



Munich Personal RePEc Archive

## **Readiness to retirement planning of estate sector employees in Sri Lanka**

Heenkenda, Shirantha

University of Sri Jayewardenapaura

July 2016

Online at <https://mpra.ub.uni-muenchen.de/72744/>  
MPRA Paper No. 72744, posted 20 Aug 2016 06:15 UTC

# Readiness to Retirement Planning of Estate Sector Employees in Sri Lanka

Shirantha Heenkenda

Department of Economics, University of Sri Jayewardenepura, Nugegoda, Sri Lanka

Email: [shiran@sjp.ac.lk](mailto:shiran@sjp.ac.lk) , [shiranheen@gmail.com](mailto:shiranheen@gmail.com)

## Abstract

This research sought to identify the motivational factors associated with the intention to readiness to retirement planning of estate sector employees in Sri Lanka. The theory of planned behavior (TPB) investigates the effects of the behavioral factors associated with the intention to readiness to retirement planning. Simple random sampling method was used to select the respondents and face-to-face interview was conducted to survey 900 households in the Nuwara Eliya district of the central province in Sri Lanka. The principal component analysis was used to calculate factors with Varimax rotation applied factor extraction. The regression analysis method was used to facilitate a path analysis of respondents' behavior. The result revealed that estate sector<sup>1</sup> employees' readiness to retirement planning was significantly related to personal attitudes, social pressures and a sense of control. Readiness to retirement planning turns out to be of utmost important and the study discovered behavior patterns that have implications. Reducing structural barriers, financial knowledge and financial inclusion may culminate the retirement planning behavior. Findings of this study can be beneficial for financial product development, especially for rural and informal sector employees in attracting and retaining clients.

Keywords: Behavioral finance, Estate Sector Employees, Retirement Planning, Theory of planned behavior

---

The author wishes to express sincere gratitude to the Research council of University of Sri Jayewardenepura, for providing funds from its "Research Grant Scheme" (Research Grant No: ASP/01/RE/HSS/2015/01)

## Introduction

Preparations for retirement and retirement confidence have emerged as a main global priority in social security (Helman, Greenwald & Associates, Copeland, & Vanderhei, 2015). Financial services play a key role in planning for old age financial beneficiary. Having accessed to financial products and services in generally is termed as financial inclusion. Financial inclusion can be improved the financial wellbeing of an individual or society as a whole (Lewis & Lindley, 2015).

The demographic make-up of Sri Lanka is changing. People are living longer and the pensioner population is growing relative to the working-age population. Especially informal sector pensions are fast becoming a key issue in social security policy. The cost of pensions will increase accordingly, yet there has been a long-term decline in private saving for their later life. One of the most pressing economic issues faced by developing economies over coming decades is how initiative to foster and strengthen the retirement orientated financial products and behaviourally-based initiatives will be designed for an increasing proportion of retirees. Sri Lanka introduced the contributory voluntary pension scheme (VPS) for the informal sector workers including estate workers who are not covered by formal pension arrangements. However, the dropout of estate workers from the VPS is the paramount problem facing the country (Heenkenda, 2016).

The contribution of the estate sector<sup>2</sup> to the national income is relatively high (CBSL, 2015). However estate sector is excluded by the mainstream socio-economic development and financial inclusion. The estate sector community is one of the mostly marginalized (Ethnic, cultural, religious & linguistic) and poorest sectors of the country (Ramesh, Rasnayake, & Kamalrathne, 2013; Sivapragasam, 2005). One of the GTZ (2009) studies highlighted that the estate sector has relatively low levels of financial access compared to the rural and urban sectors in the rest of the country. Poor financial literacy and low level of financial skill have also become an important issue in estate sector. In addition, unbanked populations are also the highest among estate sector in Sri Lanka (Heenkenda, 2014).

---

<sup>2</sup> Estate Sector: Plantation areas, which are more than 20 acres of extent and having not less than 10 residential laborers, are considered as the estate sector (Household Income and Expenditure Survey - 2012/13, p.4. Department of Census and Statistics of Sri Lanka, 2013 )

Understanding the influence of human and financial behavior and behavioral change, particularly on spending and saving concepts may be more effective for promoting long-term financial well-being (Turnham, 2010). Financial behavior can be defined as any human behavior that is relevant to money. According to financial behavior, many feel that it is necessary to continue studying in order to understand how people behave and respond to readiness to retirement planning (Topa, Moriano, Depolo, Alcover, & Morales, 2009). However, behavioral factors associated with the intention to readiness to retirement planning have not been investigated in Sri Lanka. Therefore, findings of this study would empower decision makers with the information necessary to design measures that can enhance retirement orientated financial products.

