair) and 7 (good). To

**Table 1. Factor Loadings for the Eight Items Making up the IFDFW Scale, Wave II, ( $n = 1,122$ )**

Item #	Item description	Factor loading
1	What do you feel is the level of your financial stress today?	.860
2	On the stair steps below, mark how satisfied you are with your present financial situation.	.819
3	How do you feel about your current financial situation?	.874
4	How often do you worry about being able to meet normal monthly living expenses?	.870
5	How confident are you that you could find the money to pay for a financial emergency that costs about \$1,000?	.745
6	How often does this happen to you? You want to go out to eat, go to a movie, or do something else and don't go because you can't afford to.	.784
7	How frequently do you find yourself just getting by financially and living paycheck to paycheck?	.791
8	How stressed do you feel about your personal finances in general?	.899
	Eigenvalue	5.532
	Proportion of variance explained	.692

make comparisons of results from the two data sets, the response choices for Wave II were collapsed and recoded as follows: 1, 2, 3 = 4 (poor); 4, 5 = 3 (satisfactory); 6, 7 = 2 (good); 8, 9, 10 = 1 (very good). (When data from only Wave II were used in hypotheses testing, the full 10-point response range with its original coding was utilized.)

### ***Hypotheses***

Previous research (Bagwell & Kim, 2003; Drentea, 2000; Drentea & Lavrakas, 2000; Kim, Garman, et al., 2003; Kim, Sorhaindo, et al., 2003; O'Neill et al., 2005a) generally supported relationships between personal finances and health, especially among samples of financially distressed populations. This study extended previous research by examining the health of such clients in conjunction with both financial distress/financial well-being and changes in financial practices. Based on previous research, the following hypotheses were formulated:

- H1: Self-reported health status will improve for consumers in a paired sample (using 2003 and 2005 data) 2 years following their initial contact with a credit counseling agency.
- H2: Self-reported health status will be positively associated with higher scores on the IFDFW scale (indicating lower financial distress and higher financial well-being).
- H3: Those reporting fewer occurrences of specific negative financial events will report better health than those who have experienced greater frequency of negative financial events.

### ***Data Analysis***

Hypothesis 1, that participants' health status will improve 2 years following initial contact with a credit counseling agency, used a subsample of the data. The subsample consisted of respondents who had participated in both Waves I and II of the data collection and who had provided responses to the item measuring the dependent variable in both waves ( $n = 819$ ). Response categories for the item measuring the dependent variable, health status, were collapsed from 10 to 4 for Wave II data, so the health status query responses could be compared with data from Wave I. Because the level of measurement for health status was ordinal, the Wilcoxon ranked sums test was used to test this hypothesis. The Wilcoxon test is a non-parametric procedure appropriate for comparing paired samples (Siegel & Castellan, 1988). The test statistic was based on

the ranks of the absolute values between reportings of health status for Wave I and Wave II.

Hypothesis 2, that there would be a positive relationship between health status and higher IFDFW scale scores (indicating lower financial distress/higher financial well-being) utilized data from Wave II only, as data needed to compute financial distress/financial well-being scores were not collected in Wave I. Although financial distress/financial well-being scores are considered interval data (Prawitz et al., 2006b), health status was measured at the ordinal level; hence, the Spearman's rho was chosen to test Hypothesis 2. The Spearman test is the non-parametric version of the Pearson's correlation coefficient, appropriate for use with ordinal and interval data (Siegel & Castellan, 1988). The Spearman's rho is based on rankings of the data rather than actual values.

Hypothesis 3, that those reporting fewer occurrences of specific negative financial events would report better health than those who experienced greater frequency of such events, used data from Wave II. The median test, a non-parametric test appropriate for comparison of multiple independent samples when the dependent variable is measured at the ordinal level (Siegel & Castellan, 1988), tested this hypothesis. Mann Whitney U tests served as post hoc tests to determine differences between specific groupings that represented frequency of occurrence of events (i. e., never, once, more than once) when significance was revealed with the median test. The Mann Whitney U is the non-parametric equivalent of the  $t$  test of independent samples and requires an ordinal level of measurement (Siegel & Castellan, 1988).

## **Findings**

### ***Sample Profile***

Descriptive statistics about the total sample are presented in Table 2. In Wave I ( $N = 3,121$ ), females comprised over two thirds (71%) of the respondents, a typical gender distribution for credit counseling clients (Garman et al., 1999). Almost 7 in 10 (66%) were under age 50, with an average age of 42.0 years. Married and single respondents made up 63% and 37% of the sample, respectively. Nearly one half of the sample (47%) reported annual household incomes of less than \$30,000.

The characteristics of the participants in Wave II ( $N = 1,210$ ), also provided in Table 2, are similar to those of Wave I because a number of the respondents ( $n = 828$ ) had participated in both Waves I and II of data collection.

**Table 2. Waves I and II Respondent Characteristics**

Variable	Wave I respondents (N= 3,121) (%)	Wave II respondents (N= 1,210) (%)
Gender		
Male	29	26
Female	71	74
Age		
18 to 34	30	23
35 to 49	36	36
50 to 64	25	28
65 and over	9	13
Marital status		
Married	63	55
Single	37	45
Employment Status		
Employed full-time	80	65
Employed part-time	2	10
Not employed	18	25
Household income		
Under \$30,000	47	43
\$30,000 to \$60,000	38	39
\$60,000 and over	15	18
Education	N/A	
High school or lower		39
Some college		43
College grad or higher		18
Number of people in household	N/A	
One		27
Two		32
Three or four		33
Five or more		8
Ethnicity	N/A	
Caucasian		64
African-American		23
Hispanic		8
Other		5

Some values are reported for Wave II but missing for participants in Wave I because data were not collected on certain demographic characteristics in the Wave I phase of the study.

For Wave II participants, gender and age distributions were similar to that of Wave I. For Wave II, the average

age was 41.5 years, slightly younger than the average age of 42.0 years for the Wave I group. In Wave II, 55% were married, as opposed to 63% in Wave I. In Wave II, 43% of respondents reported incomes under \$30,000 as compared with 47% in Wave I. For Wave II, almost 4 in 10 (39%) reported their highest level of education as high school or lower. Nearly one in five (18%) were college graduates, and the remainder of the sample (43%) had completed some college. The average family size was 2.5 persons; nearly two thirds (64%) of the Wave II sample were Caucasian, and almost a quarter (23%) were African-American.

