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Life Insurance: Decision States, Financial Literacy and Personal Values

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Abstract

We administered an online survey to elicit consumers' subjective assessments of their decision state for the purchase of life insurance - from pre-aware to purchase decision - in a setting of both active choice and default cover. We find that household formation and financial assets are associated with higher decision states, but not always with being capable and ready to choose. The financially literate are more likely to be in a higher state, but the less financially literate are spread across several states. We also find that personal values matter for readiness to make a choice about life insurance with respondents who place more value on benevolence and self-determination more likely to be aware of life insurance and capable to choose. We conclude that personal values help consumers choose suitable cover and that interventions to increase cover and improve suitability of life insurance should target progression through the decision states.

Keywords: Life insurance, decision states, personal values, financial literacy, defaults

JEL Codes: G22, G53, G41, A13, D14, G10, G19

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1 Introduction

The ability to absorb financial shocks is one of the four constituents of consumer financial well-being, alongside day-to-day financial control, tracking towards financial goals and enjoying some financial freedom (CFPB, 2015). Since the 18th Century, life insurance has helped households weather losses when a family member dies prematurely or becomes permanently disabled. The benefits of life insurance go beyond the affected household, extending to wider society when insured households draw less support from social security programs after a loss. However, a life insurance policy is a long-term, complicated financial contract with terms and features that many consumers find difficult to evaluate, covering an event that most do not want to contemplate.

The combination of complicated policies, consumers' limited financial capability arising from deficient knowledge, behavioral biases, and cognitive, time and energy limitations, mean that many households fail to buy life insurance or do not choose suitable cover (Campbell, Jackson, Madrian, & Tufano, 2011). In the Unites States, the percentage of people with life insurance cover has been falling over the past decade and currently stands at around 50% (LIMRA, 2020). In Australia, the setting for our study, participants in retirement plans[1] are automatically enrolled[2] in group life insurance.[3] This feature of Australia's compulsory retirement savings system, alongside a retail market that sells life policies directly, means that more than 90% of Australian workers have some life cover (Rice Warner 2018). But default settings are often unsuitable. In fact, median cover for the median household is only 25-30% of the recommend basic level (Rice Warner 2018). Moreover, plan participants are unlikely to adjust their default cover given 25% do not know whether they have insurance and a further 16% do not know what cover their policies provide (Productivity Commission, 2018; ASIC 2018). Consistent with a related study (Harris & Yelowitz, 2017) only a very small minority opt-out (Productivity Commission, 2018).[4]

[1] In Australia, retirement plans are known as "superannuation funds".
[2] Usually without standard underwriting or a medical test. Since April 2020 there have been some exclusions to default cover: plans are no longer required to provide default death, total and permanent disability and income protection cover to new participants under age 25 or to those with balances under $6,000 unless the participant opts in or is in work classified as dangerous.
[3] Plan participation and default life cover are subject to regulated age and income minima. Participants can opt out of, or adjust, their default life cover.
[4] Prior to the 2020 changes only around 5% of default participants opted out (Ali et al., 2015; ANZ, 2015). Aware of the potential for unsuitable cover, and other 'default cover' issues (Zurich, 2014), the life insurance industry has developed a Life Insurance Code of Practice (FSC, 2017).

The goals of this study are to: better understand the influences over a consumer's progress through the stages of a decision to buy life insurance; to identify vulnerable consumers; and hence direct the focus of financial regulation and education. In this paper we contribute two extensions to research findings on life insurance choice. First, we adapt the concept of a consumer funnel (Kireyev et al., 2016; Wijaya, 2015) to propose a model of insurance purchase that classifies consumers into the stages of their purchase decision journey, from being pre-aware of life insurance to being capable of a choice, labelled the Decision States Model (Bateman et al. 2014). Second, we explore additional reasons why consumers may not choose suitable life cover, that is, their personal values, or motivational life goals (Schwartz, 1992; Lee et al., 2019). Since personal values serve as guiding principles for attitudes and behavior, individuals who value, say, benevolence over self-enhancement are likely to explore and execute financial choices accordingly. Other values, such as openness to change or self-direction can explain consumers' willingness to learn about unfamiliar financial products.

To develop these extensions, we designed an online survey and administered it to over 2,400 Australian adults in 2017. We collected data on consumers' subjective assessments of their decision stage (awareness, interest, knowledge and decisions) for the purchase of life insurance in both active choice and passive default settings, and explored the role of personal characteristics, financial literacy and experience, and personal values as predictors of decision state.

In our setting, where many consumers have acquired life cover automatically rather than by active purchase, the identification of decision stage via the Decision States Model helps us separate consumers' subjective ratings of their capability to make a purchase from observed ownership of the product. Consumers who assess themselves as at low capability to make life insurance decisions may be less likely to opt out of or adjust automatic cover and consequently more likely to tolerate unsuitable default cover. We find that, despite most respondents in our sample having some automatic life cover, 28% of consumers in our sample rate themselves as not knowing what life insurance is or does, 27% are aware of the product but not interested in pursuing a better understanding of its potential benefits, and that only 39% rate themselves as understanding the product well enough to decide whether to buy it or not. On the other hand respondents with some default level of life cover are more likely to be in higher decision states and to have the capacity to adjust their policies than those who do not.

We also find that while respondents' rating of their own readiness to choose life insurance is well explained by previously-verified factors such as needs of dependents, bequest motives, and financial literacy, personal values also matter. Our estimates show that a one standard deviation increase in a relative self-transcendence over self-enhancement orientation scale is associated with a 4.5 percentage point lower likelihood of consumers staying pre-aware and 2.5 percentage point higher likelihood of consumers having become aware of life insurance, or of rating themselves as capable of deciding on cover. Likewise, respondents who are more oriented towards openness-to-change, compared with conservation, are 3.9 percentage points more likely to be aware of what life insurance is and what it does, consistent with valuing a willingness to investigate untried financial products. These effects are economically and statistically significant, being of a similar effect size as a one standard deviation increase in relative financial literacy or bequest intentions.

There is a large body of literature that establishes theory and empirical evidence relating to life insurance demand. The theory of Yaari (1965), Fischer (1973), Campbell (1980) and Bernheim (1991) predicts that people purchase life insurance to manage income uncertainty so that they can maximize the expected utility of consumption and bequests, and that life insurance demand should be positively related to risk aversion, bequest intentions, household formation (having a spouse and dependents) and human capital, and negatively related to life expectancy, time preference, net assets (including homeownership) and age.[5] A range of empirical studies confirm and extend these predictions by linking demographics, socioeconomic status, psychological traits and social interactions to insurance demand (see, for example, Browne & Kim, 1993; Lewis, 1989; Beck & Webb, 2003; Liebenberg et al., 2012; Luciano et al., 2016; Outreville, 2014, 2015; Shi et al., 2015). Likewise, Lin et al. (2017), Nolte and Schneider (2017) and Allgood and Walstad (2016) establish a positive relationship between financial literacy and life insurance participation. However, almost all earlier studies have overlooked the influence on life insurance of personal values, and empirical evidence at an individual level is sparse.

Our key contributions are therefore threefold. First, we analyze the evolution of demand for life insurance, rather than just the purchase decision, which allows us to isolate the varying influence of standard socioeconomic factors, financial literacy and personal values by breaking the life

[5] The impact of age is ambiguous. Some argue that as people age, more human capital is transferred to the realised financial capital, therefore decreasing the maximum human capital that should be insured (Chen et al., 2006). However, others suggest that the demand for life insurance should be humped-shaped by age (Showers & Shotick, 1994).

insurance decision into a sequence of consumer states, ranging from awareness through interest to capability and choice. Second, our consideration of personal values adds to an emerging literature that examines factors beyond the expected utility paradigm in the purchase of financial products and services (Kumar, 2019; Brighetti et al., 2014). Finally, our setting allows us to assess the impact of default cover on decision state membership and the capacity to choose.

The paper is set out as follows: Section 2 provides a background to the Decision States Model, personal values and default life insurance cover. Section 3 reports summary statistics for the sample and section 4 reports the analysis and estimated results. The final section provides concluding comments.

2 Background – decision states, personal values and defaults

If a choice is complex, not all consumers will be immediately ready to make utility maximizing decisions and their behavior can be better understood in a framework that allows for stages of decision making. The Decision States Model (DSM) comes from the 'hierarchy-of-effect approaches' or 'consumer funnels' of research into advertising and customer relationship management (Kireyev et al., 2016; Wijaya, 2015) that allow greater refinement of the insurance purchase/participation decision beyond the simple yes/no categorisation usually considered.[6]

2.1 Decision states in the demand for life insurance

The DSM (Figure 1) demonstrates how people move through a series of states from Pre-Aware, to Aware, to Interested, to Capable, where they are able to choose whether and if so when to make a purchase decision.

<insert Figure 1 about here>

In the purchase of life insurance, people are typically initially unaware of specific life insurance products or the entire category. Subsequently, they may become aware through advertising, marketing materials or information disclosure. People stay in the aware state until they find that the product offered is of interest - that is, the product could be useful to satisfy their needs. For life insurance products this could occur when they understand the potential risk of death or disability to human capital and have beneficiaries to protect from financial hardship should an

[6] Bateman, et al. (2014) the DSM is discussed in the context of financial services.

unfortunate event happen (Zelizer, 1978) and/or through social pressure (Williams, 1966). Interest then motivates potential consumers to learn more about life insurance policies and their features and how they could benefit from life insurance cover.

Life insurance decisions are far from simple. Consumers in the interested state may face constraints and barriers that prevent them from making capable decisions, such as skill deficits, affordability, opinions from peers, and lack of accessible and understandable information resources. As a result, if people consider themselves as incapable of taking advantage of life insurance products, they will avoid making purchase decisions and instead delay a purchase or reject the product. Capable consumers come to the final state to make a choice. At this point, they must choose decision timing – now, later or never.

Previous research has shown that the speed and probability with which consumers progress through each state depends on their personal traits, market-related factors and informational factors, such as their socioeconomic and demographic features and financial literacy. In addition, the nature of the product and how it is offered to consumers, information sources and how information is dispersed are important to progression through states (Bateman et al., 2014). We extend this set of factors to include personal values.

