

Financial Resiliency Before, During, and After the Great Recession: Results of an Online Study

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Resilience can be defined as the capacity to adapt creatively to stressful life events and function well in the face of disruption, chaos, or challenging or threatening circumstances. Financial resilience is the ability to withstand both positive and negative life events that impact one's income and/or assets. This paper describes the concept of financial resilience and results of an online study of personal resiliency resources (N = 1,109) before, during, and after the recent Great Recession, including differences in financial practices between time periods. The article concludes with a discussion of findings and implications for consumer educators.

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INTRODUCTION AND OVERVIEW

This study was conducted to explore the resilience of U.S. residents before, during, and after the recent Great Recession. The research question explored was whether there were significant differences in financial resiliency resources during these three time periods. Resilience can be defined as "the capacity to rebound from adversity strengthened and more resourceful" (Walsh, 1999) and "being able to adapt creatively when life's events are disruptive" (Anderson, 2006). In everyday language, resiliency is the ability to "roll with the punches" and bounce back from life's challenges and setbacks (Gorman, 2005).

Financial resilience is the ability to withstand life events, both negative (e.g., loss of a job) and positive (e.g., birth of a child), that impact one's income and/or assets. Some financially stressful events, such as increased family size, unemployment, divorce, widowhood, and health problems, affect specific individuals or families. Others, such as

layoffs, plant closings, recessions, stock market downturns, and acts of terrorism, affect large groups of people or society as a whole.

RESILIENCY RESOURCES

It has long been known that some people handle stressor events better than others. Thus, an understanding of resilience is essential to determine its multiple pathways and use this knowledge to prepare people for unexpected life events. Previous studies have investigated resilience from a number of vantage points such as protective factors in the resilience of children who, although exposed to numerous stress factors, do not succumb to school failure, substance abuse, and juvenile delinquency (Finley, 1994) and traits that promote resilience and well-being in later life (Ong & Bergeman, 2004). A key protective factor for youth that appears to reverse predicted negative outcomes and foster resiliency is a caring and supportive relationship with at least one person (Bernard, 2004).

The resiliency of low-income households has also been studied extensively. Orthner, Jones-Sanpei, and Williamson (2004) found that relationship assets such as communication, problem-solving, and social support predict positive outcomes for low-income families. Bachay and Cingel (1999) found that three key resilience factors for minority women were strong measures of self-efficacy, well-defined faith lives, and the ability to reframe barriers and obstacles. Vandergriff-Avery, Anderson, and Braun (2004) studied rural low-income families and identified a dozen protective factors used to cope with stress including communication, support networks, financial management, and spiritual faith.

FINANCIAL RESILIENCE

Financial strain (e.g., difficulty paying bills, loss of income) is a common situation where the resilience of individuals and families is tested. Resilience is an individual trait, however, as different people react to the same situation in a variety of ways. Resilience can be thought of as “a reservoir of resources” to be drawn upon in difficult times. Life experience, itself, can be a powerful resiliency resource because it teaches problem-solving and decision-making skills. Not surprisingly, a study of post-retirement resilience indicators with a sample of older adults who experienced a significantly stressful life event, widowhood or involuntary retirement (Marziali & Donahue, 2001), found that subjects were aware of their limited financial status but had a balanced appraisal of life challenges overall. Interviews showed evidence of resilience (e.g., self-reliance, availability of close interpersonal relationships, perseverance). While poor financial status had negative consequences for coping with life transitions, aging individuals who were resilient and who applied a spiritual lens for understanding meanings of adversity showed a greater capacity for achieving and maintaining well-being.

Many recommended money management practices provide increased financial resiliency. For example, households that increase their savings, reduce their debt, and purchase adequate insurance are better positioned than others to handle a financial crisis. While certainly not the only resiliency resources available (i.e., personal attitudes and

attributes and social support are also key factors), financial assets and experiences provide a cushion during times of economic hardship. O'Neill and Xiao (2006), in an exploratory study with part of the data set described below, found that the most frequently available personal resiliency resources reported by respondents were individual qualities and characteristics, especially information-seeking skills and social support, and the least frequent were five commonly-recommended financial practices: preparing estate planning documents, a low-interest home equity line, an emergency fund, a low debt-to-income ratio, and a long-term disability policy.

