Spousal Decision Making and Long-Term Care Insurance

Amanda E. Barnett and Marlene S. Stum

Guided by decision-making in families theory, the current study investigated the role of spousal decision-making processes on purchasing long-term care insurance (LTCI) behavior using a sample of married women (N = 292) and men (N = 277) who were not married to each other. Spousal consensus regarding LTCI as a solution to the risk of long-term care (LTC) and spousal consensus regarding affordability of LTCI premiums had a significant, positive relationship with women's probability of purchasing LTCI. Spousal influence, as well as spousal consensus regarding the men's probability of purchasing LTCI. Spousal decision-making processes, especially with men's probability of purchasing LTCI. Findings indicate that spousal decision-making processes, especially consensus, play an integral role in LTCI decision outcomes, but in different ways depending on gender. Financial professionals and educators can build more meaningful decision-making strategies by recognizing and addressing differences in consensus and influence processes when working with married women and men.

Key Words: couples, decision-making, finances, gender, long-term care

Introduction

Long-term care (LTC), or needing help with daily living to increase the ability to live independently, is a financial risk that can affect individuals of all ages (Congressional Research Service (CRS), 2011; U.S. Department of Health and Human Services (DHHS), 2010). Given the current expenditures on LTC and expected increases, the need for families to be prepared for LTC has never been greater (American Association of Retired Persons (AARP), 2009). Inadequate preparation can make families vulnerable to financial insecurity, reduced quality of life, and unmet needs (Metlife Mature Market Institute, 2009; U.S. DHHS, 2010). The failure of families to address the financial risk of LTC also poses significant economic and social expenses for governments and society (CRS, 2011). For example, when out-of-pocket costs exceed a family's financial resources, family members may become dependent upon the limited resources of Medicaid (the government safety net) (CRS, 2011).

Purchasing long-term care insurance (LTCI) is one planning option available for families. LTCI offers a long-term contract designed to cover services needed when the prospect of regaining health and functioning due to physical and/or cognitive impairments is unlikely, and getting progressively worse is expected. LTCI can be an effective risk management tool for individuals who prefer to pay premiums rather than endure the risk of potentially large and unpredictable financial losses (U.S. Congressional Budget Office (CBO), 2004). Most research that has examined LTCI purchasing behaviors has utilized a macro-economic level decision-making lens, focusing on demand and supply factors such as the availability of Medicaid programs and affordability of LTCI policies (Brown & Finkelstein, 2008; Caro, Porell, & Kwan, 2011; CRS, 2011). Much less is known about the micro-level decision-making of families, such as spousal dynamics, that may impact LTCI behaviors of married individuals (Barnett & Stum, 2012). It is widely recognized that financial decisions are typically made in the context of families; the decision to purchase LTCI is no exception. Most research on married couples' financial decision-making has focused on investing, saving, and retirement decisions, finding that spouses play an integral role in financial decision-making (Gilliam, Goetz, & Hampton, 2008; Hanna & Lindamood, 2005; Behringer, Perrucci, & Hogan, 2005). Much less is known, however, about what happens within married couples' decision-making that may be impacting their purchasing behaviors

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(Barnett & Stum, 2012). Decision-making in families theory (Rettig, 1993) reinforces that spousal dynamics add to the complexity of financial decision-making. The decisions of one spouse are related to the decisions of the other, impacting financial security of both spouses at the household level. Each spouse brings their own individual characteristics and decision-making processes to the LTCI decision; but little is known about potential relationships and the impact on LTCI decisions (Barnett & Stum, 2012; Cramer & Jensen, 2006; Stum, 2006). A key theme in Curry and colleagues' (2004) findings on individual LTCI decision-making was the important role that family structure and dynamics played in decision-making. In the current study, we focused on individuals who were married as one type of family structure and examined if and how spousal decision-making processes were related to purchasing LTCI behaviors.

Decision-making in families theory also recognizes that each spouse brings their own gendered characteristics and decision-making processes to the financial decision situation (Rettig, 1993). Historically, women have been less involved in costly household financial decisions than men because of their smaller contribution to household income and less financial education (Bernasek & Bajtelsmit, 2002). As income and education have increased among women, however, they have reported more decision-making power and influence in larger household financial decisions (Belch & Willis, 2001; Bernasek & Bajtelsmit, 2002; Burns, 1992). While research has found that women have been less likely than men to take financial risk in investment and savings decisions (Fisher, 2010; Gilliam et al., 2008; Whitaker, Bokemeiner, & Loveridge, 2012), relatively little is known about the role of gender and LTCI decision-making processes. Most research has focused only on LTCI decision behaviors, finding that women have consistently been more likely to purchase LTCI than men (America's Health Insurance Plan (AHIP), 2012; Stum, Zuiker, Pelletier, & Hope, 2001). What is not known is if and how decision-making processes may differ for men and women when faced with LTCI decision situations. This study begins to address the complexity of gender differences in financial decision-making by examining how spousal decision-making processes are related to women and men's LTCI purchasing behaviors.

The current research contributes new empirical insights into LTCI and LTCI risk management as a critical financial decision situation facing families. This study moves beyond an individual focus as well as a dichotomous marital status variable and examined the spousal dynamics that affect LTCI decision-making outcomes. In addition, the current study examines gender differences in LTCI decision-making, exploring why women and men who are married were more or less likely to purchase LTCI. As a result of this research, financial educators, counselors, and planners will gain insight into the role of spouses and gender in LTCI decision-making. Practitioners can build on study findings to develop more meaningful and practical prevention strategies and decision-making processes to help married individuals address the financial risk of LTC.

Theoretical Framework and Literature Review

A family-level decision-making conceptual framework was used to examine spousal decision-making processes and LTCI decision-making (Rettig, 1993). Decision-making in families theory examines the process of problem solving or decision-making through an ecological perspective, stipulating that there are three inter-dependent components to decision-making within family systems: context, process, and outcome. The literature reviewed on LTCI and spousal decision-making is discussed utilizing context, process, and outcomes as the key theoretical components guiding this study. Due to the limited research on spousal processes and LTCI decision-making, literature on spousal processes and other financial decision situations (e.g., household, investment, savings) was reviewed to provide insight to the impact spouses may have on LTCI decision-making.