In the aggregate, the respondents were doing better financially since they joined the debt management program. However, many respondents were still experiencing financial difficulty approximately 20 months following the Wave I data collection and about 20 to 22 months after joining the debt management program. This is not unusual because successful participation in a debt management program is 3 to 4 years, during which time the original consumer debts are slowly repaid. Improvement in personal financial well-being is a gradual process, and past financial difficulties take time to overcome. About three-fourths (73%) reported that they were just getting by financially, and about 6 in 10 reported curtailing social activities for lack of money. Over half (54%) reportedly could not handle a major financial emergency of about \$1,000, and nearly 4 in 10 (39%) felt that they were not “on track” for a financially secure retirement.

The financial distress/financial well-being score was a composite of responses to eight items that, together, measured the variable. Scores ranged from 1.00 (*overwhelming financial distress/lowest financial well-being*) to 10.00 (*no financial distress/highest financial well-being*). The average financial distress/financial well-being score for Wave II clients was 4.81, a score that indicated high financial distress/poor financial well-being (Prawitz et al., 2006b). Scores below the scale’s midpoint of 5.50 for nearly two thirds of the respondents (66.0%) indicated that this group of consumers continued to experience financial distress. See Table 3 for a summary of IFDFW Scores for Wave II respondents.

In the Wave I study, participants responded to queries about the frequency of occurrence of specific negative financial events within the past 12 months. Both waves of data collection attempted to capture the frequency of negative financial events in the recent past. It was not so

**Table 3. Percentages of IFDFW Scores for Wave II Respondents (N = 1,122)**

Score	Descriptive terminology <sup>a</sup>	%	Cum %
1.00 - 1.99	Overwhelming financial distress/lowest financial well-being	7.2	7.2
2.00 - 2.99	Extremely high financial distress/extremely low financial well-being	11.8	19.0
3.00 - 3.99	Very high financial distress/very poor financial well-being	15.0	34.0
4.00 - 4.99	High financial distress/poor financial well-being	19.5	53.5
5.00 - 5.99	Average financial distress/average financial well-being	19.1	72.6
6.00 - 6.99	Moderate financial distress/moderate financial well-being	12.3	84.9
7.00 - 7.99	Low financial distress/good financial well-being	7.8	92.7
8.00 - 8.99	Very low financial distress/very good financial well-being	4.7	97.4
9.00 - 9.99	Extremely low financial distress/extremely high financial well-being	2.2	99.6
10.00	No financial distress/highest financial well-being	0.4	100.0

<sup>a</sup>Prawitz et al., 2006b.

much the timing of the occurrence of each event that was important, as was the fact that the respondents experienced it at all. The time period for recollection was reduced from 12 months in Wave I to 6 months in Wave II to avoid incorrect responses resulting from the respondents' remembering incorrectly too far back in their lives. Table 4 reports the frequency of incidence of negative financial events more than once in the recent past for both the Wave I and Wave II samples.

On the positive side, clients in the debt management program also reported making progress financially. Of the Wave II sample, 6 in 10 reported that their finances currently were better than they had been a year earlier. The personal financial behaviors of respondents also showed a marked positive change from Wave I to Wave II, although these behaviors still need further improvement. In 2003

almost all respondents (90%) reported experiencing incidence of recent negative financial events, but by 2005, this had dropped to close to half (56%). In Wave I, about two thirds of the respondents had reached the maximum limit on a credit card more than once during the past year. In Wave II, this behavior was dramatically reduced, with fewer than 2 in 10 reporting they had reached the maximum limit on a credit card more than once during the past 6 months. Similarly, in Wave I, over one third of the respondents took a cash advance more than once in the past year. In Wave II, less than 1 in 10 reported having done so over the past 6 months. Table 4 allows comparison of frequency of negative financial events for Wave I and Wave II clients. Because Wave II data for frequency of occurrence of negative financial events were used in subsequent analyses, Table 5 displays more specific infor-

**Table 4. Incidence of Negative Financial Events More Than Once in Past 6 or 12 Months (Waves I and II)**

Negative financial event	Wave I (%) (N = 3,121) past 12 mo.	Wave II (%) (N = 1,210) past 6 mo.
Paid a late fee for paying a bill late	72	37
Paid one or more utility bills late (beyond the due date)	53	36
Received an overdue notice from a creditor	71	32
Received phone call/letter from a creditor about a past due bill	65	31
Paid a credit card bill late (beyond the due date)	68	26
Received a call from a collection agency about an overdue bill	41	23
Did not have enough money to pay for a minor emergency	32	20
Reached the maximum limit on a credit card	66	17
Took a cash advance on a credit card	35	7

mation about frequency of occurrence of these same events for Wave II respondents only.

Another key indicator of financial progress was the item measuring “dissatisfaction with present financial situation.” The proportion of clients with high dissatisfaction dropped from more than 5 in 10 (56%) in Wave I to about 3 in 10 (33%) in Wave II. The percentage of respondents reporting “a high level of financial stress today” decreased more modestly from 35% of the respondents in Wave I to 30% in Wave II. This reduction in financial dissatisfaction very likely stemmed from the improvement in money management behaviors noted above.

The O’Neill et al. (2005a, 2005c) studies of the negative health effects of financial stress demonstrated a high level of health problems among financially distressed Wave I debt management program clients. Over 4 in 10 (42%) answered yes to the question “Do you feel your health has been affected by your financial problems?” Outcomes specified by the respondents included stress, anxiety, depression, insomnia, and headaches. Wave II data indicated that the incidence of health problems was down only slightly, with 26% of respondents in Wave I and 23% in Wave II reporting poor health. It may be that health problems were not as easily reversed within a relatively short time frame as were financial problems. On a positive note, almost half (48%) of the respondents reported an improvement in their health since joining the debt management program, and they attributed this change to the program.

### Hypotheses Testing

To test Hypothesis 1, that health would improve for consumers 2 years following their initial contact with a credit counseling agency, self-reported health status of a paired set of consumers was compared for 2003 and 2005. For the health status variable, data for 2005 were collapsed and recoded to a 4-point format so they could be compared with 2003 data. For the health status variable, lower numbers indicated better health (1 = *very good*, 4 = *poor*). Results of the Wilcoxon signed ranks test indicated that self-reported health status of consumers committed to a debt management program improved from 2003 ( $M = 2.16$ ,  $SD = 0.86$ ) to 2005 [ $M = 2.03$ ,  $SD = 0.96$ ],  $Z(819) = -4.58$ ,  $p < .0001$  (one-tailed), thereby supporting the hypothesis.

