29 Financial Sustainability and Personal Finance Education

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Technological advances have transformed nearly every aspect of the marketing, delivery, and processing of financial products and services. The forces of technology and market innovation, driven by increased competition, have resulted in a sophisticated industry in which wide array of providers offer a broad spectrum of complex financial products and services. These developments have given people more options and greater flexibility in creating financial arrangements that best suit their immediate needs. However, this marketplace with complex and specialized financial services requires buyers to be fully informed, highly educated, and actively engaged in managing their finances.

The causes of the recent economic crisis are many and complex (e.g., aggressive banking and mortgage practices, greed, collapse in housing markets, credit crunch, fall in confidence resulting from global economic instability, over-valued exchange rates, and high bond yields) (Weisberg 2010). This economic crisis demonstrated that most individuals were not well equipped with the knowledge and skills necessary for safely negotiating in a complex financial marketplace. As a result, families' financial health suffered, which in turn played a significant role in the decline of the nation's financial health. Then, it is important to recognize that family financial health and the financial health of the nation are linked.

The focus of this chapter is to identify the role that factors such as attitudes, beliefs, knowledge, skills, and behaviors play in minimizing the severe negative impacts of a complex market environment and enable families to sustain their financial security over a long period of time regardless of the ups and downs of the economy.

In his book, *The Power of Habit*, Duhigg (2014) suggests that life is a mass of habits. Most choices about saving, spending, exercising, and eating that we make are mostly habits. Though each habit means little on its own, over time these routines (whether we overspend or save, how often we exercise, what we eat, our work routines) have enormous impact on our health, productivity, financial stability, and happiness. According to Duhigg we can choose our habits, or destructive habit can be overridden by new patterns. However, to modify a habit, we must decide to change it and then do things differently. By doing things differently, developing a routine can result in an automatic behavior. We have the freedom and responsibility to change bad habits.

However, before changing financial habits one needs to have some understanding of habits that create negative outcomes and those habits that lead to positive financial outcomes. Studies have shown that habits and practices such as establishing clear

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financial goals, frequently reviewing and evaluating expenses, regularly saving, reducing the number of credit cards used, eliminating credit card balances can significantly impact a family's ability to sustain positive financial outcomes (both objective and subjective) measured by net worth, debt to income ratio, and level of satisfaction or happiness with their financial situation (Hira, 1987a, 1987b; Titus, Fanslow, & Hira, 1989a).

This chapter starts with the discussion of the description and measures of behaviors that lead to financial sustainability, followed by factors associated with these financial behaviors and outcomes. Next, the need for conceptual frameworks suitable for research in the complex areas of financial behavior and outcomes is addressed. The next section addresses challenges, opportunities, and implications for educators and researchers of personal finance. The brief overview of the salient issues is presented in the conclusions section.

Behaviors Leading to Financial Sustainability

Financial sustainability refers to managing limited financial resources to not only meet current needs but also develop plans for major goals and long-term needs. To ensure financial sustainability throughout various life stages and economic conditions, one has to be able to articulate and employ specific strategies to efficiently manage limited financial resources, reduce dependence on consumer debt, prepare for emergencies, and plan for big and long-term financial goals (such as home ownership, college education, and retirement). Building positive net worth is an essential step on the path to household's long-term financial security (Fitzsimmons, Hira, Bauer, & Hafstrom, 1993).

Households' ability to sustain long-term financial security has been assessed by both objective and subjective measures. Objective measures include net worth and debt to income ratio. Wealth, an outcome of saving and investment, is measured by net worth, a stock variable that refers to the total amount a person accumulates in assets at a given time. It is an important indicator of households' long-term financial security (Hira, 1997, 2012; Hira, Fanslow, & Vogelsang, 1992; Mugenda, Hira, & Fanslow, 1990).

The subjective measures, on the other hand, include happiness, quality of life, and satisfaction with one's financial status. Income is important for happiness, especially when the income grows from the low to middle level. However, it is not easy to summarize the relationship between income and happiness. There is a relationship between the two, but it is modest, leaving some to question how it should be cast. This problem applies to all modest relationships, but the problem is compounded in the case of income and happiness because of strong feelings about what one might like the relationship to be. Some would be happy if money were unrelated to happiness; others would prefer the two to be very strongly related, so that rising income might powerfully increase the wellbeing. It is claimed that the correlation between income and happiness is considerably weaker than people expect and recent research supports that contention. However, an important lesson from judgment and decision-making research is that judgments are constructed in response to the prevailing context, leaving open the possibility that some elicitation procedures may reveal accurate intuitions about income and happiness (Cones & Gilovich, 2010). For an individual, emphasizing social relationships is more important than focusing on materialist goals. Xiao (2013) concluded that to live a happy life in a long run, one strategy is to seek a meaningful life. Spending for others or meaningful social causes may bring more happiness than spending on oneself. Research also suggests that happier people may do better financially.