2.2 Role of values in financial decision making

Kumar (2019) notes recent papers in the behavioral finance literature examining non-wealth factors beyond the traditional expected utility theory paradigm. One example is the conceptualized antecedents of financial literacy, identified as central to financial behaviors (Lusardi & Mitchell, 2014; and see the discussion of measured financial literacy by Fernandes et al., 2014). Choice is a key feature of the model of financial literacy acquisition proposed by Lusardi and Mitchell (2014) and Lusardi et al., (2017) where perceived benefits from literacy acquisition are weighed against the costs.

This economic framing can be enriched by considering the role of cultural values. Ahunov and Van Hove (2020) do this by exploring the role of cultural values in explaining aggregate, country level, financial literacy. They employ Hofstede's (1980) original cultural orientations (individualism-collectivism; uncertainty avoidance; power distance; and masculinity-femininity) as well as the two more recent proposed dimensions (long- versus short-term orientation; and indulgence versus restraint) (Hofstede & Bond 1988; Hofstede et al., 2010). De Beckker et al.

(2020) also use cultural values in explaining financial literacy but differ in that they focus on individual outcomes and only on uncertainty avoidance and individualism.

We extend the consideration of values in financial choices by considering *individual* values rather than cultural values. In reconciling the roles of cultural and individual values we adopt the framework of Schwartz (2009a,b) who posits the former as a latent construct, external to the individual, and expressed in societal institutions which mediate the effect of culture on individuals (Schwartz, 2014). An early example of this institutional role is identified by Kwok and Tadesse (2006) who use uncertainty avoidance to explain the configuration of national financial systems. Individual (personal) values are motivational life-goals that transcend situations (Schwartz, 1992) and are expected to relate to value-expressive attitudes and behaviors in a systematic manner.

The theory of basic human values (Schwartz, 1992) proposed ten basic values organised around a circular continuum, based on the motivations that underlie them. The ten basic values were later extended to 19 values (Schwartz, et al., 2012; Schwartz, et al., 2016) and then to 20 refined values (Lee, et al., 2019) as summarised in Figure 2. The values that are adjacent, for example security and tradition, are compatible with each other, whereas those opposite, for example power and universalism, are not compatible. In the case of adjacent values, pursuing one assists attaining another, whereas for those opposite, pursuing one interferes with another (Lee, et al., 2019).

Figure 2 also illustrates how the ten basic values and 19/20 refined values collapse into four higher order values that lie on two bipolar dimensions. The first dimension contrasts Self-Enhancement with Self-Transcendence and the second contrasts Openness-to-Change with Conservation. Self-Enhancement highlights values related to self-interest through control of people and/or resources whereas Self-Transcendence emphasizes concern for the welfare of others. Openness-to-Change emphasizes autonomy and novelty whereas Conservation emphasizes preservation of the *status quo*, conformity, and security.

<insert Figure 2 about here>

While it "might be flattering to think of values as a fundamental characteristic of human beings" (Verplanken & Holland, 2002, p.434) "we do not always live up to them" (Verplanken & Holland, 2002, p.445). Professing a particular way of behaving or acting as desirable and perceiving this as central to our self-concept does not mean these professed values "influence behavior by default. Rather, both activation and the centrality of a value to the self-constitute

necessary elements for value-guided behavior" (Verplanken & Holland, 2002, p.445). Verplanken & Holland (2002) argue that activation may arise when the values are the primary focus of attention or when the self is activated. In the former case, when thinking about the consequences of death, for example, values associated with considering how those left behind are impacted (e.g. benevolence) by your death or those associated with questions of how to live life (e.g. stimulation) may be expected to be activated. In the latter case it is the attention to the self which may activate values (e.g. security) which are central to the individual.

2.3 The role of values in insurance choices

A small number of papers have considered the role of cultural values in financial product and service choices, including life insurance. One of the earliest is Zelizer (1978) who argued for the role of shared cultural values in the evolution of the life insurance market in the US where the reluctance to purchase life insurance was in part because "putting death on the market offended a system of values that upheld the sanctity of human life and its incommensurability" (Zelizer, 1978, p.594). Chui and Kwok (2008) use Hofstede's four original cultural indices to identify a positive association between life insurance consumption in countries with higher individualism relative to collectivism. Pollock et al. (2019) use the (lack of development) of the life insurance market in China in the first half of the 19th century as an illustration of the role of shared cultural values.

Nepomuceno and Porto (2010) investigate the role of personal values in the purchase of several banking products, including life insurance, using a Brazilian version of the Schwartz Value Survey drawing a sample of Brazilian bank employees familiar with the products. They hypothesise that benevolence and conformity, aligning with the higher order dimensions of Self-Transcendence and Conservation respectively, would both positively predict attitudes to life insurance. The argument for conformity was based on expected social pressure from close family. Their results support a significant relationship for Conservation but not Self-Transcendence, and that this relationship is weaker if the consumer has had a negative experience with the product, that is, a problem or disappointment with the product.

We build on Nepomuceno and Porto (2010) in several ways. First, by eliciting personal values using the refined best-worst scaling approach of Lee et al. (2019), discussed further in section 2.5.

Second, we consider the role of personal values in life insurance decision states rather than simply attitudes to life insurance.

People who hold life insurance have paid for a product that directly benefits others. Thus, in terms of the personal values introduced in section 2.3, choosing insurance aligns with the values of people who hold a relative orientation towards Self-Transcendence (which incorporates the values benevolence and universalism). People who value Self-Transcendence are more willing to sacrifice current consumption for the future benefit of others whereas those more orientated towards Self-Enhancement (encompassing achievement and power) will be less willing to buy a product that reduces their current consumption. People with a relative orientation towards Self-Transcendence who receive life cover by default we expect to be more willing to adjust cover upwards whereas those more orientated towards Self-Enhancement might adjust downwards or opt out. In terms of decision states, we propose that consumers with a higher Self-Transcendence relative to Self-Enhancement will be less likely to be Pre-Aware and more likely to advance to higher decision states - Aware, Interest and Capable.

Consistent with Nepomuceno and Porto (2010), we expect people who have a higher relative Conservation score (incorporating the values of security, tradition and conformity) to be in higher decision states, more specifically to be in the Capable state, having already purchased insurance. Whereas Nepomuceno and Porto (2010) argue this is due to conformity and social norms, we emphasize the importance of security. Individuals who have a higher rating of security will be more interested in life insurance for the sense of security it provides themselves, knowing that beneficiaries enjoy more financial protection from the insurance policy payout. We expect those with a relative orientation to Openness-to-Change (incorporating the values self-direction, stimulation and hedonism) to be less likely to be in the Pre-Aware state and more likely to be in a higher state, though it is unclear which higher state specifically, as it is not clear whether those with this orientation would be more or less inclined to take up insurance.

2.4 Default life insurance

In Australia, there are two complementary distribution channels that supply life insurance cover to consumers. First, consumers can purchase policies through direct retail channels, often with the help of advisors and brokers. Second, retirement saving plans (superannuation funds) offer group insurance by default to ensure a minimum level of life (and temporary and permanent

disability - TPD) cover irrespective of consumers' engagement or capability. This channel accounts for around 70% of all life insurance cover (90% of working Australians) (Rice Warner, 2018).[7]

Default life and TPD cover offered by Australian retirement plans is set by the plan trustees and employers, usually with reference to demographics of typical plan participants including occupation rating and income, and the size of the plan, aiming to create a safety net for inattentive participants. Most retirement plans offer level premiums with the amount insured decreasing with age (Rice Warner, 2017). Default retirement plan life and disability insurance saves government spending on social security costs of around USD $50 per head of population annually (Rice Warner, 2017) and the public regulator, APRA (2020), reports that 85% of premiums collected were paid in claims over 2019-20. Group insurance is also generally cheaper than comparable retail cover (Rice Warner, 2017) especially for some high-risk populations.

Plan participants have the discretion to amend or opt-out of the default cover, but most do not.[8] Several government reports find that disclosure and communications about default life insurance are inadequate and inappropriate (ASIC, 2016; Productivity Commission, 2018). When combined with low levels of financial literacy (Agnew et al., 2013) it is no surprise that sources confirm low levels of active choice in relation to default life insurance. For example, Zurich's (2014) study shows that about 80% of surveyed Australians never think about the level and type of life insurance that may meet their own needs. Consequently, the default cover may be unsuitable for many participants. Rice Warner (2018) report that for those who have life cover (under both the choice and default channels), the median cover level is estimated to be only approximately twice the median household annual income. In addition, many plan participants are paying for insurance in duplicate or inactive retirement savings accounts (Rice Warner, 2018). While default life cover provides a safety net for many Australians, unsuitable cover, redundant premiums, and duplicate policies are undesirable side-effects.

[7] A default simplifies complex choice situations, especially for unsophisticated consumers, nudging people in a desired direction (Keane & Thorp, 2016; Thaler & Sunstein, 2008). Consumers can stick with defaults because of status quo bias, if they judge that the effort needed to opt-out is too costly (Choi et al., 2005). Or consumers can take defaults to be implicit advice (Butt et al., 2018), as conforming to the choices of others (Henrich et al., 2001), or as creating an endowment that is costly to lose (Kahneman et al., 1991; Samuelson & Zeckhauser, 1988; Sunstein & Thaler, 2003). The alternative of a mandatory active decision can require higher levels of literacy, skills and effort (Carroll et al., 2009).

[8] Standard underwriting or other restrictions might apply to default cover adjustments.

Default life insurance arrangements co-existing with voluntary life insurance raises the question as to whether progression through the decision states for life insurance purchase differs between consumers with default and/or voluntary cover. Retirement plan participants with default cover have several possible reasons for progressing through the decision states. First, default participants may have gained awareness, interest and capability through experiences with life insurance external to their retirement plan. Second, they may become aware of insurance cover through communication from their plan, and then think about, or make, adjustments to their default cover. It is possible that "endowing" some plan participants with insurance cover gives them a reason to progress through the decision states, whereas other participants might tacitly delegate decisions about insurance to plan trustees and not become aware, interested or capable.

3 Survey Design and Summary Statistics

3.1 Sample

We collected data on personal values and life insurance demand as part of a broader research project that examined value expressive behaviors.[9] In 2017, 6,500 respondents drawn from Pureprofile, an online panel consisting of over 600,000 Australians, completed a common survey that collected personal values, value-expressive behaviors, and demographics. We then administered additional, short, survey modules focussed on specific respondent characteristics (e.g. personality, risk tolerance) including a module on life insurance in July and August 2017 answered by over 2400 respondents aged 18-54 years.[10] [11]

3.2 Life insurance module and values survey design

The life insurance module covered three topics: default and choice life insurance cover; (self-assessed) membership of decision states in the context of the DSM; and demographics not asked in the common survey.