Decision Context

Context is conceptualized as individual or household factors that contribute to decision-making processes and outcomes (Rettig, 1993). In this study, eight contextual factors were proposed to be related to LTCI decision situations. These contextual factors included individual employee characteristics of gender, age, education, perceived health, and prior experience with LTC (e.g., being a caregiver, paying for care). Household-level contextual factors proposed to be related to LTCI decision situations included number of children, household income, and household assets. A review of existing literature suggested that many inconsistencies existed regarding if and how these contextual factors were related to LTCI purchase behaviors. A lack of consistent findings is most likely a reflection of differences in whether LTCI purchase decisions of the individual or group LTCI market were being examined, whether private or public employees were being examined in the group market, or whether national datasets of overall LTCI patterns were being utilized. In addition, some

studies reported descriptive findings while others reported multivariate findings. Further exploration of the role of contextual factors is warranted to help understand the complexity of spousal LTCI decision-making situations.

Gender is a specifically salient contextual factor that has been related to financial decision-making in general and LTCI in particular (AARP, 2009; Bernasek & Bajtelsmit, 2002; Godwin & Scanzoni, 1989). Descriptive findings have often found women more likely to purchase LTCI than men (AHIP, 2012; Stum et al., 2001; U.S. DHHS, 2004a). Over 20 years of examining buyers and non-buyers, AHIP (2012) has consistently found women to outpace men as buyers (54% to 46%, respectively, in 2010). The pattern of women more likely to buy LTCI, and therefore, less willing to take a financial risk of needing LTC, was consistent with findings about women and risk-taking and tolerance in other financial decisions. For example, consistent patterns of women indicating lower risk tolerance than men has been found in saving and investment decisions (Fisher, 2010; Gilliam et al., 2008; Whitaker et al., 2012). In contrast to these descriptive findings, multivariate research has been inconclusive about the relationship between gender and LTCI purchase behavior (Cramer & Jensen, 2006; Schaber & Stum, 2007; Stum, 2005; U.S. DHHS, 2004a; 2004b).

Age is a contextual factor that also has contradictory findings regarding its relationship with LTCI purchasing behaviors. The probability of needing LTC increases with age, especially for individuals 85 years of age and older. With increasing age, however, individuals are more likely to experience multiple chronic illnesses that can prevent being insurable; therefore, LTCI premiums increase with age at purchase to reflect the higher risk of needing LTC (AHIP, 2012). Overall, findings reinforced that individuals nearing or in the early years of retirement were more likely to purchase LTCI than much younger individuals, or individuals in older age groups (75+ years of age) (AHIP, 2012; Caro et al., 2011; Cramer & Jenson, 2006; Health Insurance Association of American (HIAA), 2001; Schaber & Stum, 2007; Stum, 2005; Stum et al., 2001; U.S. DHHS, 2004a). The average age of LTCI purchasers was 59 years in 2010, down from 68 years in 1990; with 47% of buyers of both group and individual LTCI policies between 55 to 64 years of age (AHIP, 2012).

Perceived health status is an important factor to consider because health is a determinant in assessing one's risk for needing LTC. Once again, contradictory empirical findings existed in regards to perceived health status and LTCI purchase behaviors (U.S. DHHS, 2004a). Some studies of the employee group market behavior have found employees with good and poor health more likely to enroll in LTCI than individuals with excellent health (Stum, 2005; Stum et al., 2001). Other studies of the LTCI group market have found individuals with excellent health status more likely to purchase, perhaps thinking they are more likely to live longer and at some point need LTC (Cramer & Jenson, 2006).

Prior experience with LTC as a caregiver is expected to increase awareness of LTC risk and financial consequences, a motivator for taking action. Some studies have found individuals with prior LTC experience were more likely to purchase LTCI (Stum et al., 2001; U.S. DHHS, 2004b); other studies have not found prior experience related to purchase behavior (Cramer & Jenson, 2006; Schaber & Stum, 2007; U.S. DHHS, 2004a).

Research has consistently found that individual education levels and household financial resources have been related to LTC purchasing behaviors. An individual's level of formal education has the potential to increase knowledge levels of insurance and LTC and a person's capacity to understand and compare LTCI financing options. Studies exploring the role of education have found that LTCI buyers were more likely to have higher levels of education than non-buyers (AHIP, 2012; Caro et al., 2011; Cramer & Jenson, 2006; HIAA, 2001; U.S. DHHS, 2004b). Regarding household-hold level financial resources, LTCI buyers were more likely to have higher incomes and higher amounts of accumulated assets relative to non-buyers (AHIP, 2012; Caro et al., 2011; Cramer & Jenson, 2006; HIAA, 2001; Shaber & Stum, 2007; Stum et al., 2001; U.S. DHHS 2004a; 2004b). Income levels influenced perceived affordability, a key issue for non LTCI purchasers (AHIP, 2012). Individuals with significant assets may purchase LTCI to protect their assets or to protect assets for a healthier surviving spouse (Stum et al., 2001).

The availability of potential caregivers is another factor with the potential to influence LTCI purchase behavior. Some studies suggested that individuals with fewer available caregivers (or caregivers living nearby) were more likely to purchase LTCI (Stum, 2005, Shaber & Stum, 2007; U.S. DHHS 2004a; 2004b). Additional studies have found the expected availability of adult children as unpaid caregivers does not reduce interest in LTCI ownership (Mellor, 2001, Caro et al., 2011). In contrast, Cramer and Jenson (2006) found non-purchasers were more likely to have more children than LTCI purchasers. This suggests that non-purchasers may be relying on informal care from children in the future.

