

The Personal Health and Finance Quiz: A Tool for Education, Research, and Program Evaluation

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Abstract

Good health and financial security are important resources for a happy and successful life. This paper includes a brief discussion of relationships and similarities between health and personal finance behaviors and results from studies linking health and personal finance. It also describes the Cooperative Extension Small Steps to Health and Wealth™ program and its associated online self-assessment tool, the Personal Health and Finance Quiz, among the first public use surveys to simultaneously query users about their health and personal finance practices. Respondents indicate frequencies for performance of ten health and ten financial activities to receive a summated score indicating performance of positive behaviors. The quiz also collects data for research about Americans' health and financial practices to inform future Extension outreach and can be used as a pre-/post-test to evaluate the impact of SSHW programs. Initial research findings indicate a moderate statistically significant, positive association of health and financial practices.

Keywords

Health, wealth, personal finance, health and wealth

Many Cooperative Extension family and consumer sciences (FCS) educators teach both health and personal finance subject matter (North Central Cooperative Extension Association 2015). Some also deliver the interdisciplinary Small Steps to Health and Wealth™ (SSHW) program that encourages participants to make positive behavior changes to simultaneously improve their health and personal finances (O'Neill and Ensle 2014, 2004). This article begins with a brief discussion of relationships and similarities between health and personal finances and results from studies linking health and personal finance. It also describes the SSHW program and the Rutgers Cooperative Extension online self-assessment tool, the Personal Health and Finance Quiz (see <http://njaes.rutgers.edu/money/health-finance-quiz/>), among the first public surveys to simultaneously query users about their health and personal finance practices.

Health and Personal Finance Relationships

Good health and financial security are important resources for living a happy and successful life. People in poor health often die at a relatively young age and/or spend thousands of dollars – money that could have been invested – on health care costs. On the other hand, those who practice recommended health behaviors are more likely to exceed average life expectancy and need a large nest egg to ensure that they don't outlive their assets (O'Neill and Ensle 2013).

Perhaps the simplest association between health and wealth is the high cost of unhealthy habits. For example, two-thirds of Americans are considered to be overweight or obese (Obesity and Overweight 2016), leading to extra expenses for health care and life insurance as well as lost work, reduced productivity, and reduced income (Paying the Price 2016).

At a 2016 Family Economics/Resource Management Association (FERMA) meeting workshop, participants discussed relationships and similarities between health and personal finance behavior using a Venn diagram activity. Following are some of their insights:

- Health recommendations include limiting calories and fats, more physical activity/exercise, eating more fruits and vegetables, wellness visits, following guidelines such as MyPlate, managing chronic diseases, and not smoking.
- Financial recommendations include paying yourself first (automatic saving), goal-setting, reducing debt, opening a retirement savings account, monitoring debt-to-income ratios, paying bills on time, and creating an emergency fund.
- Aspects of health and financial recommendations and behaviors that overlap include the following: taking action in the present for a future benefit, health vices (e.g., smoking) and financial vices (e.g., gambling), impulsivity (e.g., impulse shopping and eating), pleasure (e.g., comfort shopping and comfort eating), thought/mindfulness, allocation of time, guidelines for positive practices, and a need for self-monitoring.

Health and Personal Finance Research

Three recent studies suggest additional relationships between health and financial behaviors at the individual level. One study investigated whether the decision to contribute to a 401(k) retirement savings plan was associated with action taken to correct poor physical health indicators (e.g., abnormal blood-test results) revealed during an employer-sponsored health examination. Employees had a health screening exam and were given information about risky health behaviors and anticipated future health risks. Researchers then followed the workers for two years to see if they attempted to improve their health, and if those changes were tied to

financial planning. The company 401(k) plan contributors showed improvements in health behaviors about 27 percent more often than non-contributors, despite having few health differences prior to program implementation (Gubler and Pierce 2014). The relationship between retirement savings and health practices was correlational, not causal. Similarities in time preferences and the personal trait of conscientiousness were believed to influence retirement savings patterns and health improvement behaviors.

Kosteas (2012) investigated economic effects of engaging in regular physical activity and found a positive relationship between exercise and labor market earnings. Engaging in regular exercise (defined as working out at least three hours a week) was found to yield a 6 percent to 10 percent wage increase. Study results indicated that moderate exercise resulted in a positive earnings effect and more frequent exercise generated an even larger impact. One possible reason is that fit employees are highly disciplined and productive, which can lead to career advancement and higher earnings.