[9] The broader Values Project and the questions asked to elicit personal values are at http://www.thevaluesproject.com/about/

[10] Since that time there have been changes introduced to the default life insurance provisions in Australia relating to plan members under 25 years of age. The Treasury Laws Amendment (Protecting Your Superannuation Package) Act 2019 now prevents retirement plans from providing default coverage where the plan account has not received contributions for 16-months, or where participants are under age 25 or where account balances are under $6,000, unless they opt in or their work is classified as dangerous.

[11] Appendix S1 in the supplementary file shows the questions in the life insurance module.

Default and choice life insurance: We started by asking respondents whether and how many retirement plan (superannuation) accounts they had (Q1). This question allowed us to identify participants in retirement plans and provided information about the prevalence of potential duplicate life insurance (i.e., plan-related default cover and actively chosen). Next, we asked all respondents whether they were current participants in their (default) employer-selected retirement plan and the name of their main retirement plan (Q2-Q3). We offered the option 'do not know' for those questions as an indication of respondents' lack of plan knowledge or disengagement. We then asked respondents whether they had life insurance through any of their retirement plans (Q4). Answers to this question (Yes; No; Don't know) showed if respondents knew they had default life cover in their plan.[12] (Some respondents who were unaware of default cover also answered 'no'.) The next question asked those who reported that they have life insurance through their retirement plan account whether they have ever made adjustment to their coverage, and, if yes, to specify the adjustment (increase, decrease or cancel). All respondents then answered questions about whether they held life insurance outside of retirement plan accounts (Q5).

Questions to elicit decision state membership: Questions (Q6-Q9) let us classify respondents into four mutually exclusive decision states according to their own assessment of their awareness (or unawareness) of (Q6), interest in (Q7), and capability to decide on a purchase of (Q8) life insurance using self-assessed life insurance literacy questions. For capable consumers, we also collected their decision timing (Q9) – already chosen, choose now, choose later, choose never.

Demographics and personal characteristics: Apart from basic demographics collected in the main survey, the life insurance module collected data on personal socioeconomic traits and attitudes that might help determine respondents' demand for insurance. Table 1 summarises the additional variables that we constructed from the data collected either in the insurance module or other supplementary modules. Demographics include gender, age, education, work status, relationship status, and number of dependents. Socioeconomic features include assets (financial, investment, home) and liabilities (investment loan, mortgage). We also measured risk tolerance (Jacobs-Lawson & Hershey, 2005), intention to leave bequests, future time perspective (Jacobs-Lawson & Hershey, 2005), and satisfaction with health.

[12] The survey was administered before the exemptions from default cover were introduced in April 2020.

Personal Values: The common survey collected data on personal values and additional demographics. We estimated personal values using the Schwartz Refined Values Best Worst Survey that asks respondents to select the most and the least important values from 21 sets of five value items derived from a balanced incomplete block experimental design (Lee et al., 2019). Each value item appears the same number of times across the 21 sets, and each pair of items appears together once. The 21 sets of five values items were assigned to each respondent in a random order.

We calculate respondents' relative importance score for each value by subtracting the number of times they chose a value item as least important from the number of times they chose that value as most important. When divided by five, the total number of times the item appeared in the sets, the resultant averaged net scores can range from -1 to +1 with a midpoint of zero, where positive scores show more important values and negative scores, less important values.

We created scores for each of the two bipolar dimensions by first averaging the relative importance scores for the basic value that underlie each of the four higher order values: we calculate Self-Transcendence (ST) as the mean of benevolence and universalism; Self-Enhancement (SE) as the mean of achievement and power; Openness-to-Change (OC) as the mean of self-direction, stimulation, and hedonism; and Conservation (CO) as the average of security, tradition, and conformity. The last step is to take the Self-Transcendence score from the Self-Enhancement score and the Conservation score from the Openness-to-Change score.

Financial literacy: We calculated a financial literacy index using five questions drawn from Lusardi and Mitchell (2007) and van Rooij et al. (2011). These included a question on inflation, time value of money, mortgage interest, risk diversification, and the relationship between interest rates and bond prices. The full text of questions is included in Table 1. To construct the index we followed the approach of von Gaudecker (2015) where correct answers were scored as one, incorrect zero, and don't know responses were assigned a score equal to the probability of guessing a correct answer from the remaining available answers to a question. As an additional measure of knowledge specific to life insurance, we asked respondents what cover they thought was usually included in a standard life insurance policy. Respondents could choose multiple types, but those who selected 'don't know' were not allowed to select other options. We call this item "misunderstand life coverage" and use it in robustness checks of our results.

<insert Table 1 about here>

3.3 Sample descriptive statistics

Table 2 presents summary statistics for the demographic features of our sample and the Australian population from ages 18 to 54 (Panel A) and compares answers to the financial literacy questions with those of other studies (Panel B). Of the 2,658 who completed the insurance module we exclude full-time students (n=197) as well as those already retired (n=46), due to their undetermined human capital. An additional 401 respondents did not complete all demographic information (relationship status, education, work status). A further 305 respondents did not complete the traits module (risk tolerance, future time perspective, financial literacy) which then left a complete analysis sample of 1,709. Our sample does not match the Australian population of similar age inasmuch as it has an over-representation of females and under-representation of the 18-24 years age bracket, the latter reflecting the exclusion of full-time students. The other notable difference is an over-representation of those with a Diploma, Bachelor or Master's Degree and corresponding underrepresentation of those with a highest qualification of secondary school or less, again partly explained by excluding full-time students. As well, as presented in Panel B, our sample is less financially literate than respondents in some similar studies. However, all regression estimations presented in section 4 control for the full set of participant characteristics.

<insert Table 2 about here>

We present an overview of the DSM membership elicited from questions in the insurance module in Figure 2 using the sample (excluding students and retirees) of 2,415 respondents who answered the relevant survey questions (Q6-Q9) in the Life insurance module. We classify 28% of the sample as Pre-Aware and 27% Aware. The smallest proportion were those we classified as Interested (5%) with 39% classified as Capable. Of the Capable classification 19% were Capable - Already Chosen, 7% Capable – Now, 9% Capable – Later, and 4% Capable – Never.

<insert Figure 3 about here>

In the next section we describe and estimate regression models to explore the role of demographics, personal characteristics including financial literacy, and personal values as explanators of the eight decision states.

4 Results

4.1 Estimation strategy

The premise of the DSM is that individuals progress through a series of ordered decision states, suggesting an ordered regression model such as ordered logit (OL) or multinomial logit (ML). However, a limitation of OL and ML is that they do not treat the data as having been collected in a way that is consistent with an evolution of stages. That is, we did not ask a survey respondent classified as Pre-Aware subsequent questions relating to classification as Aware, Interested, or Capable because that would have been inconsistent with the conceptual model. Sequential logit models (SLM), continuation-ratio models (CRM), or more generally "stage" models (SMs), also known as Mare and Continuation Rate Models (Buis, 2011), consider the *conditional* probability of a respondent having reached a particular stage and going no further compared with respondents who go on to a higher stage. These models estimate "separate logistic regression for each step or decision on the sub-sample that is 'at risk' of making that decision" (Buis, 2011, p.247). The SM thus fits more squarely with the evolution implied by the DSM.[13]

4.2 Regression estimations and endogeneity

We conducted two rounds of estimations. In the first round we included responses from everyone in our analysis sample. We then conducted a second round of estimations where we reduce the sample to those respondents who hold life cover by default in order to explore the impact of default cover on progression through the decision states. In both rounds, we started with the aggregate decision states – Pre-Aware, Aware, Interest, Capable - (the base model) and then extend the analysis to the full model which includes the disaggregated Capable decision states (Chosen, Choose Now, Choose Later, Choose Never).

We then repeated these two rounds of estimation using a control function approach (Petrin & Train, 2010; Wooldridge, 2015) to address possible endogeneity of financial literacy due to simultaneity. That is, the possibility that being in a higher DSM state leads to higher financial

[13] A limitation of stage models is sensitivity to possible bias due to unobserved heterogeneity (Cameron & Heckman, 1998). In the supplemental file Appendix S4, we adopt the approach of Buis (2011) and directly manipulate the unobserved heterogeneity to compare the sensitivity of estimated results to the manipulation. We find that the reported estimates in the main text for key variables of interest (i.e. personal values and financial literacy) do not appear overly sensitive to large amounts of unobserved heterogeneity. For example, we estimate covariates given simulated unobserved heterogeneity in the odds of transitioning to higher decision states 4.5 times higher. In the case of financial literacy the estimates increase only by 18 percent over the baseline odds assuming no observed heterogeneity.

literacy rather than higher financial literacy leading to being in a higher DSM state. We instrument for financial literacy using responses to a question from the main survey that asked how frequently respondents "Engage in a creative artistic or intellectual activity (art, writing, painting)". To the extent that "creativity is primarily fostered by intrinsic incentives" (Klamer & Petrova, 2007, p. 252) we may expect that those who engage in more creative activities are less motivated to acquire financial literacy. Empirical evidence comparing financial literacy among university students finds that those enrolled in creative disciplines (e.g. Arts, Humanities majors) have lower financial literacy scores on average (e.g. Annabi et al., 2018; Jacobsen & Correia, 2019; Ergün, 2018). Appendix S2 in the supplementary file sets out our method and reports estimation results. Tests of correlation between the potentially endogenous variable and the instrument, and first stage regression results, confirm a non-weak instrument with the expected negative correlation between financial literacy and engagement with creativity. However, second stage regression tests do not reject the exogeneity of financial literacy. On that basis we proceed with discussion of the standard models.

4.3 Staged estimation results: Aggregated decision states

In the base model, we use the four decision states as the outcome variables in which the final Capable state is an aggregation of four sub-states, and include five groups of explanatory variables: 1) Demographics (Gender, Age, Relationship Status, Number of Dependants, Degree, Work Status); 2) Financial Demographics (Financial Assets, Indicators for Investment Property and Investment Loan, Housing Status); 3) Traits (Risk Tolerance, Future Time Perspective, Financial Literacy (Index), Bequest Preference, Satisfaction with Health; and 4) Personal Values (Relative Orientation: Self-Transcendence less Self-Enhancement and Openness-to-Change less Conservation).