Process

Decision-making in families theory stipulates that contextual factors are directly and indirectly related to decision-making processes (Rettig, 1993). The process of making decisions includes both perceiving and deciding interacting components. Perceiving processes are conceptualized as the emotional evaluations that occur during decision-making. Perceiving processes specific to LTCI decision-making include unique attitudes, values, and beliefs individuals feel about the particular financial LTC decision situation, including problems and solutions (Curry, Bradley, & Robison, 2004; HIAA, 2001; Schaber & Stum, 2007). In this study, the role of spousal consensus and influence were two types of perceptual factors being examined. Deciding processes are the cognitive part of the decision-making process involving seeking information, assessing alternatives, weighing consequences of specific behaviors, assessing actual resources, decision-making styles, and clarifying financial goals (Rettig, 1993). The current study examined discussion with a spouse as one type of deciding process.

Perceiving process

Decision-making in families theory stipulates that families seek to make decisions that minimize conflict and resolve tensions in family members' perceiving processes (Rettig, 1993). Consensus between spouses over the problem and potential solutions is a process by which families arrive at some form of agreement to minimize conflict and mobilize resources to meet family needs. Spouses may individually perceive that they agree on the problem and solution until it is time to choose a solution and find significant dissonance in their thinking. The level of spousal consensus with perceiving processes may ultimately impact whether or not an individual decides to purchase LTCI.

Most studies have conceptualized couple consensus as agreement or similarity between spousal perceptions of the decision outcome with little regard to spousal consensus with the process (Barnett & Stum, 2012; Hiller & Mc-Caig, 2007; Moen, Huang, Plassman, & Dentinger, 2006). A qualitative study examining couple consensus with financial LTC decision outcomes found that the majority of married couples had consensus with their financial LTC

decision behaviors, but fewer couples had consensus with their financial LTC decision intentions (Barnett & Stum, 2012). A descriptive and bivariate study examining financial LTC decision-making found that spousal consensus varied depending on the aspect of LTCI considered (Stum et al., 2001). For example, individuals perceived that they agreed with their spouses on (a) LTC as a financial risk to address (92%), (b) who to insure in the household (92%), (c) LTCI as an appropriate solution (83%), and (d) affordability of premiums (70%). Overall, this research found that individuals who purchased LTCI reported more spousal consensus regarding this decision compared to individuals who chose not to purchase LTCI (Stum et al., 2001). For example, 64% of individuals who chose not to purchase LTCI reported disagreeing with their spouse regarding premium affordability in comparison to only 16% of buyers disagreeing. It is unknown whether gender differences in couple consensus regarding LTCI exists and how this may impact men and women's LTCI purchasing behaviors.

Another part of perceiving processes is influence from individuals within the family (Rettig, 1993). Spouses may be influential in decision-making because they have differing values, goals, standards, and roles for how to address individual and family needs. Spousal influence has been conceptualized as the extent to which a spouse exerts power to alter their spouse's beliefs, attitudes, and behaviors (Corfman & Lehmann, 1987; Spiro, 1983). Research has found that spouses with more expertise, perceived fairness, desire to support the relationship, and desire to win and control had more influence in financial decision-making compared to spouses with less expertise, perceived unfairness, less desire to support the relationship and less desire to win or control (Corfman & Lehmann, 1987; Su, Zhou, Zhou, & Li, 2008; Webster & Reiss, 2001). Regarding LTCI, spouses have been consistently reported as the most significant influence in purchasing LTCI (AHIP, 2012; HIAA, 2001; Stum et al., 2001). For example, 40 to 44% of LTCI buyers over the past 20 years reported their spouse as having the most influence relative to other family members or other professional advisors (i.e., 17% indicated a financial planner was most influential) (AHIP 2012).

Spousal influence has tended to differ by gender of the spouse and stage of the decision-making process (Burns, 1992; Challiol & Mignonac, 2005; Hiller & McCaig, 2007). Wives with higher employment status have had more decision-making power depending on the decision situation (Challiol & Mignonac). Burns (1992) found that women exerted more influence than men and concluded

that women may be a driving factor behind family household decisions. In regards to retirement, men have reported more influence from their wives in their decision to retire than women have reported receiving from their husbands (Henkens & van Solinge, 2002; Smith & Moen, 1998). In addition, joint financial decision-making has been found to decrease over time and shift to the wife as financial decision maker (Ferber & Lee, 1974). Such findings suggested gender differences regarding spousal influence may exist in various financial decisions, with women having more influence than their husbands in financial decision-making.

Deciding process

The deciding or "thinking" component of processes assumes that individuals seek information in different ways and have different decision-making styles. Choosing to discuss a decision with a spouse is one type of deciding process. Spousal discussions have been influential in financial decision-making, including LTCI decisions (AHIP, 2012; HIAA, 2001; Stum et al., 2001; Sung & Hanna, 1998; Webster & Reiss, 2001). Research has found that spouses have tended to have more discussions about financial decisions than other household decisions (Webster & Reiss, 2001). For example, Sung and Hanna (1998) found that individuals preferred to discuss information on retirement plans and stocks with their spouses prior to discussing this information with financial professionals. This trend is similar for LTCI; married individuals who purchased LTCI were most likely to discuss the decision with a spouse (AHIP, 2012; HIAA, 2001; Stum et al., 2001). Stum and colleagues (2001) found a majority (63%) of employees discussed the LTC decision with a spouse/ partner, 55% discussed with co-workers/friends, followed by 16% with human resource/benefits representatives, and 7% with financial planners. Although spouses were likely to discuss financial decisions with each other, they may be too busy to discuss every decision together, resulting in some financial decisions being made by one spouse alone (Reiss & Webster, 2004). Women's involvement with household financial discussions has also depended significantly and positively on her contribution to household income (Bernasek & Bajtelsmit, 2002). Research is needed to examine the extent that men and women's spousal discussions regarding LTCI relate to purchasing LTCI behaviors.

Decision Outcomes

The final component of the decision-making model is the decision outcome. Decision outcomes are conceptualized as taking action or choosing to do nothing (inaction).