TEACHING RESILIENCE BEHAVIORS

A cornerstone of financial resilience is personal responsibility, i.e., taking charge of one's financial future. Life skills education including the teaching of recommended financial practices can foster resilience by providing protective knowledge and enhanced decision-making skills (e.g., goal-setting). Vandergriff et al. (2004) note that resilience can be increased by helping families identify and enhance existing family protective factors and how to develop new ones. For example, educators can guide learners into recalling how they coped with past hardships, in either healthy or unhealthy ways, so they can build on positive actions. Optimistic attitudes can also be fostered by helping learners see that, despite their life challenges, things could have been worse. Learners can also be tasked with small assignments (e.g., saving \$1 a day and/or daily pocket change) that provide a sense of accomplishment and increased control.

The "three Rs" of education (i.e., reading, writing, and arithmetic) are well known. The American Psychological Association (The Other 3 Rs, 2005) conducted a study that identified the importance of life skills and character education in student learning and concluded that a student's success in academics is augmented by strong problem solving skills. The "other 3 Rs" (reasoning, resilience, and responsibility) are key problem-solving skills that, when learned, can benefit student achievement and general life success. The scientists who investigated the effect of learning the "other 3 Rs" concluded that teachers can teach these skills and students can learn them. An example of an interactive activity to teach students about strategies that foster resilience is "My Stress Shield" where students are provided a handout with the picture of a blank shield and asked to list their stress buffers (e.g., life experiences, family and friends, etc.).

Research on personal financial resiliency factors can inform financial education programs by identifying learners' strengths and areas for improvement. Following is a description of an online study of personal resiliency resources that was conducted before, during, and after the recent Great Recession.

METHODOLOGY AND SAMPLE

Data were collected from a convenience sample of online Personal Resiliency Assessment Quiz respondents between August 30, 2004 (the date that the quiz was first posted online) and September 30, 2011. Because this sample is small and self-selected, generalizability of results is limited. Respondents were made aware of the quiz primarily

through Cooperative Extension educators and other financial education providers, a Cooperative Extension Web site, links in social media messages, and online searches.

Another limitation of this study is that respondents' self-assessment of their personal resiliency resources may differ from that of a neutral third party (e.g., financial planner). In addition, because the sample was drawn online, it is impossible to calculate a response rate or describe the population from which it was drawn. Nevertheless, the study provides useful insights into resiliency resources that people utilize during tough economic times.

The cut-off dates for the before, during, and after Great Recession subsamples used in this study were August 2004-December 2007, January 2008-June 2009, and July 2009-September 2011. December 2007 was the month that the National Bureau of Economic Research declared the U.S. officially in a recession, which was subsequently declared "over" in June 2009.

Items on the Personal Resiliency Assessment Quiz were drawn from empirical studies of protective resiliency factors (Danes, 1999; Marziali & Donahue, 2001; Ong & Bergeman, 2004; Vandergriff-Avery et al., 2004) as well as recommended financial practices (e.g., emergency savings) that provide increased resiliency. With the exception of three questions about purchasing a long-term disability policy, taking action to keep job skills current, and investing in tax-deferred retirement savings plans, that included a "not applicable to my personal situation" option appropriate for retirees, each question had three possible responses.

Data were coded as follows: 0 = No; 1 = Sometimes yes and sometimes no; and 2 = Yes. Thus, the more "yes" answers provided for the questions, the higher its average score, indicating a higher level of use of financial resilience resources. Lower scores indicate areas that individuals could develop to improve their resiliency in the event of a financial crisis. The online quiz requires a response for every question so there was no missing data.

FINDINGS

The sample for this study was drawn from 1,109 unique online quiz respondents who took the Personal Resiliency Assessment Quiz during the dates described above and were U.S. residents. Characteristics of the total sample and three subsamples are shown in Table 1. Among the total sample, three-fifths were women, about one third (31%) were under age 35, four-fifths were whites, and over one-third were singles without children (36%). Almost two-thirds of the total sample had college or higher degrees and a third had family incomes of \$75,000 or more.