Table 3 presents the average marginal effects for the stage model[14] with the header row reporting the unconditional probability of being in each state which is helpful when interpreting the marginal effect magnitude.[15]

[14] We use the ucrlogit (Fagerland, 2014) package in Stata which compares each state with the preceding states.
[15] We first estimated an ordered logit model, but a Brant test rejected the assumption of proportional odds. We next estimated a multinomial logit regression, that assumes independence of irrelevant alternatives (IIA). In this case we did not reject the assumption using the Small-Hsaio test. MNL results were not materially different from the stage model.

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Demographics: Theory provides an expectation that life insurance is more valuable to people who have dependents, and our results confirm this. Married respondents are more likely to have progressed through the decision states than unmarried respondents or those partnered, but unmarried. Being partnered but unmarried reduces the probability of being in the Capable state by 8.4 percentage points relative to those who are married, and by 7.7 percentage points for those single relative to those married. Similarly, respondents with dependents are 2 percentage points (negative 2 percentage points) more (less) likely to be Capable (Aware) compared with respondents with no dependents. Respondent gender, age, education (degree), and satisfaction with health are not significantly associated with decision state membership. Work status is less clear. Unemployed or self-employed respondents are 8 percentage points more likely than employees to be Aware of life insurance, possibly because employees are more likely to have default life cover. Then again, the self-employed are almost 8 percentage points less likely to have progressed to the Capable state than the employed.

Financial assets: Ownership of financial assets is strongly associated with higher decision state membership. Those with financial assets are 12 percentage points more likely to be Capable than those with no financial assets, with the magnitude of the effect being largely the same for those with small (<$50,000) or large financial assets (>$50,000). Other investment assets were not significant, and against expectations, neither was having a mortgage.

Traits: Also consistent with theory is the positive marginal effect of stronger future time perspective and bequest preference. A one standard deviation (1.1 points on a 7-point scale) increase in average future time perspective is associated with a 3.1 percentage point higher probability of being Capable and a similarly lower likelihood of being Pre-aware. The marginal effect of being in the Capable state is also significantly (5.8 percentage points), higher for respondents with a one standard deviation (3.3 point) stronger bequest motive and is likewise associated with a similarly lower likelihood of staying Pre-Aware. Somewhat surprisingly, risk tolerance is not significantly associated with decision state membership.

Financial knowledge: Another key result is that financial knowledge, both general and specific, is associated with being in higher decision states. Higher financial literacy is positively associated with progressing through the hierarchy though the effects are largest for Aware or Capable

relative to Pre-aware: membership of the Pre-Aware state is 6.1 percentage points less likely, and membership of Aware or Capable states, is around 2.5-3.0 percentage points more likely, for respondents who are one unit (one standard deviation) higher on the standardized financial literacy scale. Finally, experience is also significant, as those who have a life policy outside their default retirement plan coverage "Have Life Cover" are significantly more (less) likely to be in the Capable (Pre-Aware) states. The magnitude of this effect is large, at positive 25 and negative 11 percentage points respectively.[16]

Personal values: In terms of personal values, we confirm our expectation that respondents with higher Self-Transcendence orientation, relative to Self-Enhancement, are less likely to be in the Pre-Aware state and more likely to be in the Capable state, consistent with benevolence encouraging interest in life insurance. The marginal effect of a one standard deviation (0.48, range -1.2 to 1.5) increase in relative Self-Transcendence orientation is associated with a 4.9 percentage point lower likelihood of staying Pre-aware and 2.6 percentage point higher likelihood of Awareness and Capability. Openness-to-Change less Conservation is also significant. Those more oriented towards Openness-to-Change are less likely to be in the Pre-Aware state and more likely to be in the Aware state. The magnitudes are meaningful with a one standard deviation (0.37; range -1.3 to 1.4) increase in Openness-to-Change less Conservation raising the probability of Aware state membership by 3.9 percentage points. These results are consistent with those scoring higher on self-direction acting decisively and therefore being less likely to be in the Pre-aware state and more likely to have progressed to awareness. There is no corresponding significant change in being in the Interested or Capable state for those more oriented to Openness-to-Change. These results contrast with those of Nepomuceno and Porto (2010) who found, for banking products, a positive relationship for Openness-to-Change less Conservation but a non-significant relationship for Self-Transcendence less Self-Enhancement.[17]

Summary: In summary, these results support a staged model of life insurance choice. Almost one third of respondents are classified as "Pre-Aware" and another third are Aware of the product but

[16] As a robustness check, we estimate stage models where we substitute a specific measure of insurance literacy "Misunderstand coverage" for a general measure of financial literacy. Results in the Supplemental File Appendix S3 show that respondents who misunderstand coverage are significantly more likely to be Pre-Aware and less likely to be capable.

[17] We estimated ML models including interactions between financial literacy and personal values and found that interactions were not statistically significant. Results are available from the authors on request.

do not yet rate themselves as Capable of making a purchase decision. Further, results show that consumers' personal characteristics and values are related to progress from pre-awareness to higher states in expected ways, but progress might mean becoming aware or interested instead of capable. For the base model, where we estimate membership of the four aggregate decision states, we find that the standard personal characteristics such as household formation (being married and having dependents) and financial assets are significant positive predictors of higher decision states, along with traits such as a stronger future time perspective and bequest motives. Financial knowledge and experience with life insurance are also significant positive predictors of being in a higher decision state. This result is consistent with respondents with financial assets (evidencing knowledge and experience with financial products) being more likely to be in higher decision states. After controlling for an extensive set of characteristics, personal values are also significant predictors of advanced progress in life insurance decisions. People with a more benevolent orientation, who set Self-Transcendence above Self-Enhancement more (less) likely to be in the (Pre-Aware) Capable state. Those with a greater orientation to Openness-to-Change are less likely to be in the Pre-Aware state and more likely to be in the Aware state.

4.4 Stage estimation results: Disaggregated capability decision states

We next estimate the full "disaggregated" model where we divide the final Capable state into categories distinguishing decision times: Already chosen, Now, Later, and Never. Table 4 reports the results from a stage model regression of seven states (Pre Aware, Aware, Interested and the four capability states). We report average marginal effects for the four sub-states.

<insert Table 4 about here>

The breakdown of decision timing in the Capable category give some further insight into consumer's life insurance decisions. Older respondents are significantly less likely to be in the Capable Now or Capable Later states, and more likely to be in the Capable Never state. An additional ten years of age raises the probability of having decided to never purchase life insurance by 2.6 percentage points and lowers the probability of putting off a decision by 3.2 percentage points. We confirm that unmarried respondents (single or partnered but not married) are significantly (6.3 percentage points) less likely to have already chosen life insurance compared with their married counterparts, as are those who are currently not employed or self-employed.

These results are consistent with less need to support dependents and less human capital, particularly at later stages of working life.

Respondents with positive financial assets are 6-8 percentage points more likely to have already chosen life cover. Those who express stronger bequest motives are also significantly more likely to have already chosen or to be about to choose inasmuch as we find a one standard deviation increase in bequest motives is associated with a 2.6 percentage point or greater marginal effect on having already chosen or being ready to choose now.

In terms of knowledge, we find that higher financial literacy is significantly related to having already chosen life insurance. A unit (one standard deviation) increase in financial literacy score is associated with a 3.5 percentage point higher probability of having already chosen life cover but a 1.6 percentage point lower probability of being ready to purchase a policy now. This result, when combined with the aggregated regression reported in Table 3, suggests that financial literacy is relevant to whether consumers are Aware versus Pre-aware, and for having made a choice (Capable Already chosen versus currently actively looking - Capable Now). The personal values orientations do not have further explanatory power in explaining the capability sub-states.

In summary, when the Capable state is disaggregated into decision times, we find that many of the previously identified associations relate to having already chosen or being about to choose, life insurance. Notably, the disaggregation of capability shows that while financial literacy is generally positively associated with being in the Capable state, it is relatively higher for those who have already chosen and are continuing with their life insurance coverage.

4.5 Default life insurance coverage and decision state membership

We next re-estimate the model for the subset of respondents who participate in retirement plans and therefore have default life cover unless they have opted out. We asked respondents who answered that they knew that they had default coverage under their retirement plan whether they had made any changes to their that plan-provided cover. We consolidated responses to these two questions into four categories: Don't Know (whether they had coverage); No; Yes and I have made *no* changes; and Yes and I have made a change. Table 5: Stage Model Decision State– Base model, Default Retirement Savings Participants

This table presents the estimation reported in **Error! Reference source not found.** but with the sub-sample of respondents with a retirement savings account and adds a categorical variable "Life Insurance in Super" to indicate if life

insurance is in the account. The ucrlogit program from Stata was used to produce the estimates. Robust standard errors are shown in parentheses with significance indicated at 90% *, 95% **, and 99% ***.