Quality of life is a broad concept determined by many factors, as a result there has not been a consensus on the proper definitions or measurements (Fitzsimmons et al. 1993). In various research studies quality of life was influenced by economic factors that included income and net worth, social factors that included gender, marital status, and household size, and process factors that included financial communication and money management practices. Measures of satisfaction with financial status may also be linked to one's quality of life (Hira, 1987a, 1987b; Titus, Fanslow, & Hira, 1989b).

Mugenda et al. (1990) explored impact of money management practices on the household's financial status and satisfaction with quality of life. They found that practices such as evaluation of financial status, communication about financial matters, estimation of household's income and expenses, review and evaluation of family's spending habits, and calculation of the household's net worth were significantly related to household's financial status and satisfaction with quality of life. They also found that main determinants of money management practices are financial knowledge and financial communication. Financial knowledge was measured by an index using the responses to 22 knowledge items in consumer credit and investment areas. The study showed that the level of resources, demand on those resources (measured by age, income, household size), as well as the process of transforming those resources (measured by financial management practices and communication), are significant predictors of household's satisfaction with quality of life.

Sumarwan and Hira (1993) reported that satisfaction with quality of life is directly influenced by household income and level of satisfaction with financial status. Age, household income, household net worth, perceived locus of control, and perceived income adequacy are significantly related to satisfaction with financial status. Household income and household net worth had indirect effects on satisfaction through perceived locus of control and perceived income adequacy. Perceived locus of control also had an indirect effect on satisfaction through perceived income adequacy.

Satisfaction with financial status has been measured through survey instruments, operationalized by a single item such as "how satisfied are you with your overall financial situation," or by an index based on satisfaction with different aspects of a household's finances which include: standard of living, level of savings, ability to stay out of debt, level of assets, ability to payback debt owed, and ability to meet large emergency expenses. Use of the index, which includes multiple satisfaction variables, results in more variation in participant responses as compared to using a single overall measure of satisfaction (Titus et al., 1989b).

However, satisfaction as a measure of financial status is elusive. Some studies have shown that people who had a lower level of net worth expressed higher level of satisfaction with their financial status and vice versa. These results may indicate that some people's feelings about their financial situation are not based on financial facts but rather on their perception of what they thought their finances to be (Hira & Mugenda, 1999, 2000; Titus et al., 1989a).

In their recent study, Sass, Anek, Thomas, & Ramos-Mercado (2015) also concluded that financial satisfaction is subjective, based on what one sees and values at a particular point in time. Then it would not be surprising if subjective assessments overlook deficits in dealing with risks and meeting future needs, hence the concerns about the use of satisfaction as an indicator of financial wellbeing. Furthermore, some studies have shown that financially literate individuals do not have weaker finances, but are better equipped to see deficits (Mugenda et al., 1990; Xiao, Chen, & Chen, 2014). This hypothesis is consistent with the notion that financial rationality is limited; that subjective assessments can mask serious deficits; and that less literate households are overly sanguine, and thus less likely to take action to improve their financial status. To the extent that this is the case, initiatives to improve wellbeing must correct, or otherwise accommodate, a subject's inaccurate assessment of their financial condition (Sass et al., 2015). However, we must be reminded that according to Xiao et al. (2014) only objective financial literacy may reduce financial satisfaction. Other financial capability variables may enhance financial satisfaction. Deficits that fail to generate dissatisfaction are rarely addressed and often grow larger with time. To the extent that subjective assessments overlook deficits that are distant from day-to-day concerns, satisfaction actually diminishes financial wellbeing.

Sass et al. (2015) concluded that for households to improve their financial wellbeing, the salience of issues distant from day-to-day concerns must be raised. Households are increasingly responsible for such issues, specifically saving for retirement, accumulating home equity, paying for their children's college education, and paying off their own student loans. The results show deficits in these areas associated at most with minor reductions in financial satisfaction. The importance of salience is highlighted by the finding that having an inactive retirement plan is associated with a reduction in satisfaction while not having plan—a more adverse but less visible condition—is not.