Hypothesis 2, that there would be a positive relationship between health status and scores on the IFDFW scale (indicating that lower financial distress/higher financial well-being would be associated with better health), was tested using data from Wave II. For testing this hypothesis, the original 10-point response format for the health status variable was utilized, with higher numbers indicating better health (10 = *excellent*, 1 = *poor*); higher scores on the IFDFW scale indicated lower financial distress/higher financial well-being. Results of the Spearman’s rho test indicated support for Hypothesis 2, ( $N = 1,119$ ,  $r_s = .344$ ,  $p < .001$ ). That is, those reporting lower financial distress/higher financial well-being also reported that they enjoyed better health.

**Table 5. Frequencies and Percentages of Occurrence Frequency for Negative Financial Events (Wave II)**

Negative financial event	Frequency of occurrence					
	Never		Once		> Once	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Paid a late fee for paying a bill late	451	39	293	25	428	37
Paid one or more utility bills late	470	40	284	23	417	36
Received an overdue notice from a creditor	566	49	229	20	369	32
Received call/letter about a past due bill	595	51	211	18	363	31
Paid a credit card bill late	643	55	215	19	306	26
Received a call from a collection agency	744	64	141	12	274	24
Not enough money for minor emergency	684	59	256	22	225	19
Reached the maximum limit on a credit card	801	70	150	13	199	17
Took a cash advance on a credit card	984	85	93	8	82	7

Note. Percentages do not add up to 100% due to rounding.

**Table 6. Differences in Health Status by Frequency of Occurrence of Negative Financial Event (Wave II)**

Negative financial event	Frequency of occurrence			<i>N</i>	$\chi^2$	<i>df</i>	<i>Mdr</i> <sup>a</sup>
	Never	Once	> Once				
<b>Paid a late fee</b>				1,169	24.37**	2	7
Frequency above the median	184	125	116				
Frequency below the median	266	166	310				
<b>Paid utility bill late</b>				1,168	6.16*	2	7
Frequency above the median	181	113	132				
Frequency below the median	288	171	283				
<b>Received overdue notice</b>				1,161	25.22**	2	7
Frequency above the median	243	82	99				
Frequency below the median	322	145	270				
<b>Received “past due bill” call/letter</b>				1,166	3034**	2	7
Frequency above the median	251	84	91				
Frequency below the median	341	127	272				
<b>Paid credit card bill late</b>				1,161	24.50**	2	7
Frequency above the median	273	72	80				
Frequency below the median	369	143	224				
<b>Received call from collection agency</b>				1,156	28.09**	2	7
Frequency above the median	312	45	67				
Frequency below the median	430	95	207				
<b>No money for minor emergency</b>				1,162	59.81**	2	7
Frequency above the median	308	75	41				
Frequency below the median	374	181	183				
<b>Maxed out credit card</b>				1,147	22.83**	2	7
Frequency above the median	325	50	45				
Frequency below the median	474	100	153				
<b>Took cash advance on credit card</b>				1,156	25.02**	2	7
Frequency above the median	388	26	11				
Frequency below the median	594	67	70				

<sup>a</sup>Health status response choices ranged from 1 = *Poor* to 10 = *Excellent*.

\* $p < .05$ . \*\* $p < .001$ .

Testing of Hypothesis 3, that those reporting fewer occurrences of specific negative financial events would report better health, involved a series of nine median tests using Wave II data. When significant differences were detected among the three groupings of frequencies of occurrence of events (never, once, more than once), Mann Whitney U tests served as post hoc tests to determine exactly which groupings were different from one another.

There was partial support for Hypothesis 3 for differences in health status for consumers reporting different frequencies of occurrence for each of the nine specific negative financial events. (Probability levels for the results of the nine median tests ranged from  $p < .001$  to  $p < .05$ ; sample

sizes ranged from  $N = 1,147$  to  $N = 1,169$  due to missing values. See Table 6 for details.) For each of the nine events, those who reported no occurrences of negative financial events reported better health than did those reporting they had experienced the events more than once in the past 6 months (see Table 7).

For four specific events (paid a credit card bill late, received a call from a collection agency, took a cash advance on a credit card, and was unable to pay for a minor emergency), health also was better for those reporting no occurrences than for those reporting one. Additionally, for these four events, those reporting more than one occurrence reported worse health than those reporting only one. For

**Table 7. Differences in Health Status by Pairs of Occurrence Frequency of Negative Financial Event (Wave II)**

Negative financial event	Mean rank for frequency of occurrence			z
	Never	Once	> Once	
Paid a late fee	369 (n = 450)	376 (n = 293)		-0.406
	480 (n = 450)		395 (n = 426)	-5.050**
		406 (n = 293)	328 (n = 426)	-5.026**
Paid utility bill late	371 (n = 469)	386 (n = 284)		-0.906
	463 (n = 469)		419 (n = 415)	-2.590**
		380 (n = 284)	330 (n = 415)	-3.260***
Received overdue notice	406 (n = 565)	373 (n = 227)		-1.888
	508 (n = 565)		405 (n = 369)	-5.801***
		325 (n = 227)	282 (n = 369)	-3.027**
Received “past due bill” call/letter	407 (n = 592)	389 (n = 211)		-0.938
	519 (n = 592)		411 (n = 363)	-5.963***
		322 (n = 211)	267 (n = 363)	-3.860***
Paid credit card bill late	442 (n = 642)	391 (n = 215)		-2.604**
	509 (n = 642)		399 (n = 304)	-5.893***
		277 (n = 215)	248 (n = 304)	-2.266*
Received call from collection agency	449 (n = 742)	401 (n = 140)		-2.098*
	542 (n = 742)		418 (n = 274)	-6.044***
		228 (n = 140)	197 (n = 274)	-2.574**
No money for minor emergency	494 (n = 682)	405 (n = 256)		-4.527***
	499 (n = 682)		315 (n = 224)	-9.277***
		269 (n = 256)	208 (n = 224)	-4.844***
Maxed out credit card	487 (n = 799)	411 (n = 150)		-3.159**
	525 (n = 799)		394 (n = 198)	-5.827***
		184 (n = 150)	168 (n = 198)	-1.500
Took cash advance on credit card	545 (n = 982)	468 (n = 93)		-2.295*
	547 (n = 982)		352 (n = 81)	-5.570***
		98 (n = 93)	76 (n = 81)	-2.916**

\* $p < .05$ . \*\* $p \leq .01$ . \*\*\* $p \leq .001$ .

each of four events in a second group of negative financial events (paid a late fee, paid a utility bill late, received an overdue notice, and received a phone call or letter from a creditor about a past due bill), there were no health differences between those reporting no occurrences and those reporting only one.