	Pre-Aware	Aware	Interested	Capable
Female	-0.0239	-0.0228	0.0118	0.0349
	(0.0270)	(0.0280)	(0.0130)	(0.0285)
Age	-0.0003	0.0012	-0.0000	-0.0008
	(0.0016)	(0.0015)	(0.0008)	(0.0016)
Relationship (base: Married)				
Partnered, not married	0.0278	0.0252	0.0247	-0.0776**
	(0.0303)	(0.0301)	(0.0158)	(0.0315)
Separated, Widowed	0.0159	-0.0179	0.0062	-0.0042
	(0.0516)	(0.0504)	(0.0247)	(0.0553)
Single	0.0090	0.0356	0.0303	-0.0750**
	(0.0317)	(0.0334)	(0.0189)	(0.0355)
Dependents	0.0027	-0.0159	-0.0006	0.0137
	(0.0124)	(0.0104)	(0.0052)	(0.0097)
Degree	0.0152	0.0012	0.0017	-0.0181
	(0.0239)	(0.0244)	(0.0127)	(0.0256)
Work (base: Employee)				
Self Employed	0.0082	0.0598	0.0102	-0.0782*
	(0.0419)	(0.0442)	(0.0223)	(0.0414)
Not Employed	-0.0440*	0.0374	-0.0071	0.0137
	(0.0262)	(0.0289)	(0.0145)	(0.0312)
Financial Assets (base: None)				
< $50,000	-0.0632**	-0.0546**	0.0082	0.1097***
	(0.0267)	(0.0267)	(0.0125)	(0.0276)
> $50,000	-0.0526	-0.0823**	0.0428**	0.0921**
	(0.0355)	(0.0355)	(0.0214)	(0.0380)
Investment Property	-0.0114	0.0612*	0.0019	-0.0517
	(0.0333)	(0.0359)	(0.0173)	(0.0347)
Investment Loan	0.0615	-0.0069	-0.0017	-0.0529
	(0.0419)	(0.0408)	(0.0196)	(0.0396)
Home Status (base: No Home				
Home, No Mortgage	-0.0258	0.0268	0.0182	-0.0192
	(0.0386)	(0.0394)	(0.0227)	(0.0410)
Home, Mortgage	-0.0037	0.0387	-0.0092	-0.0258
	(0.0274)	(0.0277)	(0.0144)	(0.0287)
Risk tolerance	0.0069	-0.0056	0.0034	-0.0047
	(0.0110)	(0.0100)	(0.0048)	(0.0099)
Future Time Perspective	-0.0175	-0.0151	0.0056	0.0270**
	(0.0114)	(0.0104)	(0.0055)	(0.0112)
Financial Literacy	-0.0578*	0.0237	0.0027	0.0313**
	(0.0339)	(0.0170)	(0.0067)	(0.0134)
Bequest Preference	-0.0146**	-0.0011	-0.0009	0.0166***
	(0.0058)	(0.0042)	(0.0021)	(0.0045)
Satisfaction Health	-0.0056	-0.0030	-0.0123**	0.0209
	(0.0131)	(0.0123)	(0.0062)	(0.0129)
Have Life Coverage	-0.0806***	-0.0972***	-0.0145	0.1923***
	(0.0287)	(0.0293)	(0.0153)	(0.0336)
Life Insurance in Super base: None				
Don't Know	0.1386***	-0.0896***	-0.0245	-0.0245
	(0.0305)	(0.0306)	(0.0156)	(0.0322)
Yes, Made No Changes	0.0182	-0.1199***	-0.0271*	0.1288***
	(0.0284)	(0.0301)	(0.0153)	(0.0312)
Yes, Made Changes	-0.0822**	-0.1541***	-0.0089	0.2452***
	(0.0366)	(0.0384)	(0.0238)	(0.0427)
Openness to Change	-0.0542	0.1031**	-0.0082	-0.0407
less Conservation	(0.0766)	(0.0419)	(0.0167)	(0.0340)
Self-Transcendence	-0.0849	0.0589*	-0.0121	0.0382
less Self-Enhancement	(0.0612)	(0.0322)	(0.0135)	(0.0279)
LL_base		-1839		
LL_full		-1650		
Chi_2		378.2		
Obs		1490		

reports marginal effects from the stage model for the aggregated decision states base model and **Error! Reference source not found.** for the full model including the disaggregated capability states.

<insert Table 5: Stage Model Decision State– Base model, Default Retirement Savings Participants

This table presents the estimation reported in **Error! Reference source not found.** but with the sub-sample of respondents with a retirement savings account and adds a categorical variable "Life Insurance in Super" to indicate if life insurance is in the account. The ucrlogit program from Stata was used to produce the estimates. Robust standard errors are shown in parentheses with significance indicated at 90% *, 95% **, and 99% ***.

	Pre-Aware	Aware	Interested	Capable
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	(0.0110)	(0.0100)	(0.0048)	(0.0099)
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Financial Literacy	-0.0578*	0.0237	0.0027	0.0313**
	(0.0339)	(0.0170)	(0.0067)	(0.0134)
Bequest Preference	-0.0146**	-0.0011	-0.0009	0.0166***
	(0.0058)	(0.0042)	(0.0021)	(0.0045)
Satisfaction Health	-0.0056	-0.0030	-0.0123**	0.0209
	(0.0131)	(0.0123)	(0.0062)	(0.0129)
Have Life Coverage	-0.0806***	-0.0972***	-0.0145	0.1923***
	(0.0287)	(0.0293)	(0.0153)	(0.0336)
Life Insurance in Super base: None				

Don't Know	0.1386***	-0.0896***	-0.0245	-0.0245
	(0.0305)	(0.0306)	(0.0156)	(0.0322)
Yes, Made No Changes	0.0182	-0.1199***	-0.0271*	0.1288***
	(0.0284)	(0.0301)	(0.0153)	(0.0312)
Yes, Made Changes	-0.0822**	-0.1541***	-0.0089	0.2452***
	(0.0366)	(0.0384)	(0.0238)	(0.0427)
Openness to Change	-0.0542	0.1031**	-0.0082	-0.0407
less Conservation	(0.0766)	(0.0419)	(0.0167)	(0.0340)
Self-Transcendence	-0.0849	0.0589*	-0.0121	0.0382
less Self-Enhancement	(0.0612)	(0.0322)	(0.0135)	(0.0279)
LL_base		-1839		
LL_full		-1650		
Chi_2		378.2		
Obs		1490		

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Comparing the results with Tables 3 and 4, these responses are very informative. In particular, people who don't know if they have default insurance cover are also more likely to be at the Pre-Aware state (14 percentage points more likely to be Pre-Aware; 9 percentage points less likely to be Aware), while respondents who know about their default life cover are less likely to be at early decision states and more likely to be Capable, having made a decision. Higher financial literacy is also associated with significantly higher probability of capability.

Personal values still matter for automatically insured plan participants. People who value Self-Transcendence over Self-Enhancement are significantly more likely to be Aware (5.9 percentage points), as are those who value Openness-to-Change over Conservation (10.3 percentage points). However, as compared to the full sample, those who value Self-Transcendence over Self-Enhancement are not more likely to be Capable. These results reinforce the role of people's traits, personal values, and financial literacy in membership of decision states for life insurance. Our findings also show that default life cover can potentially protect the beneficiaries of consumers who have not begun to think about life insurance at all. At the same time, consumers may first become aware of life insurance via their retirement plan default. Retirement plans that help participants to find out about default insurance services are likely to also help them progress through the decision states, eventually to feel capable to decide on suitable cover.

5 Conclusion

While conventional economic theory has long assumed that households will insure themselves against losses arising from the premature death or disablement of a provider, we observe that low or unsuitable life insurance cover is widespread. In Australia, where we conduct this study, most employees hold default life insurance cover through their workplace retirement (superannuation) plans, but many are either unaware of their insurance cover or unsure about its suitability.

Comparison of default cover against basic cover benchmarks shows that many households are likely to be either over- or under-insured (Rice Warner 2017). This raises questions relating to what types of people are more at risk of poor life insurance decisions, and how insurance choices can be presented to people in ways that help them choose well.

To address these issues we designed and administered an online structured survey to collect consumers' subjective ratings of their own capacity and in interest in life insurance. We find:

- A majority of respondents do not rate themselves as capable of making a decision about life insurance. In fact, almost 30% of respondents say that they do not know what life insurance is or how it works, and another 30% are aware of the product but not really interested in finding out more about it. Only slightly more than one third of adults surveyed felt interested enough and ready to decide about life cover.

- Higher decision states are positively related to factors that previous research has shown to drive demand for life insurance but do not ensure readiness to choose; some promote awareness or interest but not capability.

- Personal values matter for life insurance awareness and capability. People who value benevolence (Self-Transcendence versus Self-Enhancement) are significantly more likely to belong to higher decision states, and therefore find out about life insurance, and adjust their cover. Openness-to-Change (incorporating self-determination) is significantly associated with awareness but not with higher decision states.

- Financial literacy and financial experience are significantly positively associated with membership of higher decision states, particularly for those who have already chosen and are continuing with their cover. Those with low financial literacy are not a homogeneous group as they are spread across several decision states.

- Default life insurance cover facilitates informed life insurance decisions. Personal characteristics, financial literacy and personal values are still relevant for retirement (superannuation) plan participants with default life insurance cover and those aware of their default cover are more likely to belong to the higher decision states and have the capacity to choose.

These results show that a range of strategies are required to assist consumers to move through the decision states to ultimately have the capacity to choose whether and how much life insurance cover they need. Possible interventions include improved information provision focussing on priming values, building financial literacy skills and modifying choice architecture, including consideration of default cover.

For any financial literacy interventions we note that the role of financial literacy appears different by decision state. The reported regression analysis suggests a larger effect of an increase in financial literacy for the reduced likelihood of being in the Pre-Aware decision state than on the increased likelihood of being in the Aware or Capable state. This underscores that strategies that aim to improve financial literacy may have a positive impact but may not necessarily result in observable behaviors. In this case it may move an individual from being Pre-Aware to Aware or to Interested. However, once the Capable state is reached, financial literacy supports the actual choice decision.

But more intriguing is the practical relevance of personal values to engagement with, and execution of, life insurance decisions. Both a relative orientation to Self-Transcendence (encompassing benevolence and universalism) and Openness-to-Change (incorporating self-determination) significantly explain being Aware relative to Pre-Aware, while a relative orientation to Self-Transcendence is significantly associated with capacity for choices of life insurance cover. This indicates that standard methods to explain and promote life insurance cover could be modified to attract people whose values focus elsewhere.

Finally, auto enrolment, as in the case of Australia's default life insurance cover, could be an option to accelerate people through the decision states, particularly to address the under insurance of those with poor financial skills and those whose values do not align with life insurance cover, to the detriment of their family and dependents. However, choice architects must ensure that people are aware of their default cover.