Factors Associated with Financial Behaviors and Outcomes

Household net worth, a measure of financial sustainability has been shown to be strongly associated with investment regularity, age, family size, employment status and, as expected, higher household income (Sabri et al., 2012). The results suggest that there is a possible linkage between early in life involvement with investing and subsequent household wealth. Socialization influences independently accounted for variation in household wealth, with parental influence emerging as the strongest socialization agent, even though the effects were modest in size (Hira, Sabri, & Loibl, 2013).

Debt to income ratio, used as an outcome measure of a household's financial status, has been shown to be significantly affected by credit card practices, including number of credit cards used, the amount one felt comfortable owing on credit cards, and frequency of paying finance charges on credit cards. The size of monthly debt payments played a significant role in explaining the variation in total asset ownership (Hira et al., 1993)

However, Mugenda et al. (1990) reported that satisfaction with financial status is influenced by financial communication and money management practices. Whereas, household wealth measured by net worth is affected by age, ethnicity, family size, employment status, and household income. In addition, investment regularity, parental influences, and workplace influences were found to be associated with net worth. These results support the notion that financial socialization, particularly parental influences, accounts for variance in household net worth over and above other socio-demographic and belief-related variables. Communication between children and parents plays a key role in financial socialization as parents influence children's norms and values. Children also learn financial behaviors from observing their parents' financial behavior (Hira et al., 2013).

Hira and Mugenda (1999) reported a significant and positive relationship between financial beliefs (being optimistic about their future financial situation and satisfied with their current financial situation) and self-worth. This study also showed that those with high and low senses of self-worth did not differ in terms of age, income, marital status, and gender. However, the groups did differ in educational level and employment status. However, the relationship between spending behavior and self-worth is complex; some people spend beyond their means to deal with the feelings of low self-worth, and then feel guilty due to excessive spending leading to financial problems.

Conceptual Frameworks

Human behavior is extremely complex, and consequently, the financial aspects of human behavior are equally multifaceted. Social learning theory posits that learning is a cognitive process that takes place in a social context and can occur purely through observation or direct instruction (Bandura & Walters, 1964). While this theory is useful as a model of imitative learning it cannot explain why such learning is so often insufficient to alter patterns of choice and behavior. This is the case with financial behaviors as well. Financial behaviors are affected by a large number of internal factors such as personality, individual psychology and cognition, family history, and environment. Other internal factors that influence financial behaviors include socio-economic characteristics (income, age, education, employment status, ethnicity), personal characteristics (attitudes, values, emotions, beliefs), and family dynamics (culture, behaviors, and communication patterns) (Titus et al., 1989a). External factors influencing financial behavior include financial markets, peers, schools, and media. Financial behaviors also differ by culture and are affected by moral hazard, social mood, and unconscious herding (Hira, 1997; Sabri et al., 2012; Hira et al., 2013). This presents huge challenges to both researchers and educators. Educators have to recognize the role of socio-psychological factors influencing financial behavior and expand the teaching topics accordingly.

Eccles, Ward, Goldsmith, & Guler (2013) discuss the challenges of introduction and treatment of "consumer values" as a factor in consumer financial sustainability, what it is, what it means, and why it is important. It is difficult to argue against the importance of including personal values in any framework that examine financial teaching, financial sustainability, and financial behaviors. However, this debate is not quite settled yet. On the one hand, personal values are offered as a valid (and valued) contributor to one's financial choices but, on the other hand, it is devalued as a contributor of poor financial behavior because they are emotional and are greatly influenced by their inner needs and their social environment.

Adult learning theory takes into account emotions and imaginations that are integral to the process of adult learning; it provides a better window into the cognitive process, particularly in terms of internal reaction to experience for financial behavior that is influenced by emotions and experiences (Loibl & Hira, 2005).