For one of the nine negative financial events, having reached the maximum limit on a credit card, there were differences in health between those who reported no incidence and both those who had only one experience and those who had multiple experiences with the events. There

were no differences, however, for respondents reporting either one or more than one occurrence. Health was the same for those who had “maxed out” a credit card, whether it was one time or more than once during the past 6 months. Details of findings are presented in Table 7.

### Discussion

The findings of this study are derived from Waves I and II data collections from a national sample of credit counseling clients. Respondents were enrolled in the credit counseling agency’s debt management program for assistance with repayment of their debts over time. The respondents

could be characterized as over-extended financially and experiencing serious distress about their personal finances, but are not yet at the point of insolvency where bankruptcy is a frequently used option. Thus, the findings are specific to this population of financially distressed adults. The participants were primarily females under age 50 who were non-college graduates, employed full-time, and with average annual earnings of slightly less than \$40,000. (The average income for the Wave II sample in 2005 was \$39,913, and for Wave I in 2003, \$37,322.) This study is one of relatively few in personal finance research that has tracked individuals' behaviors and other outcomes over time with respect to their personal finances. Longitudinal studies are costly to conduct but are important in understanding changes in financial behavior over time, especially those associated with educational or counseling interventions (National Endowment for Financial Education [NEFE], 2006).

Studies and publications in recent years have established that relationships exist between individuals' health and their personal finances (O'Neill, 2004, 2005; O'Neill et al., 2005a, 2005b, 2005c). For the current study, it is important to note that health status reflects respondents' perceptions of their health, which may differ from a professional assessment by a neutral third party (e.g., physician). It is not uncommon for people, when surveyed, to report themselves as being above average. Nevertheless, asking respondents to self-report their health status, without providing specific definitions or benchmarks, is common in sociological research. In the current study, the same respondents were queried in 2003 and again in 2005 about their health status. In this case, study participants served as their own controls in the measurement of this variable over time.

There was a small but statistically significant change in the respondents' self-reported health status for the two waves of data collection. Two years following initial contact with the credit counseling agency, clients participating in the debt management program reported better health in 2005 than they had in 2003. This is an indication of progress, but also suggests that health problems are not readily reversed.

In previous research conducted with Wave I respondents, O'Neill et al. (2005a, 2005b) found evidence of associations between individuals' self-reported health status and two separate indicators of their financial stress as well as satisfaction with their financial situation. The current study

examined the financial distress/financial well-being of consumers in 2005 using an eight-item composite measure of the construct that was not available in 2003. The new instrument, the IFDFW scale (Prawitz et al., 2006b), provided a means to capture various aspects of the concept that collectively contributed to a valid measurement of the latent construct, financial distress/financial well-being. Nevertheless, financial distress/financial well-being scores may reflect the biases and perceptions of individual respondents who perceive the same financial stressors quite differently, thus reporting differing levels of personal financial distress (Garman et al., 2005).

A relationship was found between financial distress/financial well-being and health for those who participated in Wave II of the data collection. Those reporting lower financial distress/higher financial well-being reported better health than did consumers experiencing more financial distress/less financial well-being. These findings are similar to those of O'Neill et al. (2005a), who found a positive association between self-reported health status and level of financial distress, using the Wave I data, with financial stress response choices on a one-item financial stress survey item ranging from 1 = *none* to 5 = *overwhelming*. (Note that higher numbers in the Wave I, health and stress variables, indicated poorer health, greater stress.)

Although participants reporting better health also reported lower financial distress/higher financial well-being in 2005, findings indicated a population that is slowly making progress to improve their personal financial well-being, but still experiencing financial difficulty. It should be noted that overall, financial distress/financial well-being scores for this group of credit counseling clients were not equivalent to levels experienced by the general population. According to national norming data for the IFDFW scale (Prawitz et al., 2006b), the median score (indicating average-moderate financial distress/average-moderate financial well-being) for the general population was 5.7 on the 10-point scale, slightly above the scale's midpoint of 5.5. For consumers in the Wave II panel in the current study, 70.5% fell below the median score of 5.7 reported by the general population, indicating they were experiencing more financial distress/less financial well-being when compared with the general population.

There also was evidence of improvements in financial status. A sign of progress was the reduction in Wave II in the occurrence of negative financial events. Debt has been

described as “yesterday’s spending taken from tomorrow’s income” (Warren & Tyagi, 2005, p. 136). As people get their consumer debts under control (paid down or repaid in full), it logically can be expected that their financial well-being will improve when they no longer have to pay late fees or dodge creditors and are able to reposition income from making debt repayments to increasing savings.

As the incidence of negative financial behaviors lessened, credit counseling clients’ reported health status improved. There were differences in reported health status for frequency of occurrence of specific groups of negative financial events. For the first group of four specific events, consumers reported differences in health status at all levels of frequency of occurrence. That is, if even one time during the past 6 months they had paid a credit card bill late, received a call from a collection agency about an overdue bill, taken a cash advance on a credit card, or could not pay for a minor emergency, they reported poorer health. If any of these four events had happened more than once, respondents were more likely to report even worse health.