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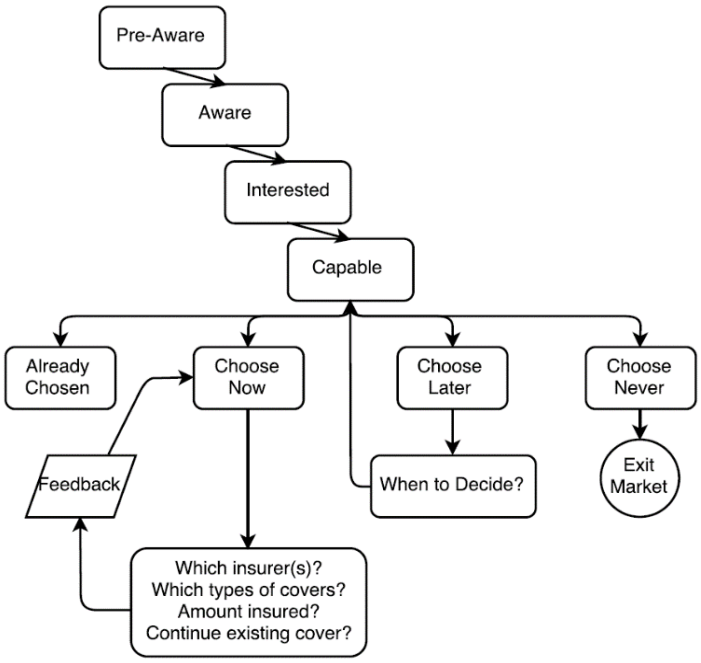
Figure 1: Decision States Model



Source: Adapted from Bateman et al. (2014, p. 216)

Figure 1: Refined Values

Source: Lee, et al. 2019

Figure 2: Descriptive Statistics – Decision States

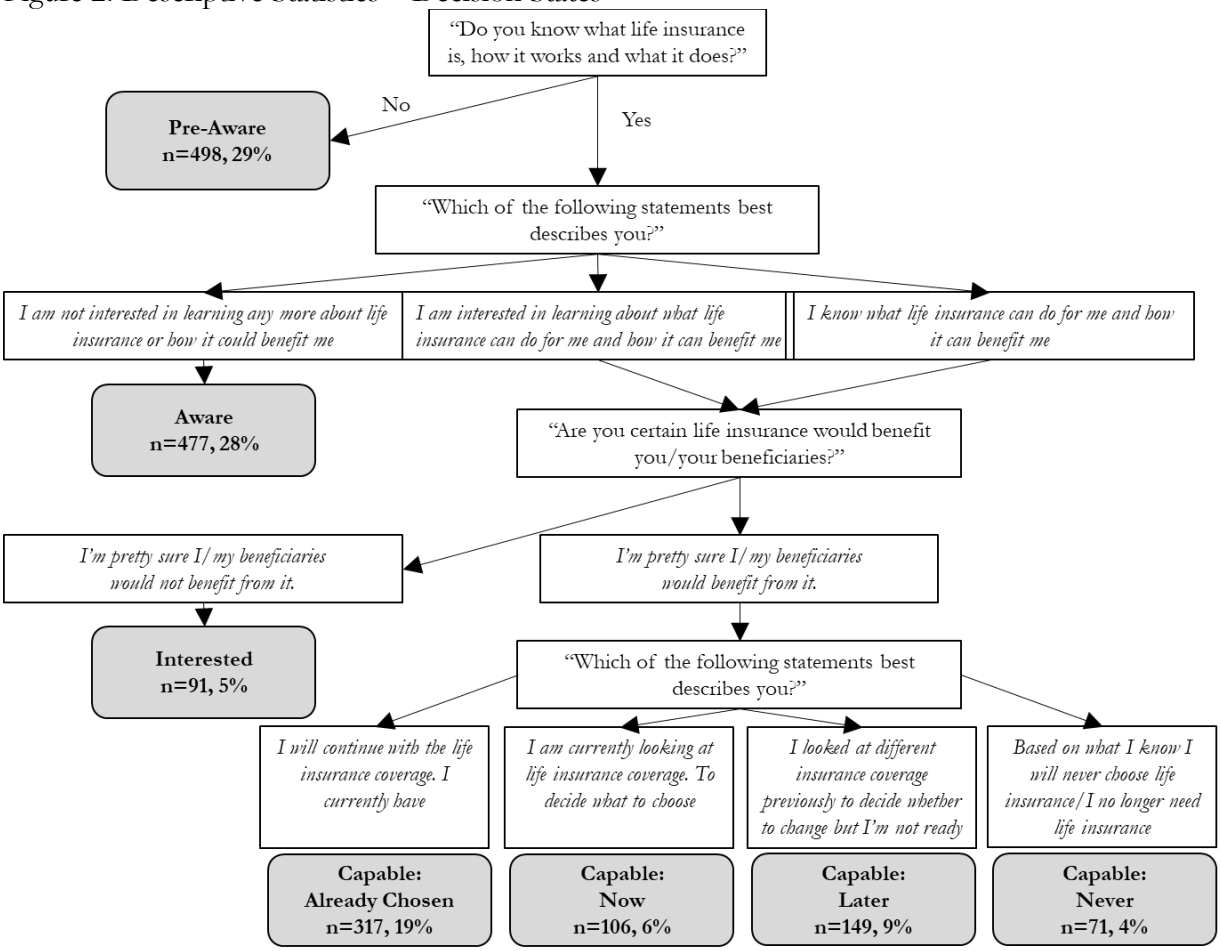


Table 1: Variable Definitions

Financial Assets	None (base); < $50,000; ≥ $50,000
Investment Property	Indicator of owning an investment property
Investment Loan	Indicator of investment loan (covers property & other)
Home Status	No Home Asset (base); Home, No Mortgage; Home with Mortgage
Risk tolerance	Average score of following items using scale: *Average score of: Completely Disagree 1, Completely Agree 7*. 1) I am willing to risk financial losses; 2) I prefer investments that have higher returns even though they are riskier; 3) As a rule, I would never choose the safest investment when investing; 4) The overall growth potential of an investment is more important than the risk of the investment; 5) I am very willing to make risky investments to ensure financial security in the future. (Jacobs-Lawson & Hershey, 2005)
Future Time Perspective	Average score of following items using scale: *Strongly Disagree 1, Strongly Agree 7* 1) Enjoy thinking about how I will live years from now in the future; 2) My close friends would describe me as future oriented; 3) I look forward to life in the distant future; 4) It is important to take a long-term perspective on life; 5) I like to reflect on what the future will hold.
Financial Literacy	Index: Standardized factor score for answers to following items: 1) Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account? *(More than today; Exactly the same; Less than today; Do not know)*; 2) Assume a friend inherits $10,000 today and his sibling inherits $10,000 3 years from now. Who is richer because of the inheritance? *(My friend; His sibling; They are equally rich; Do not know)*; A 15-year mortgage typically requires higher monthly payments than a 30-year mortgage, but the total interest paid over the life of the loan will be less: *(True; False; Don't Know)*; 4) Buying shares in a single company usually provides a safer return than buying units in a managed share plan *(True; False; Don't Know)*; If interest rates fall, what should happen to government bond or fixed interest security prices? *(Increase; Decrease; Nothing; None of the above)*.
Bequest Preference	Response to "Including property and other valuables as well as money that you might own, what are the chances that you will leave an inheritance totalling $20,000 or more?" (0-10 scale: where 0 means 'no chance' and 10 means 'certain')
Health Satisfaction	How satisfied are you with your health? *(1 Very dissatisfied, 2 Dissatisfied; 3 Neither satisfied nor dissatisfied, 4 Satisfied, 5 Very satisfied)*
Misunderstand Coverage	What types of cover do you think are usually included in a standard life insurance policy? *(If Trauma, Income Protection, or Don't know selected. Other options Life, Total and Permanent Disability)*
Life Insurance Coverage	Do you have life insurance coverage? (Outside Superannuation)
Openness-to-Change less Conservation	Average of Self-Determination, Stimulation, and Hedonism less Average of Security, Tradition, and Conformity
Self-Transcendence less Self-Enhancement	Average of Benevolence and Universalism less Average of Achievement and Power

Table 2: Demographics and Financial Literacy: Sample vs Population

PANEL A	**AUSTRALIAN POPN. (18-54 YEARS) %**	**INSURANCE MODULE %**	**ANALYSIS SAMPLE %**
		(n=2,415)	(n=1,709)
Gender			
Male	49.54	32.53	26.97
Female	50.46	67.47	73.03
Age			
18-24 years	18.23	7.44	6.90
25-29 years	14.15	12.80	13.05
30-34 years	14.48	15.75	16.38
35-39 years	13.28	18.90	18.26
40-44 years	13.46	16.87	16.56
45-49 years	13.44	16.45	16.62
50-54 years	12.95	11.80	12.23
		(n=2,014)	(n=1,709)
Relationship status			
Married	39.61	47.32	44.35
Work status			
Employed	62.33	63.80	65.06
self employed	8.92	8.09	8.43
NOT EMPLOYED	28.75	28.10	26.51
HIGHEST LEVEL OF EDUCATION			
SECONDARY SCHOOL OR LESS (ISCED97 LEVEL 0-3)	40.22	26.17	25.70
TAFE CERTIFICATE OR EQUIVALENT (ISCED97 LEVEL 4)	19.32	17.78	17.76
DIPLOMA, BACHELOR OR MASTER'S DEGREE (ISCED97 LEVEL 5)	40.46	56.06	56.42

Panel B	Inflation	Mortgage	Bond	Divers.	TVM	Raw Total Mean	Raw Total SD
Analysis Sample correct	56.1%	74.6%	13.8%	48.4%	49.6%	2.45	1.40
Don't know	16.7%	16.7%	41.4%	39.6%	14.5%	1.23	1.38
FINRA (2018) correct	55%	73%	26%	43%			
Don't know	21%	17%	36%	45%			
HILDA (2018) correct	69.4%			75.6%			
Don't know	9.4%			7.9%			
Agnew et al. (2013)	69.3%			54.7%	54.9%		
Gerrans and Heaney (2019)	68.1%			70.1%	63.9%		

Note: Population data from 2016 Australian Census and authors' calculations.

Table 3: Stage Model Decision State Marginal Effects – Base Model

This table presents estimated results from a stage model showing average marginal effects for each state relative to the preceding states for the basic (four state) decision state model. The top row of each marginal effect column shows the unconditional probability of being in each state. The ucrlogit program from Stata was used to produce the estimates. Robust standard errors are shown in parentheses with significance indicated at 90% *, 95% **, and 99% ***.