Previous studies of LTC risk management have identified a range of potential risk management intentions as well as actions at the individual- (Stum, 2006) and couple-level (Barnett & Stum, 2012). In the current study, decision outcomes focused on the choice to purchase or not purchase LTCI when offered as a workplace benefit as one approach to LTC risk management. Overall, contextual factors and decision processes were assumed to have direct and indirect relationships with the decision outcome, affecting whether women and men purchased LTCI (Rettig, 1993).

The overall purpose of the current study was to examine if LTCI purchasing behaviors could be explained by a combination of contextual and process decision-making factors. To the best of the authors' knowledge, this study was the first to focus specifically on understanding the role of spousal processes, specifically discussion, influence, and consensus regarding LTC as a problem and appropriate solutions. In addition, we explored potential differences in LTCI spousal decision-making by gender. This study sought to answer two research questions: (1) Are spousal decision-making processes related to purchasing LTCI behaviors?; and (2) Are there differences in how spousal decision-making processes are related to women and men's purchasing LTCI behaviors?

Methods

Sampling Procedures and Data Collection

A stratified random sample of 1,600 individuals (800 enrollees and 800 non-enrollees) was selected from just over 61,000 public employees eligible to purchase LTCI coverage as a part of a benefits package offered in the fall of 2000. The LTC coverage was optional, portable, paid 100% with employee contributions, with employees eligible regardless of health status during open enrollment. Data were collected from individual employees using written, mailed surveys to the employee's home address. An overall 53% response rate resulted in 830 completed questionnaires with 504 enrollees (61%) and 326 non-enrollees (39%). Missing data analyses indicated relatively low percentages of missing data, with the majority of missing data for any single item being less than 3%. Therefore, listwise deletion was used to create a sub-sample of employees with complete data who indicated that they were married, resulting in a final sample size of 569 individual employees (292 women and 277 men). Although results were not generalizable to employees of all types or to all married individuals who may be making LTCI decisions, they presented an informative picture of public employees in a Midwest region of the U.S. facing decisions about LTCI as a new workplace benefit. To the authors' knowledge, this is the only dataset on LTCI that asks about spousal processes, specifically consensus. It is a limitation of the study that both spouses' perceptions and contextual factors in the same married couple were not available.

Measures

Context

Context characteristics for the total sample as well as female and male employees are presented in Table 1. The contextual variables included seven categorical variables, four individual-level and three household level variables. Individual-level variables included age of employee (1 = 50 and older, 0 = younger than 50), education (college graduate as reference group), perceived health compared to others (good health as reference group), and whether or not the employee had prior experience with LTC such as needed LTC, provided LTC, paid for LTC, or purchased LTCI (1 = yes, 0 = no). Household level variables included whether or not the employee had living children (1 =yes, 0 = no), annual household income (1 = > \$70,000; 0 $= \le \$70,000$), and the value of total household assets (less than \$60,000 as reference group). Gender (1 = female, 0)= male) was included in the first regression analysis to answer the first research question. Gender was examined separately to answer the second research question. Frequency distributions determined the categories for age, education, and income. The goal was to have adequate representation in each category in order to have statistical variability and power in the analysis. Income and asset categorical options were chosen based on state-specific data on household income and assets when the original survey was developed. Reference groups were chosen by selecting categories that had the largest group membership.

Process

Process characteristics for the total sample as well as female and male employees are presented in Table 1. *Spousal discussion* was measured by using responses to one question: "Did you discuss your long-term care coverage (LTCC) decision with any of the following people?"; *discuss with spouse* (1 = yes, 0 = no). *Spousal influence* was measured by asking employees if discussed with others, who had the most influence on your LTCC decision; *influenced most by spouse* (1 = yes, 0 = no). Four items were used to measure *spousal consensus*; one item measured consensus with the problem and three items measured consensus with LTCI as a solution. The items were measured as follows: "If your spouse/partner was involved in the decision-making, how much did you agree or disagree about the following? (a) LTC is a financial risk to address (problem); (b) LTCI is an appropriate financial solution (solution); (c) the premiums were affordable (solution); and (d) who in the household to insure, if anyone (solution) (4 = strongly agreed, 1 = strongly disagreed). Responses were dichotomized for each consensus measure to specifically compare employees who reported consensus versus those who did not (1 = strongly agreed/ agreed, 0 = strongly disagreed/disagreed).

Outcome

Outcome characteristics for the total sample, as well as female and male employees, are presented in Table 1. In this study, behavioral outcomes included either purchasing LTCI or not purchasing LTCI (1 = yes; 0 = no).

Analytical Approach

Hierarchical logistic regression analyses were conducted to answer the study research questions. Illustrated in Figure 1, hierarchical models were consistent with decision-making theory (Rettig, 1993) in which context variables (gender, age, education, health, prior experience, children, income, and assets) were entered first, followed by process variables (discuss with a spouse, spousal influence, spousal consensus). Perceiving and deciding process variables were entered in the same model to be consistent with theoretical assumptions about the interwoven nature of process components. To answer the first research question, a hierarchical logistic regression for the total sample controlled for context variables (including gender) in Model 1 and tested the unique contribution of spousal decision-making processes to purchasing LTCI behaviors in Model 2. The second research question was answered by conducting a hierarchical logistic regression analysis for women and another analysis for men. Context variables (excluding gender) were controlled for in Model 1 and the unique contribution of spousal decision-making processes to purchasing LTCI behaviors were tested in Model 2.