The four negative financial events making up this group appeared to represent financial behaviors and experiences indicating a pervasive negative financial condition. Occurrence of any of these four events suggested that consumers were short of funds to meet ongoing financial responsibilities; for financially distressed consumers, such events likely added to the discomfort they were already feeling, resulting in reduced physical and/or psychological well-being (Garman et al., 1996; Weisman, 2002). A call from a collection agency, for example, represents an ongoing condition of non-payment of a particular bill, and likely the situation had been contributing to worries about financial matters over a period of months for these respondents. Late payment of a credit card bill usually results in additional fees, with the growing debt adding to the distress of not having the money to pay the bill in the first place. A cash advance on a credit card, in addition to being assessed a higher interest rate than other charges made on the account, is a clear indication that a consumer is unable to meet immediate financial responsibilities. When a minor emergency arises and there are no monetary funds to access for payment, resulting worries may contribute to physical discomforts that lead to illness. For financially distressed consumers, occurrence of any these four negative financial events, even one time, may have contributed to emotional distress manifested through physical symptoms.

A second group of four negative financial events appeared to represent a problem only if any had occurred more than once during the previous 6 months. Consumers reported worse health if they had incurred any of the four events in the second group more than once; however, there were no health differences between those who reported no incidence and those who had experienced any of the events only once. That is, if consumers had “slipped up” one time, their reported health was no different from those who had never experienced any of the following events: paying a utility bill late, paying a late fee on a bill, receiving an overdue notice, or receiving a letter or phone call about an overdue bill. For these particular unfavorable financial events, one incident did not contribute to changes in health one way or the other. Unlike the group of four negative events previously mentioned, consumers may have perceived these incidents as easily corrected, short-term mistakes, unlike the pervasive nature of events such as contacts from a collection agency and needing cash advances on a credit card. However, when these specific events occurred more than once, there apparently was a cumulative negative impact on health.

The remaining negative financial event from the original group of nine was having reached the maximum limit on a credit card. Credit counseling clients who had not reached the maximum limit on a credit card within the past 6 months reported better health than those who had done so once or more than once. There was no difference in health status based on the number of times one had reached the maximum limit on a credit card—what mattered was that it had happened at all. This particular negative financial event may have signaled to consumers that they were again approaching the same financial condition that had prompted the call to the credit counseling agency in the first place, triggering a negative physical and/or psychological response.

Because there was a positive difference in health status of credit counseling clients over time, it was encouraging that the incidence of poor financial behaviors greatly decreased between the two waves of data collection. This improvement supported other studies that found positive effects associated with credit counseling (Ellichhausen, Lundquist, & Staten, 2003; Kim, Sorhaindo, et al., 2003). Kim, Sorhaindo, et al. found that credit counseling was effective in decreasing financial stressor events of clients who remained in a debt management program for 18 months. This is approximately the same time frame, about 20 months, that the Wave II sample was enrolled in the debt

management program at the time of data collection. It appears that it takes time for financial difficulties to decrease, but progress does occur with lengthened program participation.

This study showed that participation in a debt management program contributed to beneficial outcomes, including improved health status, lower financial distress/higher financial well-being, and lower frequency of occurrence of negative financial events. While these findings are not meant to suggest causal relationships, they indicate a need for integrating health, financial topics, and behavior change strategies into financial education and counseling interventions.

### Limitations

This study had several limitations that affected the generalizability of its findings. First, the sample consisted solely of credit counseling clients who were experiencing financial distress. Therefore, associations between health and financial distress/financial well-being cannot be generalized to the general population.

Second, there was the issue of “survivorship bias” due to the respondents’ voluntary participation in the study. In other words, it is possible that only the most successful clients completed the Wave II questionnaire and that the viewpoints of less successful clients were missing or underrepresented. Indeed, the credit counseling agency’s proprietary research indicated that clients left the debt management program for reasons that included not making scheduled payments (32%) and filing for bankruptcy (6%), both of which are serious negative outcomes. In addition, the Wave II sample is relatively small and only about one third the size of Wave I, which limited the sample size for time series comparisons.

Third, generalizations to outcomes from the credit counseling industry as a whole must necessarily be limited due to variations in the business models and service quality of various industry players as evidenced by recent Congressional, IRS, and state government inquiries into the business practices of some credit counseling providers (“Credit counseling in crisis,” 2003; Foley, 2003; Mayer, 2004; “Pushed off the financial cliff,” 2001).

Fourth, the respondents’ perceptions of both their health status and financial well-being may differ from that of an objective third party assessment. Future researchers examining relationships among these and other variables may

want to employ more specific measures of health (i. e., diagnoses by medical personnel) rather than self-reported health status. Structural equation modeling is also recommended to explore directionality of relationships among variables.

Finally, there is a concern related to pre-existing and chronic health conditions, such as a diagnosed mental illness, or a physical condition such as cancer or asthma. Such conditions could warrant a lack of satisfaction with current health status regardless of respondents’ financial behaviors or their financial distress/financial well-being.

### Implications

Financial educators are increasingly recognizing the importance of conducting studies to measure the effectiveness of financial education and counseling interventions (NEFE, 2006). In other words, research is needed to answer the question “So what difference did the program make in the lives of its participants?” This study tracked changes over time in the financial practices of the same population of financially distressed clients of a national debt management program. Results indicate that, although many positive improvements have occurred since program enrollment (e.g., lower incidence of negative financial events), participants still need to do more or receive more assistance to improve their financial well-being and health status. This study also provided insights into the relationship between financial distress/financial well-being and health status, which could serve as a motivator for changes in financial behavior for clients. Additionally, knowing which negative financial events, when experienced more frequently, can make a difference in self-reported health status can be useful to inform the content of educational programs and credit counseling sessions.

The findings add to existing literature (Bagwell & Kim, 2003; Drentea, 2000; Drentea & Lavrakas, 2000; O’Neill et al., 2005a) about associations between health and personal finances. Findings from the current study make a strong argument for a holistic integration of educational programs and research about the health and financial areas of life instead of the separate and parallel tracks that currently exist (Vitt, Sieganthaler, Sieganthaler, Lyter, & Kent, 2002). An example is the new Cooperative Extension *Small Steps to Health and Wealth™* program that encourages participants to set health and financial goals and periodically tracks and aggregates their progress. The program encourages participants to apply the same behavior change strategies to simultaneously improve both their

health and personal finances. Its title also acknowledges the same reality shown in the results of this study: that change is a gradual process and past difficulties will take some time to overcome.