Prochaska and his colleagues (Prochaska, 1979; Prochaska, DiClemente, & Norcross, 1992) developed the transtheoretical model (TTM) of behavior change in the 1970s. Bristow (1997) suggested that this model could be used to change people's financial behavior in Money 2000. Recently researchers have applied transtheoretical model of behavior change in the credit counseling setting to develop a measure to help consumers change behaviors to eliminate undesirable credit card debts (Xiao, Newman, Prochaska, Leon, & Bassett, 2004a; Xiao et al., 2004b). TTM is also applied in financial education programs for low-income consumers, in which specific educational strategies under the framework of TTM were developed (Shockey & Seiling, 2004). In addition, TTM is used to provide advice for women on being better investors (Loibl & Hira, 2007). For a thorough discussion of the transtheoretical model of behavior change, see Chap. 1 "Financial Capability and Well-being" in this book.

We know that financial behaviors are affected by a large number of internal and external factors. Internal factors influencing financial behavior include personality, individual psychology and cognition, family history, socio-economic characteristics (income, age, education, employment status, ethnicity), personal characteristics (attitudes, values, emotions, beliefs), and family dynamics (culture, behaviors, and communication patterns) (Titus et al., 1989a). And external factors influencing financial behavior include financial markets, peers, schools, and media. Financial behaviors also differ by culture and are affected by moral hazard, social mood, and unconscious herding (Hira, 1997; Hira et al., 2013; Sabri et al., 2012).

To be effective in establishing cause and effect relationships researchers have to consider conceptual models that take into account the above-mentioned broad and complex spectrum of factors found in both the external and internal environments in which families live and function. The family resource management model (Deacon & Firebaugh, 1988) has a great potential to handle such complex situations. It focuses on management processes in the context of families and their environments (both internal and external). It refers to a process with a systems orientation where management is defined as a tool for achieving desired goals and where personal factors are recognized as resources that influence decision-making and management behavior. The four components of the model—inputs, throughputs, outputs, and the feedback loop—can be easily applied to understand how people make financial decisions, develop and perhaps change their financial behaviors. And it is a dynamic model, which recognizes that an outcome provides feedback that can instigate a change in factors that are included both in input and throughput to produce a different outcome (Fitzsimmons et al., 1993).

The adult learning theory, transformative learning theory, transtheoretical model of behavior change, and family resource management model are some examples of potential frameworks that may assist with the development of an overarching theory of financial literacy. Opportunities for trans-disciplinary work offer a great promise for the future.

Implications for Education and Research

Challenges and Opportunities

The failure of markets, institutions, businesses, and households during the current financial crisis has proven both the current economic framework and the current household financial management framework to be ineffective. These frameworks must be adjusted to better position households and broader society to maintain financial wellbeing, even in times of crisis. We must also recognize that the mission of the personal finance profession is different from the study of related fields, such as finance, economics, or even consumer economics. The underlying assumptions in economics are that humans are rational, and the market's invisible hand serves as a trustworthy corrective to imbalance. In reality, people do not always make rational and optimal decisions; they are emotional and are greatly influenced by their inner needs and their social environment. They are creatures of habit and sometimes act in a way that can be harmful to their financial health, even though they know otherwise. More importantly, personal finance is about understanding the relationships between values, beliefs, attitudes, emotions, self-esteem, and financial behaviors (earning, spending, borrowing, saving, and investing). All personal finance professionals must recognize this complex nature of the person and the situation in which financial resources are handled, and not identify people as just "consumers."

Despite progress in the field, financial literacy still remains poorly defined and imperfectly measured and issues with response bias and data interpretation remain challenging in the context of overall financial wellbeing. Schmeiser and Seligman (2013) concluded that despite the proliferation of academic studies examining financial literacy and financial outcomes, no consistent definition or empirically validated measures of financial literacy exist. While a handful of questions have become the standard measures of financial literacy, little work has been done examining whether responses to these questions accurately capture underlying financial capability, or whether they causally relate to subsequent financial wellbeing.

Generally speaking the existing research is dependent on theory and modeling—and not the "lived reality" of average persons, families, and their communities. As an interdisciplinary field, financial education has grappled with an appropriate theoretical framework to apply to work in financial education. Most of the theories currently utilized by researchers address financial practices, and little work is done on the process of financial decision-making and financial literacy. A disconnect still exists between what researchers study and what practitioners do.

Implications for Education

Financial education efforts should focus on improving financial behavior in order to improve financial wellbeing in society. This, however, cannot be separated from moral, ethical, and spiritual considerations. Nothing in life is morally neutral. To be effective in bringing about a behavior change, financial teaching should be far more values-based, reflecting the real world—not limited only to mechanical models and theories (Hira, 2012).