Carr et al. (2015) studied whether individuals who engage in health information search behaviors (e.g., reading nutrition details on food labels) were more likely to engage in financial planning activities. A positive association was found. Financial planning was proxied through five retirement planning activities (e.g., calculating retirement income need and attending meetings on retirement planning). Cognitive processes such as reading food product contents had a statistically significant health-wealth relationship while actual physical activities (e.g., exercise and eating well) did not. Research results suggest that internal motivation is a strong predictor of behavior.

SSHW Program

Cooperative Extension's Small Steps to Health and Wealth™ (SSHW) program encourages people to make positive behavior changes that simultaneously improve their health and personal finances. It focuses on small daily action steps that can achieve significant results over time (O'Neill and Ensle 2014). Dozens of program materials have been developed since 2004 including a 132-page workbook, curricula for youth and older adults, an online challenge, and slides for Extension inservice education or individual self-study.

The SSHW program is based on a framework of 25 behavior change strategies (O'Neill 2015; O'Neill and Ensle 2013). Included are actions to track current behavior, defy another person or a negative statistic, ramp up positive behaviors (called "kick it up a notch"), scale back negative behaviors, compare individual practices to recommended benchmarks, automate good habits, and consider the time that it takes to buy something (working) or burn the calories from eating (physical activity), a strategy called "Convert Consumption Into Labor." Program participants are encouraged to select three or four strategies to incorporate into their lives and create an action

plan around them. For example, “kick it up a notch” could be operationalized by completing a savings challenge (see <http://www.slideshare.net/BarbaraONeill/four-savings-challenges-for-new-year-0116>).

A logic model (2014) for SSHW was updated in 2015. See <http://njaes.rutgers.edu/sshw/internal/>. Program inputs include internal and external funding, program materials, and staff time for the development of program components, consumer workshops, monthly online messages at <http://njaes.rutgers.edu/sshw/> and other outreach methods. SSHW outcomes include actual program outreach and evaluation methods and state or national aggregation of impact data. SSHW outcomes include evidence of knowledge gain and behavior change by program participants (i.e., improved health and financial status). Evaluation methods used to collect SSHW impact data include a post-class evaluation form, a pre- and post-test to assess knowledge gain, SSHW Challenge results (i.e., performance of recommended health and financial practices), anecdotes and success stories, follow-up evaluations (e.g., three or six months after a program), and use of the Personal Health and Finance Quiz, described below, as a pre- and post-test to assess behavior change. The quiz was created to develop a stronger evidence base for SSHW and collect data about health and financial practices of Americans to inform future Extension outreach.

Personal Health and Finance Quiz

The Personal Health and Finance Quiz consists of twenty questions: ten each about health and financial practices. It is available at <http://njaes.rutgers.edu/money/health-finance-quiz/>. Respondents indicate one of four frequencies for their performance of the twenty activities. In addition to providing personalized feedback to users, the quiz collects data for research about the health and financial practices of Americans and is also available as a pre-/post-test to evaluate the impact of SSHW programming; e.g., increased performance of recommended practices following an educational intervention (O'Neill and Ensle 2015). Experts in health/nutrition, personal finance, and evaluation methods provided input during the development of the Personal Health and Finance Quiz, including its format and practices used to measure health and financial management. Quiz behaviors are not necessarily the highest recommended level of action but are “a step in the right direction.”

In an analysis of the first year's data with 942 respondents, there was a positive, statistically significant, and moderate (.463) correlation between indices of health and financial behaviors. Support was found for all three hypotheses in this study: respondents who reported frequent planning behavior (measured by the item “I make written to-do lists or specific plans to organize my financial goals, spending, and/or daily activities”) had higher health behavior scores than others, respondents who reported frequent planning behavior had higher financial behavior scores than others, and respondents who had higher health behavior scores also had higher

financial behavior scores (O'Neill, Xiao, and Ensle 2016). A master's thesis is under way using the Personal Health and Finance Quiz as a SSHW program evaluation tool. It will be administered before a series of SSHW classes and once again upon program completion.

At a 2016 FERMA meeting workshop, participants took the Personal Health and Finance Quiz and calculated their score. Following are some of their insights: easy to use online, provides useful personalized feedback, and addresses two key areas of people's lives simultaneously.

Summary

Empirical research indicates that health and personal finances are associated in many ways. The Small Steps to Health and Wealth™ (SSHW) program and Personal Health and Finance Quiz were developed to integrate programming and research about these two key aspects of people's lives. The quiz is among the first public use surveys to simultaneously query users about their health and personal finance practices. Data derived from this instrument make a unique contribution to existing literature by investigating relationships between a wide variety of individual health and financial practices. Results can also be used to provide evidence about SSHW program effectiveness.

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