Employers, particularly, have an important role to play in helping Americans improve their health and personal finances by offering targeted programs and incentives to employees. After all, the workplace is where their employees spend most of their time and where many receive employer-sponsored health insurance and financial benefits such as matched 401(k) retirement accounts. Employers also stand to benefit from workers' improved health and financial well-being. Not only are there potential productivity benefits from decreased financial distress (Garman et al., 1996), but also it seems likely that health care costs associated with stress may be reduced, perhaps resulting in lower costs for employer health insurance plans. Employers might consider offering incentives to workers who improve their health and/or financial well-being, perhaps through smoking cessation or weight-loss programs, and matching contributions to retirement savings plans or other benefit plans. Another way that employers can foster positive behavior is automatic enrollment of workers in company retirement savings plans (sometimes with automatic contribution increases as well) as a way to overcome the common behavioral finance mistakes of procrastination, risk aversion, and inertia (NEFE, 2006).

Additional research is needed to better understand financially distressed consumers, such as the degree of their distress, reasons for distress, negative impacts of distress (on individuals, families, and employers), and psychological factors associated with reducing distress, including perhaps locus of control and self-esteem. Stages of readiness for changing behavior, using the Transtheoretical Model of Change (NEFE, 2006; Prochaska, Norcross, & DiClemente, 1994), also need to be studied. Such findings can help various organizations successfully implement programs designed to help people who are distressed about their finances and be of assistance in addressing common behavioral finance mistakes. If the degree of perceived financial distress/financial well-being is known about an individual or population, programs can be designed and delivered to reduce individual and family distress about personal finances and help improve financial well-being. Furthermore, useful research findings can help mobilize a myriad of organizations to help people who are distressed about personal finances.

One promising tool for studying the degree of financial distress and financial well-being currently experienced by individuals is the IFDFW scale that was used to measure the construct in this study (Prawitz et al., 2006b). The IFDFW scale has several potential uses including facilitating the evaluation of financial programs by assessing changes in participants' perceptions of their financial condition. It also can be used to immediately assess the severity of the perceived financial distress of people who contact credit counseling agencies, as well as to monitor changes in debt management program enrollees' levels of financial distress. Mental health counselors and marriage and family therapists may find the IFDFW scale useful to gain perspective about the level of stress attributable to financial concerns (Prawitz et al., 2006b). The scale can be useful if shared with individual debt management program participants to illustrate their progress over time. A study of Cooperative Extension MONEY 2000™ program participants, who set goals and took action to increase their savings and reduce debt, found that seeing results and evidence of success was an important motivator to continue making progress toward their financial goals (O'Neill, Xiao, Bristow, Brennan, & Kerbel, 2000).

Another area of needed research is more in-depth studies of relationships between health and personal finances at both the individual and societal level. Two examples are the financial savings resulting from ending an unhealthy, costly practice, such as smoking, and behavior change strategies that can simultaneously improve health and finances. More emphasis is needed on cross-disciplinary work involving nutrition/health and financial planning educators and researchers. Funding sources for health and financial education and research need to encourage integrative projects in their requests for proposals. As an example, in May 2006, the National Endowment for Financial Education announced a new grant-making process that encourages inquiry into changing financial behavior from fields outside financial education rather than traditional personal finance content development projects ("NEFE redefines grants program," 2006). This policy change was an outgrowth of a symposium that recommended a continuing multidisciplinary dialogue to identify best practices from other disciplines that also use education to facilitate behavior change (NEFE, 2006).

This study also has public policy implications. Public policy regarding improving Americans' health and personal finance practices often is formulated on two separate tracks. With increasing documentation of relationships

between health and personal finances, policymakers need to consider consumers' lives holistically when proposing legislative/regulatory changes and/or making recommendations for behavior change.

A final implication of this study is the need for financial educators and counselors to help financially distressed individuals make a smooth transition from being debtors to being savers. The goal should be to help shift the focus for individuals away from crisis-driven present preoccupation with juggling bills and repaying debt to a future-oriented savings mentality. One useful resource to help people see what they could save by repositioning debt repayment to savings deposits is the Utah State University's PowerPay program, which includes savings calculators for making projections of the amount needed to meet financial goals once debt is eliminated (Miner, House, & Harris, 2005). PowerPay© is accessible online at [www.powerpay.org](http://www.powerpay.org). Another helpful resource is Advantage Publications' cardboard calculators (*Wise investor retirement booster calculator*, 2003; *Wise investor retirement calculator*, 2003) that show the amount that can be accumulated by regularly saving small amounts of money.

This article described research about positive health and financial outcomes associated with participation in a credit counseling agency's debt management program. Some impacts associated with participation in such programs over time are decreases in both financial distress and the incidence of negative financial events, as well as improvements in health status.

These findings are welcome news for an industry that increasingly has been maligned in recent years. One recent book about bankruptcy noted, "We are extremely wary of most nonprofit consumer credit counseling services because so many have been investigated for fraud or even criminal activity" (Martin & Paley, 2006, p. 44). Another goes even further: "Until the [credit counseling] industry is regulated, just stay away" (Warren & Tyagi, 2005, p. 252). A number of credit counseling agencies have had their tax-exempt status revoked by the IRS, which currently is investigating the tax status of the entire credit counseling industry ("Credit counseling in crisis," 2003; Foley, 2003). Others have been sued or have paid fines to settle cases related to deceptive practices (Foley, 2003; "Pushed off the financial cliff," 2001). Nevertheless, there are many good corporate citizens among the industry's few bad actors. Results of this study clearly show beneficial outcomes associated with continuing participation in a credit

counseling program that assists people with their debt and money management problems.