Results

Spousal Processes and Long-Term Care Insurance Behaviors

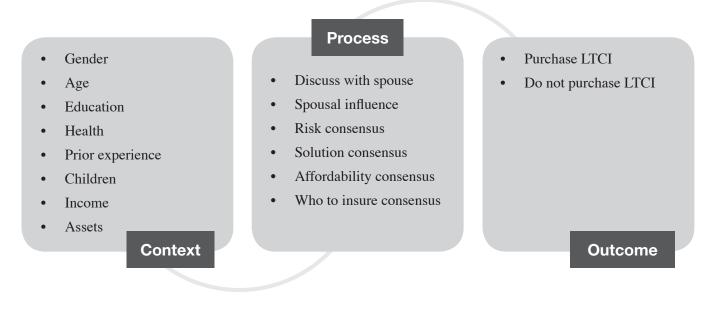
The first research question was tested using hierarchical logistic regression to examine LTCI purchasing behaviors of the total sample (see Table 2). Context variables explained 9% of the variance in LTCI purchasing behaviors (see Model 1). Adding spousal process variables in Model 2 significantly accounted for 33% of the variance in LTCI purchasing behaviors for the total sample. Overall, employees were most likely to purchase LTCI if they reported

	Total sample	Females	Males	Difference
Variable	%	%	%	χ^2
Context				
Age $(1 \ge 50 \text{ years})$	54.66	46.20	63.50	17.18***
Education (reference = college graduate)				
Less than college degree	33.57	39.70	27.10	10.20***
Graduate degree	33.39	27.40	39.70	9.69**
Health (reference = good)				
Poor/fair	11.95	9.59	12.27	1.06
Excellent	37.08	38.01	36.10	0.22
Prior experience (1 = yes)	71.01	74.32	67.51	3.20
Children (1 = yes)	83.47	82.88	84.12	0.16
Income $(1 \ge \$70,000)$	60.98	57.90	64.30	2.43
Assets (reference = less than \$60,000)				
\$60,001 - \$140,000	21.44	18.50	24.50	3.10
\$140,001 - \$300,000	21.09	18.20	24.20	3.11
More than \$300,000	18.98	18.20	19.90	0.27
Process				
Spousal discussion $(1 = yes)$	41.65	38.36	45.13	2.68
Spousal influence (1 = yes)	51.85	49.66	54.15	1.15
Spousal consensus				
Risk (1 = strongly agreed/agreed)	72.23	70.55	74.01	0.85
Solution (1 = strongly agreed/agreed)	65.03	64.73	65.34	0.02
Afford (1 = strongly agreed/agreed)	53.95	54.45	53.43	0.06
Insure (1 = strongly agreed/agreed)	65.55	66.44	64.62	0.21
Outcome				
Purchase LTCI (1 = yes)	59.58	63.00	56.00	2.94

Table 1. Sample Characteristics and Coding of Married Female (N = 292) and Male (N = 277) Employees

p < .05. p < .01. p < .001.

Figure 1. Analytical Framework Examining the Contribution of Spousal Decision-Making Processes on Financial LTC Decision Outcomes



spousal consensus regarding affordability of LTCI (Odds Ratio [OR]= 7.10; p < .001) and LTCI as a solution (OR = 2.55; p < .01) followed by having household incomes higher than \$70,000 (OR = 2.45; p < .001), having prior experience with LTC (OR = 1.83; p < .01), being 50 years of age and older (OR = 1.68; p < .05), being female (OR = 1.55, p < .05), and having less than \$60,000 (versus \$300,000) in household assets (OR = .45; p < .05).

Spousal Processes and Long-Term Care Insurance Behaviors of Women and Men

The second research question was examined using hierarchical logistic regression to examine LTCI purchasing behaviors of women and men. Unstandardized estimates predicting LTCI purchasing behaviors for women are presented in Table 3. Context variables explained 12% of the variance in LTCI purchasing behaviors of women (see Model 1) and adding spousal process variables in Model 2 significantly accounted for 32% of the variance in LTCI purchasing behavior. Findings indicated that women were more likely to purchase LTCI if they reported spousal consensus with the affordability of LTCI (OR = 6.87; p < .001) followed by household incomes higher than \$70,000 (OR = 3.80; p < .001), spousal consensus regarding LTCI as a solution (OR = 3.05; p < .05), prior experience with LTC (OR = 2.42, p < .01), and less than \$60,000 in household assets versus \$140,001-\$300,000 (OR = -1.08; p < .05) and more than \$300,000 (OR = -1.20; p < .05).

Unstandardized estimates predicting LTCI purchasing behaviors for men are presented in Table 4. Context variables explained 9% of the variance in LTCI purchasing behaviors of men (see Model 1) and adding spousal process variables in Model 2 significantly accounted for 40% of the variance in their LTCI purchasing behaviors. Findings indicated that men were more likely to purchase LTCI if they reported spousal consensus regarding LTCI as a solution (OR = 8.39; p < .001) followed by influence from a spouse (OR = 3.03, p < .05), spousal consensus regarding the risk of needing LTC (OR = 2.93; p < .05), being 50 years of age and older (OR = 2.01; p < .05), and having a college degree compared to less than a college degree (OR = .42; p < .05) or a graduate degree (OR = .53; p < .05).

Discussion

Guided by decision-making in families theory (Rettig, 1993), this was the first study to examine whether spousal perceptual and deciding decision-making processes contribute to LTCI decision outcomes. Findings indicate that spousal processes are a pertinent component of married individual's LTCI decision-making, with the importance of specific spousal processes varying for women and men. It seems that simply discussing LTCI with spouses does not lead to purchasing LTCI among married individuals. Instead, purchasing LTCI depends on what occurs during spousal conversations as well as the context of decision-making for both married women and men.