The three time period subsamples were compared by Chi-square tests (Table 1). Differences were found in gender, age, education, income, race, and marital status. On average, compared to before- and after-recession respondents, the in-recession respondents were more likely to be male, age 55 or older, with a lower education level, and more likely to be white and married without young children. Respondents' incomes showed mixed patterns. The lowest income group was more likely to be in the before- and in-recession subsamples while the highest income group was more likely to be in the in- and after-recession subsamples.

Respondents' total Personal Resiliency Assessment Quiz score is the total of scores for all 20 items with a range from 0 to 40 (i.e., a score of 2 indicating a "yes" for each question). The average total scores for the before (pre-recession), during (in-recession), and after (post-recession) subsamples were 26.90, 28.22, and 28.31, respectively, and differences were statistically significant ($p = .0033$). Additional Tukey test results showed that the "before" score was significantly different from the "during" and "after" scores and there was no difference between the "during" and "after" score. Among the 20 quiz items, mean scores of eight items were significantly different between the three time periods ($p \leq .05$). Among the significant results, three patterns were discernible.

The first pattern was that the score for the in-recession subsample was greater than the pre- and post-recession subsamples for quiz questions 1, 3, 5, and 8 (emergency fund, health insurance for major medical expenses, debt-to-income ratio, and spending less than earnings). This pattern may suggest the temporary nature of these coping strategies which were most prevalent when the Great Recession was occurring.

The second pattern showed progress trends with the pre-recession score the lowest and the post-recession score the highest in the case of quiz questions 4, 9, 10, 13 and 18 (long-term disability insurance, being a beneficiary of life insurance, tax-deferred retirement savings, physical exams, and self-assessed "good health" status). This pattern may imply that some resilience resources used in the recession continued, and were even enhanced, following the Great Recession.

The third statistically significant pattern is that the score of the in-recession subsample was the lowest compared to scores in both the pre- and post-recession subsamples for quiz question 6 (keeping job skills current). This finding could have resulted from a heightened fear of vulnerability in the event of job loss in the midst of rising unemployment rates during this period. Details of quiz item scores for the three time periods are presented in Table 2.

Two way ANOVA tests were conducted to identify possible interaction effects between two factors: Great Recession time period (i.e., before, during, and after) and income. The results showed that the following questions had a significant interaction effect: Q2, Q12, Q13, and Q17 (low interest home equity line of credit, awareness of community resources, regular physical exams, and being focused). The results are not shown but are available upon request. To make the analyses manageable, the income variable was recoded to two groups, a high (\$50,000 or higher) and a low (\$49,999 or lower) income group, and simple main tests among these income groups were conducted. Among 8 simple main tests, only one test showed a significant result. Among the high income group, for Q13 (regular physical exams), the after-crisis score was significantly higher than the before- or in-crisis score (1.75 vs. 1.46 and 1.57, respectively). This may reflect the tendency of people with reduced resources or experiencing financial distress to postpone routine health care and screening tests.

Table 1. Sample Demographics and Chi-Square Test Results

Questions	Total Sample	Pre-Recession	In-Recession	Post-Recession	p-value
N	1109	361	365	383	
Gender					.0010
Male	39.48%	38.23%	46.83 %	33.68%	
Female	60.52	61.77	53.17	66.32	
Age					<.0001
34 or younger	30.93	29.64	31.78	31.33	
35-44	25.25	34.35	19.73	21.93	
45-54	23.62	18.28	24.93	27.42	
55 or older	20.20	17.73	23.56	19.32	
Education					.0010
High school or lower	11.18	9.14	15.07	9.40	
Some college	25.16	22.99	30.68	21.93	
4-year College degree	35.53	39.06	30.68	36.81	
Graduate degree	28.13	28.81	23.56	31.85	
Family Income					<.0001
Less than \$25,000	13.92	16.07	17.96	8.09	
\$25,000 to \$49,999	26.49	31.30	22.65	25.59	
\$50,000 to \$74,999	25.32	25.48	22.38	27.94	
\$75,000 to \$99,999	16.09	15.24	16.85	16.19	
\$100,000 or greater	18.17	11.91	20.17	22.19	
Race					.0294
White	79.75	75.28	82.92	80.94	
Non-white	20.25	24.72	17.08	19.06	
Marital Status					.0059
Single, no minor children	35.83	39.61	34.34	33.68	
Single, with minor children	9.21	10.80	6.59	10.18	
Married, no minor children	30.05	26.04	36.81	27.42	
Married, with minor children	24.91	23.55	22.25	28.72	