## References

- 2<sup>nd</sup> American Express national survey finds worker financial stress lingering into 2004.* (2004, April 1). Press release, American Express Financial Services.
- Bagwell, D. C., & Kim, J. (2003). Financial stress, health status, and absenteeism in credit counseling clients. *Journal of Consumer Education, 21*, 50-58.
- Bailey, W. C., Woodiel, D. K., Turner, M. J., & Young, J. (1998). The relationship of financial stress to overall stress and satisfaction. *Personal Finances and Worker Productivity, 2*(2), 198-207.
- Bankruptcy filings surge in calendar year 2005.* (2006, March 24). Washington DC: Administrative Office of the U.S. Courts. Retrieved May 14, 2006, from [http://www.uscourts.gov/Press\\_Releases/bankruptcyfilings032406print.html](http://www.uscourts.gov/Press_Releases/bankruptcyfilings032406print.html)
- Bayot, J. (2003, October 14). *Not-for-profit credit counselors are targets of an I.R.S inquiry.* Retrieved November 1, 2003, from <http://query.nytimes.com/gst/fullpage.html?res=9807E4DB113EF932A15753C1A9659C8B63>
- Bucks, B. K., Kennickell, A. B., Moore, K. B., Fries, G., & Neal, A. M. (2006). Recent changes in U.S. family finances: Evidence from the 2001 and 2004 Survey of Consumer Finances. *Federal Reserve Bulletin*, A1-A38.
- Credit counseling in crisis: The impact on consumers of funding cuts, higher fees and aggressive new market entrants.* (2003, April). Consumer Federation of America and National Consumer Law Center. Retrieved June 12, 2004, from [www.consumerfed.org/pdfs/credit\\_counseling\\_report.pdf](http://www.consumerfed.org/pdfs/credit_counseling_report.pdf)
- Detweiler, G. (2003). *The ultimate credit handbook.* New York: Plume Books.
- Dretea, P. (2000). Age, debt and anxiety. *Journal of Health and Social Behavior, 41*, 437-450.
- Dretea, P., & Lavrakas, P. J. (2000). Over the limit: The association among health status, race and debt. *Social Science & Medicine, 50*, 517-529.
- Ellicheusen, G., Lundquist, E. C., & Staten, M. E. (2003, January). *The impact of credit counseling on subsequent borrower credit usage and payment behavior.* Washington, DC: Credit Research Center, Georgetown University. Retrieved May 25, 2006, from [http://www.chicagofed.org/cedric/files/2003\\_conf\\_paper\\_session1\\_staten.pdf](http://www.chicagofed.org/cedric/files/2003_conf_paper_session1_staten.pdf)

- Epel, E. S., Blackburn, E. H., Lin, J., Dhabhar, F. S., Adler, N. E., Morrow, J. D., & Cawthon, R. M. (2004, December 7). Accelerated telomere shortening in response to life stress. *The National Academy of Sciences of the USA, PNAS*, 101(49), 17312-17315. Retrieved January 27, 2005, from www.pnas.org/cgi/doi/10.1073/pnas.0407162101
- Field, R., & Vogt, V. A. (2004). *Health care cost increases: Impact on worker financial health and retirement savings*. New York: American Express Retirement Services.
- Foley, R. J. (2003, October 10). IRS probes credit counselors' fees. *The Wall Street Journal*, p. D2.
- Garman, E. T., Camp, P., Kim, J., Bagwell, D., Baffi, C., & Redican, C. (1999). Credit delinquencies: A portrait of pain for employers' bottom lines—Preliminary findings. *Personal Finances and Worker Productivity*, 3(1), 165-168.
- Garman, E. T., Leech, I. E., & Grable, J. E. (1996). The negative impact of employee poor personal financial behaviors on employers. *Financial Counseling and Planning*, 7, 157-168.
- Garman, E. T., Sorhaindo, B., Prawitz, A., Osteen, S., Kim, J., O'Neill, B., Drentea, P., Haynes, G., & Weisman, R. L. (2005). Development of and norms for the InCharge financial distress/financial well-being scale: A summary. *Consumer Interests Annual*, 51, 233-238.
- Kim, J., & Garman, E. T. (2003). Financial stress and absenteeism: An empirically derived model. *Financial Counseling and Planning*, 14(1), 31-42.
- Kim, J., Garman, E. T., & Sorhaindo, B. (2003) Relationships among credit counseling clients' financial well-being, financial behaviors, financial stressor events, and health. *Financial Counseling and Planning*, 14(2), 75-87.
- Kim, J., Garman, E. T., & Sorhaindo, B. (2005). Study finds positive financial behaviors increased: Credit counseling, debt management effective. *Journal of Family and Consumer Sciences*, 97(2), 35-39.
- Kim, J., Sorhaindo, B., & Garman, E. T. (2003). Relationships between credit counseling, financial well-being and health. *Consumer Interest Annual*, 49, 1-4.
- Koesten, J. (2005, October). Reducing stress and burnout for financial planners. *Journal of Financial Planning*, 18(10), 64-74.
- Lansing, K. J. (2005). Economic research and data: Spend-thrift nation. *Federal Reserve Bank of San Francisco*. Retrieved January 29, 2006, from http://www.frbst.org/publications/economics/letter/2005/el2005-30.html
- Lyons, A. C., & Yilmazer, T. (2005). Health and financial strain: Evidence from the Survey of Consumer Finances. *Southern Economic Journal*, 71(4), 873-890.
- Martin, N., & Paley, S. (2006). *J. K. Lasser's the new bankruptcy law and you*. New York: John Wiley & Sons, Inc.
- Mayer, C. (2004, March 23). Profiteering in a non-profit industry: Abusive practices in credit counseling. *The Washington Post*, p. B-1.
- The MetLife study of employee benefits trends: Findings from the 2003 national survey of employers and employees*. (2003, November). New York: MetLife Insurance Company.
- Miner, F. D., House, A. C., & Harris, J. L. (2005). Using the new PowerPay 5.1 to help consumers transition from debtors to savers. *Proceedings of the Association for Financial Counseling and Planning Education*, 13.
- National Endowment for Financial Education. (2006). Closing the gap between knowledge and behavior: Turning education into action. *Financial Counseling and Planning*, 17(1), 73-90.
- NEFE redefines grants program: Announces new guidelines and initiatives (2006, May/June). *NEFE Digest*, 6, 8.
- New report finds one-quarter of U.S. households are wealth-poor*. (2002, May 13). Washington, DC: Consumer Federation of America.
- O'Neill, B. (2004, December). Small steps to health and wealth. *The Forum For Family & Consumer Issues*. Retrieved December 29, 2004, from www.ces.ncsu.edu/depts/fcs/pub/9\_3/smallsteps.html
- O'Neill, B. (2005). Health and wealth connections: Implications for financial planners. *Journal of Personal Finance*, 4(2), 27-39.
- O'Neill, B., Sorhaindo, B., Xiao, J. J., & Garman, E. T. (2005a). Financially distressed consumers: Their financial practices, financial well-being, and health. *Financial Counseling and Planning*, 16(1), 73-87.
- O'Neill, B., Sorhaindo, B., Xiao, J. J., & Garman, E. T. (2005b). Health, financial well-being, and financial practices of financially distressed consumers. *Consumer Interests Annual*, 51, 80-82.
- O'Neill, B., Sorhaindo, B., Xiao, J. J., & Garman, E. T. (2005c). Negative health effects of financial stress. *Consumer Interests Annual*, 51, 260-262.
- O'Neill, B., Xiao, J. J., Bristow, B., Brennan, P., & Kerbel, C. M. (2000). Successful goal attainment: Perceived resources and obstacles. *Financial Counseling and Planning*, 11(1), 1-12.