In order to account for this, personal financial teaching should be far more values-based and reflective of personal situations, not just financial situations. We must also recognize that teaching the management of financial resources involves the specific processes of goal setting, problem solving, planning, and implementing. These specific processes are imbedded in the general processes of communication, decision-making, and feedback (Hira et al., 2013; Schuchardt et al., 2007).

The focus in personal finance education should not be on the consumer or consumption but on the overall financial wellbeing of households. The end goal must be to equip individuals with knowledge and skills to make informed and productive financial choices throughout various stages of life. At the heart of teaching strategies should be the promotion of financial behaviors that lead to the long-term financial sustainability of individuals, families, and their communities (Hira, 2012).

In addition, personal finance teaching should be simple and realistic; it should be outcome-based, should address those areas in which most people are currently facing problems, and be far more value-based and reflective of personal experiences and financial situations. Long-term financial sustainability of individuals and families should be at the heart of all approaches to providing financial education (Schuchardt et al., 2007).

More importantly, for educational efforts to be successful, we must assure that the teachers of these courses are financially healthy themselves, and they have a good grasp of the topics they plan to teach. They must live the part, modeling financially sustainable behaviors. Technology provides financial educators with unique opportunities to expose people to the messages and provide just-in-time intervention, before it is too late or before their behaviors lead to financial insecurity. However, when using technology as a tool of financial education, careful attention to market segmentation is critical to ensure messages are relevant to and acceptable to people from different backgrounds and with different needs (Hira, 2012; Power & Hira, 2010).

To show that educational efforts are producing the desired results, outcome measurements must be explicitly connected with current challenges faced by many households, and assessments must be limited to the specific course objectives. Evaluations must be incorporated into the program design, and their focus needs to go beyond measuring knowledge and changes in behavior to examining the curricula, pedagogy, and delivery mechanisms. Rigorous program evaluation approaches include randomized evaluation, experimental methods, and qualitative research. However, it is important to recognize that financial education is not a panacea. Financial behaviors are formulated and developed over a long time period and are affected by many factors, with education being only one of them. Financial behaviors are also affected by the nature of financial products and services, including information and marketing approaches. Both financial education and effective regulation responsive to market evolutions are necessary to ensure that most people can successfully function in this environment and are protected against abusive and fraudulent practices (Hira, 2012; Hira & Loibl, 2008).

Willis (2009) suggests that until and unless stronger evidence emerges that the current model of financial literacy education is effective, policymakers and regulators should be circumspect in their use of it as a response to consumer financial problems. Researchers should be particularly cautious in the presentation of their findings, so that academic work will contribute to the public policy discussion empirical, rather than ideological, assessments of financial literacy education.

This may be a fair warning, but most financial educators believe that financial education does not and will not replace the need for appropriate policies and strong regulatory approaches to protect consumers from aggressive and dangerous business practices. Without doubt, education can improve individuals' socio-economic outcomes. OECD work has shown the potentially important role of education in promoting positive life outcomes. Education contributes to improving outcomes by helping individuals develop skills. Return on education is explained by the development of cognitive, social, and emotional skills (OECD, 2015, p. 23). We must ask if Willis and her supporters are applying these standards to other subjects (economics, mathematics, English). It appears that personal finance education being singled out to meet these expectations, if so why?

Implications for Research

If the goal of financial literacy measures is to simply document financial capacity in the broadest sense, then repeating cross sectional measures with validated questions and measures may be sufficient. However, if what really matters is long-term individual financial wellbeing, then our findings suggest that longitudinal data, where the consistency of individual responses to financial literacy questions can be assessed, may yield more accurate results.

Improving our evaluation approaches is much needed to identify financial programs that are most effective at changing financial behavior, which is the ultimate goal of all efforts. The field of financial education continues to struggle with several issues, including lack of consensus on the core content of basic financial literacy courses, a simple and easy-to-administer measure that is widely accepted in the field as an indicator of financial wellbeing, and how best to measure and conduct proper course evaluations. As the field tackles important societal issues related to financial education, validation of successful education, and the recognition and application of the rich compendium of research conducted over the last several decades will be beneficial in moving forward.

Educators, meanwhile, will benefit from research findings when developing educational programs for specific population groups. More applied research that has the capacity to inform policy, education, and practice is needed as well. Researchers must engage people on the ground when designing research projects or developing plans to deliver educational programs. Similarly, research findings must be connected to the real lives of individuals, families, practitioners, and policy makers.