Marginal Effects	Pre-Aware	Aware	Interested	Capable
	0.2969	0.2804	0.0560	0.3667
Female	-0.0136	-0.0276	0.0057	0.0356
	(0.0252)	(0.0265)	(0.0121)	(0.0263)
Age	-0.0006	0.0015	0.0000	-0.0009
	(0.0014)	(0.0014)	(0.0007)	(0.0014)
Relationship (base: Married)				
Partnered, not married	0.0128	0.0430	0.0285*	-0.0843***
	(0.0286)	(0.0287)	(0.0152)	(0.0288)
Separated, Widowed	-0.0143	-0.0171	-0.0011	0.0325
	(0.0467)	(0.0459)	(0.0209)	(0.0518)
Single	-0.0037	0.0498	0.0303*	-0.0765**
	(0.0308)	(0.0316)	(0.0167)	(0.0329)
Dependents	-0.0022	-0.0188**	0.0013	0.0197**
	(0.0090)	(0.0086)	(0.0046)	(0.0087)
Degree	0.0149	-0.0023	-0.0051	-0.0076
	(0.0240)	(0.0243)	(0.0120)	(0.0242)
Work (base: Employee)				
Self Employed	-0.0163	0.0803*	0.0136	-0.0776**
	(0.0412)	(0.0430)	(0.0228)	(0.0391)
Not Employed	-0.0279	0.0783***	-0.0104	-0.0400
	(0.0250)	(0.0262)	(0.0128)	(0.0274)
Financial Assets (base: None)				
< $50,000	-0.0658***	-0.0588**	0.0058	0.1188***
	(0.0247)	(0.0252)	(0.0123)	(0.0259)
> $50,000	-0.0626*	-0.0839**	0.0385*	0.1080***
	(0.0341)	(0.0344)	(0.0207)	(0.0365)
Investment Property	-0.0350	0.0614*	-0.0016	-0.0248
	(0.0323)	(0.0347)	(0.0164)	(0.0321)
Investment Loan	0.0511	-0.0161	0.0007	-0.0356
	(0.0410)	(0.0397)	(0.0196)	(0.0376)
Home Status (base: No Home Asset)				
Home, No Mortgage	-0.0088	0.0260	0.0080	-0.0252
	(0.0367)	(0.0369)	(0.0199)	(0.0373)
Home, Mortgage	-0.0026	0.0399	-0.0157	-0.0216
	(0.0264)	(0.0267)	(0.0133)	(0.0274)
Risk tolerance	0.0065	-0.0082	0.0028	-0.0011
	(0.0087)	(0.0088)	(0.0044)	(0.0091)
Future Time Perspective	-0.0250***	-0.0123	0.0087*	0.0286***
	(0.0095)	(0.0096)	(0.0050)	(0.0102)
Financial Literacy	-0.0610***	0.0251**	0.0062	0.0297**
	(0.0135)	(0.0122)	(0.0062)	(0.0125)
Bequest Preference	-0.0157***	-0.0015	-0.0003	0.0176***
	(0.0036)	(0.0036)	(0.0019)	(0.0041)
Satisfaction Health	-0.0062	0.0010	-0.0096*	0.0148
	(0.0111)	(0.0112)	(0.0056)	(0.0118)
Have Life Coverage	-0.1144***	-0.1210***	-0.0194	0.2547***
	(0.0263)	(0.0263)	(0.0130)	(0.0308)
Openness-to-Change less	-0.0724**	0.1054***	-0.0037	-0.0293
less Conservation	(0.0338)	(0.0307)	(0.0152)	(0.0311)
Self-Transcendence	-0.1030***	0.0554**	-0.0082	0.0558**
less Self-Enhancement	(0.0269)	(0.0247)	(0.0124)	(0.0259)
LL_base		-2118		
LL_full		-1924		
Chi_2		387.8		
Observations		1709		

Table 4: Stage Model Decision State Marginal Effects – Full model

This table presents estimated results on the sub-states of "Capable" from a stage logit model of the full decision state model with seven states, showing average marginal effects for each state. The top row of each marginal effect column shows the unconditional probability of being in each sub-state. We used the ucrlogit program from Stata to produce the estimates. Robust standard errors are shown in parentheses with significance indicated at 90% *, 95% **, and 99% ***.

	Chosen	Now	Later	Never
	0.1780	0.0602	0.0869	0.0416
Female	0.0191	-0.0261	0.0245	0.0148
	(0.0199)	(0.0160)	(0.0159)	(0.0106)
Age	0.0017	-0.0018**	-0.0032***	0.0026***
	(0.0012)	(0.0008)	(0.0009)	(0.0007)
Relationship (base: Married)				
Partnered, not married	-0.0630***	-0.0235*	0.0004	-0.0116
	(0.0222)	(0.0141)	(0.0186)	(0.0124)
Separated, Widowed	-0.0056	-0.0166	-0.0027	0.0276
	(0.0412)	(0.0265)	(0.0341)	(0.0248)
Single	-0.0554**	0.0022	-0.0240	-0.0142
	(0.0263)	(0.0187)	(0.0199)	(0.0129)
Dependents	0.0087	0.0025	0.0027	0.0047
	(0.0068)	(0.0047)	(0.0055)	(0.0036)
Degree	-0.0160	-0.0014	0.0002	0.0106
	(0.0187)	(0.0126)	(0.0151)	(0.0120)
Work (base: Employee)				
Self Employed	-0.0624**	-0.0096	-0.0027	0.0070
	(0.0278)	(0.0208)	(0.0266)	(0.0167)
Not Employed	-0.0559***	-0.0107	-0.0106	0.0310**
	(0.0212)	(0.0146)	(0.0162)	(0.0128)
Financial Assets (base: None)				
< $50,000	0.0646***	0.0282**	0.0206	0.0068
	(0.0198)	(0.0131)	(0.0161)	(0.0104)
> $50,000	0.0790***	0.0209	-0.0147	0.0219
	(0.0279)	(0.0174)	(0.0202)	(0.0187)
Investment Property	0.0010	-0.0072	-0.0299	0.0101
	(0.0251)	(0.0165)	(0.0186)	(0.0164)
Investment Loan	-0.0272	0.0128	0.0099	-0.0236**
	(0.0271)	(0.0216)	(0.0268)	(0.0119)
Home Status (base: No Home Asset)				
Home, No Mortgage	-0.0511*	0.0002	0.0195	0.0096
	(0.0282)	(0.0208)	(0.0249)	(0.0170)
Home, Mortgage	-0.0369*	-0.0046	0.0319*	-0.0091
	(0.0212)	(0.0146)	(0.0173)	(0.0115)
Risk tolerance	0.0013	0.0003	-0.0003	-0.0023
	(0.0071)	(0.0048)	(0.0057)	(0.0040)
Future Time	0.0127	0.0005	0.0109*	0.0049
	(0.0080)	(0.0055)	(0.0066)	(0.0043)
Financial Literacy	0.0354***	-0.0163**	0.0110	0.0017
	(0.0101)	(0.0066)	(0.0078)	(0.0057)
Bequest Preference	0.0095***	0.0079***	0.0010	-0.0003
	(0.0034)	(0.0025)	(0.0026)	(0.0016)
Satisfaction Health	0.0176*	0.0051	-0.0009	-0.0074
	(0.0096)	(0.0066)	(0.0074)	(0.0048)
Have Life Coverage	0.2362***	0.0245	0.0165	-0.0471***
	(0.0285)	(0.0159)	(0.0194)	(0.0066)
Openness-to-Change	-0.0161	0.0003	-0.0022	-0.0078
less Conservation	(0.0247)	(0.0167)	(0.0196)	(0.0133)
Self-Transcendence	0.0160	0.0141	0.0226	-0.0048
less Self-Enhancement	(0.0204)	(0.0138)	(0.0167)	(0.0116)
LL_base		-2908		
LL_full		-2611		
Chi_2		593.2		
Observations		1709		

Table 5: Stage Model Decision State– Base model, Default Retirement Savings Participants

This table presents the estimation reported in **Error! Reference source not found.** but with the sub-sample of respondents with a retirement savings account and adds a categorical variable "Life Insurance in Super" to indicate if life insurance is in the account. The ucrlogit program from Stata was used to produce the estimates. Robust standard errors are shown in parentheses with significance indicated at 90% *, 95% **, and 99% ***.

	Pre-Aware	Aware	Interested	Capable
Female	-0.0239	-0.0228	0.0118	0.0349
	(0.0270)	(0.0280)	(0.0130)	(0.0285)
Age	-0.0003	0.0012	-0.0000	-0.0008
	(0.0016)	(0.0015)	(0.0008)	(0.0016)
Relationship (base: Married)				
Partnered, not married	0.0278	0.0252	0.0247	-0.0776**
	(0.0303)	(0.0301)	(0.0158)	(0.0315)
Separated, Widowed	0.0159	-0.0179	0.0062	-0.0042
	(0.0516)	(0.0504)	(0.0247)	(0.0553)
Single	0.0090	0.0356	0.0303	-0.0750**
	(0.0317)	(0.0334)	(0.0189)	(0.0355)
Dependents	0.0027	-0.0159	-0.0006	0.0137
	(0.0124)	(0.0104)	(0.0052)	(0.0097)
Degree	0.0152	0.0012	0.0017	-0.0181
	(0.0239)	(0.0244)	(0.0127)	(0.0256)
Work (base: Employee)				
Self Employed	0.0082	0.0598	0.0102	-0.0782*
	(0.0419)	(0.0442)	(0.0223)	(0.0414)
Not Employed	-0.0440*	0.0374	-0.0071	0.0137
	(0.0262)	(0.0289)	(0.0145)	(0.0312)
Financial Assets (base: None)				
< $50,000	-0.0632**	-0.0546**	0.0082	0.1097***
	(0.0267)	(0.0267)	(0.0125)	(0.0276)
> $50,000	-0.0526	-0.0823**	0.0428**	0.0921**
	(0.0355)	(0.0355)	(0.0214)	(0.0380)
Investment Property	-0.0114	0.0612*	0.0019	-0.0517
	(0.0333)	(0.0359)	(0.0173)	(0.0347)
Investment Loan	0.0615	-0.0069	-0.0017	-0.0529
	(0.0419)	(0.0408)	(0.0196)	(0.0396)
Home Status (base: No Home				
Home, No Mortgage	-0.0258	0.0268	0.0182	-0.0192
	(0.0386)	(0.0394)	(0.0227)	(0.0410)
Home, Mortgage	-0.0037	0.0387	-0.0092	-0.0258
	(0.0274)	(0.0277)	(0.0144)	(0.0287)
Risk tolerance	0.0069	-0.0056	0.0034	-0.0047
	(0.0110)	(0.0100)	(0.0048)	(0.0099)
Future Time Perspective	-0.0175	-0.0151	0.0056	0.0270**
	(0.0114)	(0.0104)	(0.0055)	(0.0112)
Financial Literacy	-0.0578*	0.0237	0.0027	0.0313**
	(0.0339)	(0.0170)	(0.0067)	(0.0134)
Bequest Preference	-0.0146**	-0.0011	-0.0009	0.0166***
	(0.0058)	(0.0042)	(0.0021)	(0.0045)
Satisfaction Health	-0.0056	-0.0030	-0.0123**	0.0209
	(0.0131)	(0.0123)	(0.0062)	(0.0129)
Have Life Coverage	-0.0806***	-0.0972***	-0.0145	0.1923***
	(0.0287)	(0.0293)	(0.0153)	(0.0336)
Life Insurance in Super base: None				
Don't Know	0.1386***	-0.0896***	-0.0245	-0.0245
	(0.0305)	(0.0306)	(0.0156)	(0.0322)
Yes, Made No Changes	0.0182	-0.1199***	-0.0271*	0.1288***
	(0.0284)	(0.0301)	(0.0153)	(0.0312)
Yes, Made Changes	-0.0822**	-0.1541***	-0.0089	0.2452***
	(0.0366)	(0.0384)	(0.0238)	(0.0427)
Openness to Change	-0.0542	0.1031**	-0.0082	-0.0407
less Conservation	(0.0766)	(0.0419)	(0.0167)	(0.0340)
Self-Transcendence	-0.0849	0.0589*	-0.0121	0.0382
less Self-Enhancement	(0.0612)	(0.0322)	(0.0135)	(0.0279)
LL base		-1839		
LL_full		-1650		
Chi_2		378.2		
Obs		1490		