	Model 1			Model 2			
	β	SE	OR	β	SE	OR	
Context							
Gender	.44	.19	1.55*	.55	.23	1.74*	
Age	.52	.20	1.68*	.57	.25	1.76*	
Education							
Less than college degree	36	.24	.70	29	.29	.75	
Graduate degree	31	.23	.73	16	.28	.85	
Health							
Poor/fair	.42	.31	1.52	.44	.37	1.55	
Excellent	31	.19	.74	39	.24	.68	
Prior experience	.61	.20	1.83**	.39	.24	1.48	
Children	27	.25	.76	.14	.30	1.15	
Income	.90	.21	2.45***	.69	.27	1.99**	
Assets							
\$60,001 - \$140,000	.22	.25	1.24	.05	.31	1.05	
\$140,001 - \$300,000	21	.26	.81	47	.33	.63	
More than \$300,000	51	.31	.60	80	.38	.45*	
Process							
Spousal discussion				06	.24	.94	
Spousal influence				.25	.26	1.28	
Spousal consensus							
Risk				74	.39	.48	
Solution				.94	.34	2.55**	
Afford				1.96	.27	7.10***	
Insure				.59	.35	1.80	
χ^2	54.19*** 172.32***						
Cox & Snell R ²		.09			.33		

Table 2. Summary of Hierarchical Logistic Regression for Contribution of Spousal Decision-Making Processes in Financial LTC Decision Outcomes (N = 596)

p < .05. p < .01. p < .001.

	Model 1			Model 2		
	β	SE	OR	β	SE	OR
Context						
Age	.35	.30	1.42	.38	.36	1.46
Education						
Less than college degree	.01	.32	1.01	.26	.38	1.30
Graduate degree	.05	.36	.02	.50	.43	1.65
Health						
Poor/fair	.59	.49	1.81	.65	.58	1.91
Excellent	42	.28	.66	45	.33	.64
Prior experience	.88	.31	2.42**	.73	.37	2.07*
Children	03	.35	.97	.29	.42	1.34
Income	1.34	.32	3.80***	1.33	.39	3.77**
Assets						
\$60,001 - \$140,000	.32	.38	1.37	.06	.45	1.07
\$140,001 - \$300,000	63	.39	.51	-1.08	.47	.34*
More than \$300,000	67	.47	.51	-1.20	.54	.30*
Process						
Spousal discussion				.03	.37	1.03
Spousal influence				47	.40	.62
Spousal consensus						
Risk				27	.50	.76
Solution				1.11	.50	3.05*
Afford				1.93	.39	6.87***
Insure				.19	.53	1.21
χ ²	37.65*** 73.93***					
Cox & Snell R ²		.12			.32	

Table 3. Summary of Hierarchical Logistic Regression for Contribution of Spousal Decision-Making Processes in Women's Financial LTC Decision Outcomes (N = 292)

*p < .05. **p < .01. ***p < .001.

	Model 1			Model 2			
	β	SE	OR	β	SE	OR	
Context							
Age	.70	.29	2.01*	.77	.37	2.15*	
Education							
Less than college degree	87	.37	.42*	-1.11	.47	.33*	
Graduate degree	64	.32	.53*	87	.42	.42*	
Health							
Poor/fair	.27	.40	1.31	.35	.50	1.42	
Excellent	16	.28	.85	19	.37	.83	
Prior experience	.52	.28	.167	.25	.36	1.28	
Children	58	.37	.56	05	.49	.96	
Income	.45	.30	1.57	09	.40	.92	
Assets							
\$60,001 - \$140,000	.10	.35	1.10	.28	.46	1.33	
\$140,001 - \$300,000	06	.37	.94	01	.50	1.00	
More than \$300,000	58	.43	.56	54	.55	.58	
Process							
Spousal discussion				17	.36	.85	
Spousal influence				1.11	.39	3.03*	
Spousal consensus							
Risk				1.08	.55	2.93*	
Solution				2.13	.44	8.39***	
Afford				1.00	.58	2.71	
Insure				.62	.35	1.86	
χ^2		25.80**			114.01***		
Cox & Snell R ²		.09			.40		

Table 4. Summary of Hierarchical Logistic Regression for Contribution of Spousal Decision-Making Processes in Men's Financial LTC Decision Outcomes (N = 277)

*p < .05. **p < .01. ***p < .001.

Contributing new insight into LTCI decision-making, study findings on the total sample show that after controlling for contextual factors, married individuals are more likely to purchase LTCI if they have spousal consensus regarding the affordability of LTCI premiums followed by spousal consensus that LTCI is a solution for addressing the financial risk of LTC. This means that married individuals are less likely to purchase LTCI if they cannot agree with spouses about the cost of LTCI and LTCI as a solution to the risk of needing LTC. Spousal discussions, spousal influence, spousal consensus with perceiving LTC as a risk, and spousal consensus with who to insure did not contribute to married individuals' likelihood of purchasing LTCI in this study. Supporting previous research, having adequate income resources to purchase LTCI and being older and female are context factors that are related to a higher likelihood of married individuals purchasing LTCI (AARP, 2009; AHIP, 2012). Interestingly, study findings suggest that having fewer household assets increases the likelihood of married individuals purchasing LTCI. Most research examining samples of older adults (50 years and older), however, has found that individuals with higher assets are more likely to purchase LTCI to protect their assets (AHIP, 2012; Caro et al., 2011). The sample in this study includes a broader age range than in other studies. It is possible that younger employees are still in the process of accumulating assets, but may have sufficient income to consider LTCI affordable.

Consistent with decision-making in families theory, this study found that women and men experience different context and spousal process factors that impact their LTCI purchasing behaviors. Study findings suggest that married women who can afford LTCI and have experience with LTC are more likely to purchase LTCI, supporting the idea that women are more likely to purchase LTCI because they are more at risk of needing LTC and have more experience with LTC than men (AARP, 2009). Married women in this study are more likely to purchase LTCI if they report spousal consensus regarding the use of LTCI as a solution to the risk of LTC; however, this type of consensus is less important than having consensus with a spouse about the affordability of LTCI and having adequate income resources for LTCI.