Table 2. Comparison of Personal Resiliency Assessment Quiz Scores: ANOVA Results

Questions	Pre-Recession	In-Recession	Post-Recession	P
Total Quiz Score	26.90 ^a	28.22 ^b	28.31 ^b	.0033**
1. I have an emergency fund of at least three months expenses set aside in a liquid account such as passbook savings or a money market mutual fund.	1.04 ^a	1.22 ^b	1.07	.0350**
2. I have a low interest home equity line of credit (or other low-cost source of funds) established that can be tapped in the event of an emergency.	.83	.83	.77	.6800
3. My monthly consumer debt-to-income ratio (total of monthly consumer debt payments/monthly take-home pay) is less than 15%.	1.03 ^b	1.33 ^a	1.08 ^b	<.0001* *
4. I have a long-term disability insurance policy that will replace at least half of my income if I am unable to work due to accident or illness.	.92 ^a	1.03	1.10 ^b	.0316**
5. I am covered by a health insurance policy with a high (\$1 million or an unlimited amount) per person limit for major medical expenses.	1.43 ^a	1.57 ^b	1.50	.0613*
6. I keep my job skills current through formal education, on-the-job training, professional meetings, and other methods.	1.50 ^b	1.35 ^a	1.53 ^b	.0020**
7. I have recommended estate planning documents such as a will, living will, and durable power of attorney.	.59	.71	.67	.1051
8. I spend less than I earn and regularly make deposits into saving or investment accounts.	1.30 ^b	1.47 ^a	1.31 ^b	.0040**
9. I am the beneficiary of a life insurance policy owned by another person and/or I own a life insurance policy that protects my dependents.	1.26 ^a	1.35	1.42 ^b	.0511*
10. I have a tax-deferred retirement savings plan to which I make regular deposits and from which I could withdraw money if I had to.	1.37 ^a	1.55 ^b	1.61 ^b	.0003*
11. I have a least 5 close friends or family members that I could call to help me in the event of an emergency or a crisis.	1.47	1.54	1.51	.4545
12. I am aware of government and non-profit agencies in my community that could assist me if I was in need.	1.26	1.14	1.21	.1823
13. I have regular physical exams by my doctor and health screening tests at recommended intervals.	1.50 ^a	1.60	1.67 ^b	.0041**
14. I am able to easily search for needed information on the Internet or at the public library.	1.95	1.96	1.97	.5422
15. I would describe myself as a positive (optimistic) person and an often heard to say "it could have been a lot worse" when bad things happen.	1.63	1.65	1.66	.7792
16. I would describe myself as an "organized" person who can juggle many tasks and stay on top of everything easily.	1.43	1.52	1.54	.0596
17. I would describe myself as a "focused" person. When I make up my mind to do something, I somehow figure out a way to get it done.	1.61	1.66	1.69	.1503
18. I would describe myself as being "in good health" with good nutrition, adequate exercise and sleep, and no major health problems.	1.45	1.47	1.55	.0400**
19. I would describe myself as having good stress management skills and an ability to handle crises and unexpected events.	1.42	1.47	1.53	.0708
20. I consider myself "literate" with a good ability to read and write and understand basic health and financial terminology.	1.93	1.91	1.93	.6038

Notes: based on the Tukey test, a and b are different at significance level of 5%. * <.10; ** <.05

DISCUSSION AND IMPLICATIONS

Following is a discussion of major findings of this study, comparisons to results of other studies, and implications for consumer educators:

Many Factors Enhance Financial Resiliency

Financial resilience is enhanced by many factors, not all of which involve money. Individuals and families develop financial resilience in ways unique to their individual situation (Bernard, 2004) and culture. For example, in high immigrant density low- and moderate- income communities, neighborhood savings circles (e.g., tandas) are common. This study confirms findings from O'Neill & Xiao (2006) where higher quiz scores were found for social/community and personal resources than financial resources. The highest scores in both studies were for self-assessed literacy levels and information search skills and the lowest for having estate planning documents and established lines of credit.