Ideally, educators and practitioners should be able to use research findings to increase their understanding of their target groups before developing and delivering educational and marketing programs. For educators and practitioners, knowing what researchers have already learned about how adults acquire knowledge, being aware of knowledge their target groups may already have, and understanding differences in learning by gender, age, and ethnicity can be helpful in developing and delivering effective educational and marketing programs (Hira, 2012).

Conclusion

The overall objective of personal finance profession is to educate average person about attitudes, beliefs, and behaviors that are significantly related to sustainability of financial security. It may involve teaching people strategies to live within means, reduce dependence on debt, be prepared for emergencies, save regularly, and invest wisely to meet long-term goals. Because of differences in people's backgrounds and experiences, personal finance education must specialize both the content and the delivery techniques utilized to meet the needs of all individuals. This may involve teaching people to behave differently in regard to matters of money.

The enduring lesson of the classic personal finance books such as *Richest Man in the Babylon* (Classon, 1926) and *The Millionaire Next Door* (Stanley & Danko, 1996) is that most of the ordinary people can grow rich because of modesty, thrift, and prudence. However, as we know, behaviors are formulated and developed over a long time period and are affected by many factors besides education. In reality, many behaviors do not involve conscious decisions—they are habits, that means they can be difficult to change. However, with proper education and skill development they can be changed, and we can nurture positive financial practices into unconscious actions—habits. Here, we may benefit by partnering with professionals in psychological research, knowledgeable of how habits are formed and how they can be changed.

Although there is a role for purely theoretical research in personal finance, researchers need to consider the practical implications of their research when selecting research topics and methodologies. Educators and researchers must join in their efforts to develop effective approaches and tools to bring about desired changes in financial behavior necessary to achieve financial sustainability. To meet future research needs, it is important that we develop a financial literacy theory. It is also important that researchers develop a strong connection with practitioners to be able to learn about the reality of peoples' finances and find out what is missing or needed in the field. It is critical that recommendation for businesses and policy makers be developed and shared in an appropriate and timely fashion.

Even though there is a significant improvement in the availability of research funding it is still an issue for the continuation of quality and longitudinal research in this field. Within the health field, for example, researchers often perform continuing research over many years to understand how habits are formed and how they can be changed. Yet, in personal finance most of the research performed has focused on issues at the present time of research. We need significant funding to conduct valuable long-term studies to understand how to bring about desired changes in financial behavior to ensure long-term household financial wellbeing.

The goal of all efforts—financial education, research, policies, and regulations—must be to help people increase their financial capabilities, by increasing financial knowledge, improving skills, and developing constructive habits. Through research we can improve approaches to educating people in a way that influences their financial behaviors resulting in improved financial status of their households over the long term. Furthermore, research can assist in identifying appropriate policies and business practices to create a safe external financial environment where individuals may successfully demonstrate these desirable financial behaviors (Power & Hira, 2010).

There is no doubt that if challenges are met and opportunities are acted upon, individuals and families can be better prepared to meet the complex and forever changing economic environment in the future. Furthermore there is every reason to believe that with proper education and skill development on the one hand, and appropriate policies and strong regulations we can increase chances of financial stability for households and at the same time ensure a somewhat stable economic situation of the economy as a whole during future financial crises.

About the Author

Tahira K. Hira, Ph.D., has served as a member of the US President's Advisory Council on Financial Literacy, Chair of the NYSE committee, and has served as an expert witness for the United States Senate Committee on Judiciary and the United States Senate Banking Committee. She is the founding president of the Association for Financial Counseling and Planning Education (AFCPE) and president of the American Association of Family and Consumer Sciences (AAFCS). Her research interests include financial attitudes and beliefs, borrowing and investing behavior, gambling, and consumer bankruptcy. Her work has been cited in the *New York Times*, the *Washington Post*, the *Wall Street Journal*, the *Chicago Tribune*, and the *Money*, and she has appeared on the NBC Today Show, CNN News, and the CBS Up to the Minute Show. Currently a professor emerita, she joined Iowa State University in 1980. As a Fulbright-Hays Scholar, she received an M.S. in Agricultural Economics and a Ph.D. in Family and Consumer Economics from the University of Missouri-Columbia.

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