Table 6: Stage Model Decision State – Full model, Default Retirement Savings Participants

This table presents an equivalent estimation as in Table 4: Stage Model Decision State Marginal Effects – Full model

This table presents estimated results on the sub-states of "Capable" from a stage logit model of the full decision state model with seven states, showing average marginal effects for each state. The top row of each marginal effect column shows the unconditional probability of being in each sub-state. We used the ucrlogit program from Stata to produce the estimates. Robust standard errors are shown in parentheses with significance indicated at 90% *, 95% **, and 99% ***.

	Chosen	Now	Later	Never
	0.1780	0.0602	0.0869	0.0416
Female	0.0191	-0.0261	0.0245	0.0148
	(0.0199)	(0.0160)	(0.0159)	(0.0106)
Age	0.0017	-0.0018**	-0.0032***	0.0026***
	(0.0012)	(0.0008)	(0.0009)	(0.0007)
Relationship (base: Married)				
Partnered, not married	-0.0630***	-0.0235*	0.0004	-0.0116
	(0.0222)	(0.0141)	(0.0186)	(0.0124)
Separated, Widowed	-0.0056	-0.0166	-0.0027	0.0276
	(0.0412)	(0.0265)	(0.0341)	(0.0248)
Single	-0.0554**	0.0022	-0.0240	-0.0142
	(0.0263)	(0.0187)	(0.0199)	(0.0129)
Dependents	0.0087	0.0025	0.0027	0.0047
	(0.0068)	(0.0047)	(0.0055)	(0.0036)
Degree	-0.0160	-0.0014	0.0002	0.0106
	(0.0187)	(0.0126)	(0.0151)	(0.0120)
Work (base: Employee)				
Self Employed	-0.0624**	-0.0096	-0.0027	0.0070
	(0.0278)	(0.0208)	(0.0266)	(0.0167)
Not Employed	-0.0559***	-0.0107	-0.0106	0.0310**
	(0.0212)	(0.0146)	(0.0162)	(0.0128)
Financial Assets (base: None)				
< $50,000	0.0646***	0.0282**	0.0206	0.0068
	(0.0198)	(0.0131)	(0.0161)	(0.0104)
> $50,000	0.0790***	0.0209	-0.0147	0.0219
	(0.0279)	(0.0174)	(0.0202)	(0.0187)
Investment Property	0.0010	-0.0072	-0.0299	0.0101
	(0.0251)	(0.0165)	(0.0186)	(0.0164)
Investment Loan	-0.0272	0.0128	0.0099	-0.0236**
	(0.0271)	(0.0216)	(0.0268)	(0.0119)
Home Status (base: No Home Asset)				
Home, No Mortgage	-0.0511*	0.0002	0.0195	0.0096
	(0.0282)	(0.0208)	(0.0249)	(0.0170)
Home, Mortgage	-0.0369*	-0.0046	0.0319*	-0.0091
	(0.0212)	(0.0146)	(0.0173)	(0.0115)
Risk tolerance	0.0013	0.0003	-0.0003	-0.0023
	(0.0071)	(0.0048)	(0.0057)	(0.0040)
Future Time	0.0127	0.0005	0.0109*	0.0049
	(0.0080)	(0.0055)	(0.0066)	(0.0043)
Financial Literacy	0.0354***	-0.0163**	0.0110	0.0017
	(0.0101)	(0.0066)	(0.0078)	(0.0057)
Bequest Preference	0.0095***	0.0079***	0.0010	-0.0003
	(0.0034)	(0.0025)	(0.0026)	(0.0016)
Satisfaction Health	0.0176*	0.0051	-0.0009	-0.0074
	(0.0096)	(0.0066)	(0.0074)	(0.0048)
Have Life Coverage	0.2362***	0.0245	0.0165	-0.0471***
	(0.0285)	(0.0159)	(0.0194)	(0.0066)
Openness-to-Change	-0.0161	0.0003	-0.0022	-0.0078
less Conservation	(0.0247)	(0.0167)	(0.0196)	(0.0133)
Self-Transcendence	0.0160	0.0141	0.0226	-0.0048
less Self-Enhancement	(0.0204)	(0.0138)	(0.0167)	(0.0116)
LL_base		-2908		
LL_full		-2611		
Chi_2		593.2		
Observations		1709		

but with the sub-sample of respondents with a retirement savings account and adds a categorical variable "Life Insurance in Super" to indicate if life insurance is in the account.. The ucrlogit program from Stata was used to produce the estimates. Robust standard errors are shown in parentheses with significance indicated at 90% *, 95% **, and 99% ***.

	Chosen v Interested	Now v Chosen	Later v Now	Never v Later
Female	0.0297	-0.0311*	0.0206	0.0181
	(0.0208)	(0.0177)	(0.0177)	(0.0129)
Age	0.0011	-0.0020**	-0.0031***	0.0033***
	(0.0014)	(0.0009)	(0.0010)	(0.0009)
Relationship (base: Married)				
Partnered, not married	-0.0466*	-0.0170	-0.0043	-0.0181
	(0.0238)	(0.0164)	(0.0207)	(0.0154)
Separated, Widowed	-0.0172	-0.0064	-0.0131	0.0165
	(0.0430)	(0.0318)	(0.0364)	(0.0278)
Single	-0.0432	0.0133	-0.0421**	-0.0144
	(0.0278)	(0.0217)	(0.0195)	(0.0161)
Dependents	0.0069	0.0034	-0.0005	0.0056
	(0.0074)	(0.0053)	(0.0061)	(0.0045)
Degree	-0.0178	-0.0029	0.0038	0.0068
	(0.0193)	(0.0142)	(0.0162)	(0.0136)
Work (base: Employee)				
Self Employed	-0.0398	-0.0244	-0.0075	0.0018
	(0.0312)	(0.0202)	(0.0278)	(0.0194)
Not Employed	0.0020	-0.0011	-0.0147	0.0252
	(0.0256)	(0.0173)	(0.0182)	(0.0153)
Financial Assets (base: None)				
< $50,000	0.0568***	0.0232	0.0233	0.0081
	(0.0212)	(0.0149)	(0.0175)	(0.0127)
> $50,000	0.0676**	0.0118	-0.0070	0.0208
	(0.0285)	(0.0187)	(0.0225)	(0.0199)
Investment Property	-0.0037	-0.0089	-0.0335*	0.0041
	(0.0270)	(0.0183)	(0.0202)	(0.0184)
Investment Loan	-0.0493*	0.0104	0.0043	-0.0210
	(0.0277)	(0.0239)	(0.0279)	(0.0159)
Home Status (base: No Home Asset)				
Home, No Mortgage	-0.0467	-0.0018	0.0131	0.0112
	(0.0309)	(0.0223)	(0.0261)	(0.0202)
Home, Mortgage	-0.0549**	-0.0017	0.0349*	-0.0058
	(0.0219)	(0.0162)	(0.0179)	(0.0142)
Risk tolerance	-0.0025	0.0015	-0.0006	-0.0036
	(0.0076)	(0.0053)	(0.0062)	(0.0048)
Future Time Perspective	0.0154*	0.0009	0.0066	0.0052
	(0.0085)	(0.0060)	(0.0072)	(0.0053)
Financial Literacy	0.0336***	-0.0180**	0.0124	0.0055
	(0.0106)	(0.0072)	(0.0089)	(0.0070)
Bequest Preference	0.0055	0.0078***	0.0009	0.0012
	(0.0036)	(0.0027)	(0.0028)	(0.0020)
Satisfaction Health	0.0255**	0.0080	-0.0034	-0.0089
	(0.0103)	(0.0075)	(0.0082)	(0.0059)
Have Life Coverage	0.1451***	0.0207	0.0256	
	(0.0273)	(0.0181)	(0.0219)	
Life Insurance in Super (base: None)				
Don't Know	-0.0133	-0.0249	0.0252	-0.0248
	(0.0205)	(0.0183)	(0.0213)	(0.0174)
Yes, Made No Changes	0.2127***	-0.0217	-0.0172	-0.0523***
	(0.0251)	(0.0170)	(0.0182)	(0.0146)
Yes, Made Changes	0.2746***	-0.0041	0.0025	-0.0532***
	(0.0389)	(0.0229)	(0.0258)	(0.0188)
Openness-to-Change	-0.0299	0.0013	-0.0052	0.0042
less Conservation	(0.0264)	(0.0188)	(0.0217)	(0.0161)
Self-Transcendence	0.0030	0.0234	0.0187	-0.0100
less Self-Enhancement	(0.0214)	(0.0153)	(0.0177)	(0.0136)
LL_base		-2554.8		
LL_full		-2235.4		
Chi_2		638.8***		
Obs		1490		