Adequate Emergency Savings is Lacking

Similar to findings from O'Neill and Xiao (2006), results of this study indicate that many people do not have adequate emergency reserves of at least three months' expenses. Even after the Great Recession began, through early Summer 2011, while there was a significant difference in scores for this quiz item from before the Great Recession, scores for all three subsamples were relatively low. This finding indicates that the three-month emergency fund guideline may be a tall order for many households to achieve and that many are living on the "financial edge" with inadequate reserves to sustain themselves in the event of a financial crisis. Consumer educators should, nonetheless, encourage small steps toward reaching the minimum recommended three-month expense savings target. Any amount of savings is better than none.

Several Bright Spots

There was increased self-reported evidence of many recommended personal resiliency practices and characteristics during and/or after the Great Recession. In addition, average in-recession and post-recession resiliency quiz scores were significantly higher than the pre-recession average. While subsample differences were small, these findings are welcome news to consumer educators who have long recommended these prudent actions. The 2008-2010 financial crisis may have spurred interest in improved financial practices. Differences in subsample characteristics may have also contributed to differences in pre- and post-recession resiliency resource scores.

Supportive Relationships

Financial resiliency is more than having a sum of money or insurance to bail you out of a crisis. It is also about giving and receiving support through strong human relationships and interconnectedness with family, friends, co-workers, and community. In this study, the resource of having at least 5 close friends or family members to call upon in the event of an emergency rated fairly high in all three time periods, indicating respondents' availability of social capital. Interestingly, respondents' knowledge of community human services was also fairly consistent in all three time periods and was relatively low. It could be that this sample of respondents, who skew toward high income and educational

levels, probably don't use these services. It could also mean that, at a time when people most needed community services (i.e., the Great Recession), many were simply unaware of local service providers.

Teachable Moment

Performance of some recommended financial practices during and after the Great Recession was higher than pre-recession levels. The Great Recession may have precipitated greater attention to financial management tasks than in the past and indicate that we are at a "teachable moment" for financial skills where learners are seeking specific "how to" (e.g., prepare a budget) instruction. Consumer educators should make the most of this time when interest in and support for financial education is high. Exact content taught and success metrics used will, of course, depend upon the target population and its characteristics and learning needs.

Health and Wealth Connections

Four quiz items (4, 5, 13, and 18) related to different aspects of respondents' health. While scores were moderately high for the last three items, the question on disability insurance received low scores in this study and a previous one (O'Neill & Xiao, 2006). Programs like Cooperative Extension's Small Steps to Health and Wealth™ that integrate health and financial subject matter can increase awareness of connections between both aspects of life (e.g., good health is a form of human capital and disability insurance mitigates the risk of lost income due to accidents or illness).

Home Equity as a Resiliency Resource

In this study and previously in O'Neill and Xiao (2006), use of home equity lines of credit (HELOCs) was low despite the availability of extremely low interest rate loans during the time that data were collected. While HELOCs generally charge lower interest rates versus credit cards that often charge double-digit APRs (interest), they also put a family's home at risk which, understandably, might make people shy away from them. In addition, HELOCs were often tactically difficult to obtain during the Great Recession and afterward.

SUMMARY

Life has always been uncertain. This is nothing new. What has changed since the events of September 11, 2001 and, more recently, the Great Recession, is a greater awareness of uncertainty on many fronts. We feel more uncertain so the world seems more uncertain. President Kennedy once paraphrased Francis Bacon and remarked "in a time of turbulence and change...knowledge is power." Preparedness and resilience are strong antidotes for uncertainty. This study provided insights into the resiliency resources of U.S. households before, during, and after an extremely difficult economic climate labeled the Great Recession. The resilience resources discussed above can help individuals and families build financial resiliency and prepare for the unexpected.

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