In contrast, married men are more likely to purchase LTCI as a result of several spousal decision-making processes. Having spousal consensus regarding LTCI as a solution to the risk of LTC, spousal influence, and spousal consensus regarding LTC as a risk or problem to address are the three

most influential factors related to married men's decisions to purchase LTCI. This suggests that married men may need to be influenced by their spouses to enroll in LTCI. Spouses of male employees appear to be influential in their decisions to purchase LTCI as has been found with other household financial decisions (Belch & Willis, 2001; Burns, 1992; Henkens & van Solinge, 2002; Webster & Reiss, 2001). Women may be influential in LTCI decisions because they have more expertise with LTC and have longer life expectancies (AARP, 2009; Corfman & Lehmann, 1987; Webster & Reiss, 2001; Su et al., 2008). Unlike married women, income and spousal consensus regarding affordability do not contribute to married men's decisions to purchase LTCI. In addition, this study found that being older and more educated was related to an increased probability of married men purchasing LTCI, but not married women. These findings contribute to previous research by demonstrating gender differences in contextual factors that are related to LTCI decision outcomes (AHIP, 2012; HIPPA, 2001).

Implications

Given the dynamics of LTC decision-making among married women and men, study findings provide several avenues for application. Findings reinforce the important role of spousal decision-making processes among married individuals making LTCI decisions. Financial service professionals and educators are ideally positioned to help married individuals recognize and address discussion, consensus, and influence as important dimensions of decision-making processes. Financial service professionals and educators could use the four spousal consensus items presented in this study as an assessment tool to help couples understand their level of agreement in regards to LTCI problems and solutions. For example, a financial counselor could give spouses the four consensus items separately and then come together to compare each spouse's responses, discussing reasons for similarities and differences in the four areas of consensus. Additional tools could be developed to assess whether married women and men perceive their spouses as having influence over the decision.

Inconsistency in past literature combined with study findings on the relative role of contextual variables suggest that financial advisors and educators should proceed with caution when utilizing demographic characteristics as a primary determinate of a married client's likelihood to purchase LTCI. Financial professionals can play a critical role in helping clients choose risk management options that are financially responsible, especially given current and projected income, age, health status, and financial goals (e.g., protecting assets) of their clients. More importantly, findings suggest that assessing spousal consensus of various financing LTC solutions may be vital to ensuring spouses are adequately protected against the risk of LTC.

Professionals and educators may benefit from recognizing and addressing different spousal decision-making processes and contexts when working with married women and men. Study findings suggest striking differences in consensus processes; women are most influenced by consensus with affordability while affordability is not a significant factor for men. Therefore, it may be most beneficial to focus on whether married women have adequate income resources to purchase LTCI and agreement with their spouses about the affordability of LTCI. Spousal consensus with LTCI as a solution, prior experience with LTC, and the role of household assets should also be considered when working with married women. Professionals working with married men may find it most advantageous to consider whether their clients have spousal consensus regarding LTC risk and LTCI as a solution as well as the amount of influence from their spouse. Age and level of education should also be considered when working with married men. Given the importance of spousal consensus and influence in LTCI decision-making, it seems that professionals and educators need to help married individuals consider the family unit, who is most at risk of needing LTC in the family, perceptions of affordability, and how to choose viable solutions spouses can agree on.

There is a need for more understanding of the role of family structure and processes on financial decision-making, especially LTC risk management. Future research should consider obtaining reports from both spouses/partners in a couple, and more culturally diverse samples. Excluding one spouse's perceptions may over- or under-estimate the involvement of spouses and the impact spouses have on the LTC financial decision-making processes and outcomes (Behringer, Perrucci, & Hogan, 2005; Smith & Moen, 1998). Individuals with different race/ethnicity, educational, and employment backgrounds (contextual factors) than the study sample may experience different patterns in decision-making processes and outcomes. More research is needed to explore if and how spousal processes could explain other LTC decision outcomes (versus LTCI) or other types of financial decision situations, for women and men.

In summary, spouses play an integral role in married individuals' LTCI decision-making. Financial service providers and educators of all types must understand gender differences in married individual's LTCI decision-making to better help married couples prepare for their financial futures and implement strategies for achieving appropriate LTC financial solutions.

References

- American Association for Retired Persons (AARP). (2009). Across the states: Profiles of long term care and independent living. Washington, DC: AARP Public Policy Institute.
- America's Health Insurance Plan (AHIP). (2012). *Who buys long-term care insurance in 2010-2011? A twenty year study of buyers and non-buyers*. Washington, DC: America's Health Insurance Plans (AHIP).
- Barnett, A. E., & Stum, M. S. (2012). Couples managing the risk of financing long-term care. *Journal of Family and Economic Issues*, *33*, 363-375.
- Behringer, A., Perrucci, C. C., & Hogan, R. (2005). Dual-earner couples' expectations for joint retirement: A study of typical and atypical congruent and non-congruent couples. *Advances in Gender Research*, 9, 111-132.
- Belch, M. A., & Willis, L. A. (2001). Family decisions at the turn of the century: Has the changing structure of households impacted the family decision-making process? *Journal of Consumer Behavior*, 2, 111-124.
- Bernasek, A., & Bajtelsmit, V. L. (2002). Predictors of women's involvement in household financial decision making. *Financial Counseling and Planning*, 13, 39-48.
- Brown, J. R., & Finkelstein, A. (2008). The private market for long term care insurance in the U.S.: A review of the evidence. *The Journal of Risk and Insurance*, 76, 5-29.
- Burns, D. J. (1992). Husband-wife innovative consumer decision making: Exploring the effect of family power. *Psychology and Marketing*, 9, 175-189.
- Caro, F. G., Porell, F. W., & Kwan, N. (2011). Expectancies and ownership of long-term care insurance policies among older married couples. *Journal of Applied Gerontology*, 30, 562-586: DOI: 10.1177/0733464810376374 2010.
- Challiol, H., & Magnonac, K. (2005). Relocation decision making and couple relationships: A quantitative and qualitative study of dual-earner couples. *Journal of Organizational Behavior*, 26, 247-274.

Congressional Research Service (CRS). (2011). Community Living Assistance Services and Supports (CLASS) provisions in the Patient Protection and Affordable Care Act (PPACA). Washington, DC: Congressional Research Service.

Corfman, K. P., & Lehmann, D. R. (1987). Models of cooperative group decision-making and relative influence: An experimental investigation of family purchase decisions. *Journal of Consumer Research*, 14, 1-13.