- Prawitz, A. D., Garman, E. T., Sorhaindo, B., O'Neill, B., Kim, J., & Drentea, P. (2006a). Assessment of validity and reliability in the measurement of financial distress/financial well-being. *Proceedings of the Association for Financial Counseling and Planning Education*, 77-89.
- Prawitz, A. D., Garman, E. T., Sorhaindo, B., O'Neill, B., Kim, J., & Drentea, P. (2006b). The InCharge financial distress/financial well-being scale: Development, administration, and score interpretation. *Financial Counseling and Planning*, 17(1), 34-50.
- Prochaska, J. O., Norcross, J. C., & DiClemente, C. C. (1994). *Changing for good: A revolutionary six-stage program for overcoming bad habits and moving your life positively forward*. New York: HarperCollins.
- Pushed off the financial cliff. (2001). *Consumer Reports*, 66(7), 20-25.
- Reality of financial trouble hits hard for employees, according to ComPsych*. (2004, February 9). Chicago, IL: ComPsych Corporation.
- Schmitt, C. H., Timmons, H., & Cady, J. (2001). A debt trap for the unwary. *Business Week Online*. Retrieved November 5, 2001, from [http://businessweek.com/magazine/content/01\\_44/b37555094.htm](http://businessweek.com/magazine/content/01_44/b37555094.htm)
- Siegel, S., & Castellan Jr., N. J. (1988). *Non-Parametrics for the Behavioral Sciences* (2<sup>nd</sup> ed.), New York: McGraw-Hill, Inc.
- Stat bank. (2005, October). *Journal of Financial Planning*, 18(10), 24.
- Tangri, R. (2003). *Stress costs stress-cures: How to recover productivity lost to stress*. Retrieved from [www.Stress-Cures.com](http://www.Stress-Cures.com)
- Vitt, L. A., Siegenthaler, J. K., Siegenthaler, L., Lyter, D. M., & Kent, J. (2002, January). *Consumer health care finances and education: Matters of values* (EBRI Issue Brief Number 241). Washington, DC: Employee Benefit Research Institute.
- Warren, E., & Tyagi, A. W. (2005). *All your worth: The ultimate lifetime money plan*. New York: Free Press.
- Weisman, R. (2002). Personal financial stress, depression, and workplace performance. In E. T. Garman, F. Williams, R. Weisman, H. Fried, W. A. Kelly, & W. W. Sayles (Eds.), *Financial stress and workplace performance: Developing employer-credit union partnerships*. Madison, WI: Center for Credit Union Innovation and Filene Research Institute.
- Wise investor retirement booster calculator*. (2003). Boston, MA: Advantage Publications.
- Wise investor retirement calculator*. (2003). Boston, MA: Advantage Publications.
- Zhang, H., & DeVaney, S. A. (2004). The impact of households' ability, willingness, and uncertainty on the probability of holding adequate emergency funds. *Proceedings of the Association for Financial Counseling and Planning Education*, 94-103.

#### Acknowledgments

Sincere appreciation is extended to the InCharge Education Foundation and the InCharge Institute of America for their support of research leading to the development of the IFDFW scale. Approval for use of the IFDFW scale may be obtained by contacting [bsorhain@incharge.org](mailto:bsorhain@incharge.org) or [www.ethomasgarman.net](http://www.ethomasgarman.net).

## Appendix

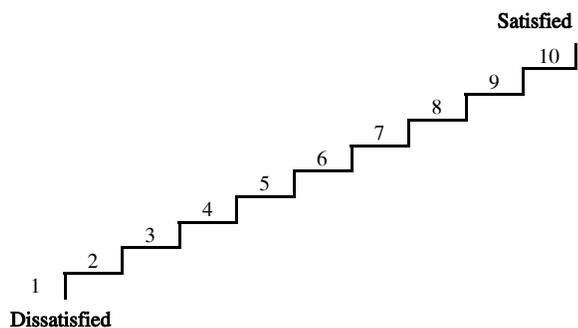
### InCharge Financial Distress/Financial Well-Being Scale©

**Directions:** Circle or check the responses that are most appropriate for your situation.

1. What do you feel is the level of your financial stress today?

1	2	3	4	5	6	7	8	9	10
Overwhelming Stress		High Stress			Low Stress		No Stress at All		

2. On the stair steps below, mark (with a circle) how satisfied you are with your present financial situation. The “1” at the bottom of the steps represents complete dissatisfaction. The “10” at the top of the stair steps represents complete satisfaction. The more dissatisfied you are, the lower the number you should circle. The more satisfied you are, the higher the number you should circle.



3. How do you feel about your current financial situation?

1	2	3	4	5	6	7	8	9	10
Feel Overwhelmed		Sometimes Feel Worried			Not Worried		Feel Comfortable		

4. How often do you worry about being able to meet normal monthly living expenses?

1	2	3	4	5	6	7	8	9	10
Worry All the Time		Sometimes Worry			Rarely Worry		Never Worry		

5. How confident are you that you could find the money to pay for a financial emergency that costs about \$1,000?

1	2	3	4	5	6	7	8	9	10
No Confidence		Little Confidence			Some Confidence		High Confidence		

6. How often does this happen to you? You want to go out to eat, go to a movie or do something else and don't go because you can't afford to?

1	2	3	4	5	6	7	8	9	10
All the time		Sometimes			Rarely		Never		

7. How frequently do you find yourself just getting by financially and living paycheck to paycheck?

1	2	3	4	5	6	7	8	9	10
All the time		Sometimes			Rarely		Never		

8. How stressed do you feel about your personal finances in general?

1	2	3	4	5	6	7	8	9	10
Overwhelming Stress		High Stress			Low Stress		No Stress at All		

©Copyright by InCharge Education Foundation (<http://www.inchargefoundation.org/>) and E. Thomas Garman (<http://www.PersonalFinanceFoundation.org/>), 2005. All rights reserved.