Cramer, A. T., & Jensen, G. A. (2006). Why don't people buy long-term-care insurance? *Journal of Gerontology*, *61B*, S185-S193.

Curry, L., Bradley, E. H., & Robison, J. (2004). Individual decisions regarding financing nursing home care: Psychosocial considerations. *Journal of Aging Studies*, 18, 337-352.

Ferber, R., & Lee, L. C. (1974). Husband-wife influence in family purchasing behavior. *Journal of Consumer Research*, 1, 43-50.

Fisher, P. (2010). Gender differences in personal savings behaviors. *Journal of Financial Counseling and Planning*, 21, 16-24.

Gilliam, J. E., Goetz, J. W., & Hampton, V. L. (2008). Spousal differences in financial risk tolerance. *Journal* of Financial Counseling and Planning, 19(1), 3-11.

Godwin, D. D., & Scanzoni, T. (1989). Couple consensus during joint decision making. A context, process, outcome model. *Journal of Marriage and Family*, 51, 943-956.

Hanna, S. D., & Lindamood, S. (2005). *Risk tolerance* of married couples. Paper presented at the 2005 Academy of Financial Services. Retrieved from a CD of the Proceedings of the Academy of Financial Services, G2, 1-28.

Health Insurance Association of America (HIAA). (2001, October). Who buys long term care insurance in the workplace? A study of employer LTC insurance plans. Washington, DC: Lifeplans, Inc.

Henkens, K., & van Solinge, H. (2002). Spousal influences on the decision to retire. *International Journal of Sociology*, 32, 55-74.

Hiller, H. H., & McCaig, K. S. (2007). Reassessing the role of partnered women in migration decision-making and migration outcomes. *Journal of Social and Personal Relationships*, 24, 457-472.

Mellor, J. (2001). Long-term care and nursing home coverage: Are adult children substitutes for insurance policies? *Journal of Health Economics*, 20, 527-547. MetLife Mature Market Institute. (2009). *MetLife long term care IQ Survey: Removing myths, reinforcing realities.* New York, NY: Metropolitan Life Insurance Company. Retrieved from http://www.metlife. com/assets/cao/mmi/publications/consumer/longterm-care-essentials/mmi-long-term-care-iq-removing-myths-survey.pdf

Moen, P., Huang, Q., Plassman, V., & Dentinger, E. (2006). Deciding the future: Do dual-earner couples plan together for retirement? *American Behavioral Scientist*, 49, 1422-1442.

Reiss, M. C., & Webster, C. (2004). An examination of established antecedents of power in purchase decision making: Married and nontraditional couples. *Journal* of Applied Social Psychology, 34, 1825-1845.

Rettig, K. D. (1993). Problem-solving and decision-making as central processes of family life: An ecological framework for family relations and family resource management. *Marriage and Family Review*, *18*, 187-222.

Schaber, P. L., & Stum, M. S. (2007, June). Factors impacting group long-term care insurance enrollment decisions. *Journal of Family Economic Issues*, 28, 189-205.

Smith, D. B., & Moen, P. (1998). Spousal influence on retirement: His, her, and their perceptions. *Journal of Marriage and the Family*, 60, 734-744.

Spiro, R. L. (1983). Persuasion in family decision-making. Journal of Consumer Research, 9, 393-402.

Stum, M. (2005). Financing long term care: Examining family decision making to help inform policy and practice. Research Report from the Department of Family Social Science at the University of Minnesota, St. Paul.

Stum, M. S. (2006). Financing long term care: Risk management intentions and behaviors of couples. *Financial Counseling and Planning*, 17, 79-89.

Stum, M. S., Zuiker, V. S., Pelletier, E., & Hope, L. (2001, December). To buy or not to buy: Examining long term care insurance decision making from the employee perspective. Research Report from the Department of Family Social Science at the University of Minnesota, St. Paul.

Su, C., Zhou, K. Z., Zhou, N., & Li, J. J. (2008). Harmonizing conflict in husband-wife purchase decision making: Perceived fairness and spousal influence dynamics. *Journal of the Academy of Marketing Science*, 36, 378-394.

- Sung, J., & Hanna, S. (1998). The spouse effect on participation and investment decisions for retirement funds. *Financial Counseling and Planning*, 9, 47-59.
- U.S. Department of Health and Human Services (DHHS). (2010). *National clearing house for long-term care information: Our own future*. Washington. DC: U.S. DHHS. Retrieved from http://www.longtermcare. gov/LTC/Main_Site/index.aspx
- U.S. Department of Health and Human Services. (2004a, August). What we know about buyers and non-buyers of private long-term care insurance: A review of studies. Washington, DC: Office of Assistant Secretary for Policy & Evaluation. Retrieved from http:// aspe.hhs.gov/daltcp/reports/LTCIIr.htm
- U.S. Department of Health and Human Services. (2004b, August). *Multivariate analysis of buyers and non-buyers of the Federal Long-Term Care Insurance Program*. Data Brief #6. Washington, DC: Office of Assistant Secretary for Policy & Evaluation. Retrieved from http://aspe.hhs.gov/daltcp/reports/ FLTCIanal.htm
- U.S. Congressional Budget Office (CBO). (2004, April). *Financing long term care for the elderly: A CBO Paper.* Washington, DC: Congressional Budget Office report. Retrieved from http://www.cbo.gov/ sites/default/files/cbofiles/ftpdocs/54xx/doc5400/04-26-longtermcare.pdf
- Webster, C., & Reiss, M. C. (2001). Do established antecedents of purchase decision-making power apply to contemporary couples? *Psychology and Marketing*, 18, 951-972.
- Whitaker, E., Bokemeiner, J., & Loveridge, S. (2012, March). Interactional associations of gender on savings behavior: Showing gender's continued influence on economic action. *Journal of Family and Economic Issues*. DOI 10.1007/s10834-012-9307-2.