### **Objective**

A single act is a specific behavior that an individual performs. Many financial behaviors are defined by behavioral categories; the main objective of this study is to investigate the normative influence on the intention to readiness to retirement planning of estate sector employees in Sri Lanka.

### **Financial Planning Behavior and Retirement**

Financial planning is important to determine short and long-term financial goals and create a balanced plan to meet those goals. This phenomenon is widely discussed on corporate financial decision making. However personal financial planning has grown rapidly in the field of behavioral economics. Kapoor, Dlabay, and Hughes, (2004, p.4) stated that “personal financial planning is the process of managing your money to achieve personal economic satisfaction”. Lusardi and Mitchell (2007) highlighted that the planners accumulate large wealth than non-planners.

Planning and retirement satisfaction has a positive effect (Topa et al., 2009). Taylor and Doverspike (2003) highlighted the importance of retirement planning by stating that “the importance of retirement planning on postretirement adjustment cannot be overstated” (p. 53). The retirement planning is predictive of later life satisfaction and well-being in retirees (Donaldson, Earl, & Muratore, 2010; Noone, Stephens, & Alpass, 2009; Reitzes & Mutran, 2004; Wang, 2007). Retirement planning can be decided with the changes in roles, relationships, routines, and habits, along with concurrent changes in income and health (Lee & Law, 2004). Planning includes formal

preparation or informal preparation through discussions with partners or friends and reading about retirement (Noone et al., 2009). Retirement planning is conceptualized as conscious, goal directed behavior undertaken in preparation for the changes in retirement due to finances, social relationships and physical health.

Research has identified multiple factors associated with retirement planning including a future time perspective (Earl, Bednall, & Muratore, 2015; Zacher, 2013), realistic expectations (Taylor & Doverspike, 2003), clarity of retirement goals, and financial knowledge (Hershey, Henkens, & Dalen, 2010). Recently, studies on retirement planning behaviors have been conducted on employing normative influence on retirement planning (Foster, 2015).

### **Financial Planning Theories**

Financial planning comprised some foundational theories in economics, among them, choice theories (expected utility theory and prospect theory), and theories of savings (life cycle-permanent income hypothesis), consumption theory (the permanent income hypothesis) and modern portfolio theory are widely highlighted. Personal finance was derived from financial planning theories (Overton, 2007).

To achieve personal economic well-being and satisfaction when one moves through the life cycle financial planning is required. Life Cycle-Permanent Income Hypothesis has been the most widely used and generally accepted paradigm for the understanding of human behaviour on saving behavior, including retirement planning. The basic assumption of this model is that individuals make consumption and saving decisions considering their lifetime resources; thus, individuals plan ahead, they anticipate the income decline at retirement and save during the working years to offset it. Planning could also increase saving and consumption smoothing, if it is the process by which an individual enhances their expected utility maximization. In its most general form, the household's lifetime utility function can be written for intertemporal consumption (two periods of work and retirement), Now suppose that the consumer's utility is time-separable over those two periods,

$$U = u(c_0, \alpha p) + \beta u(c_1)$$

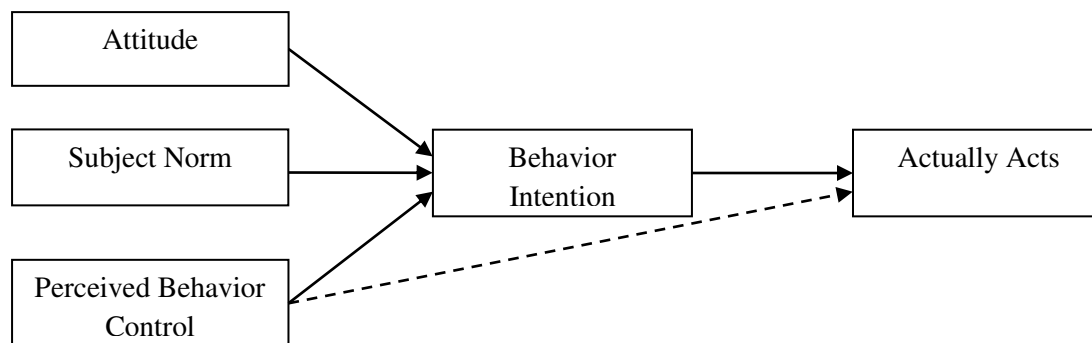
Where, C is consumption, p planning and  $\alpha$  propensity to planning. Planning has pronounced effects on consumer behavior and intertemporal choice.

Principally, conventional consumer theories, assume that consumer is rational and always optimize the utility and expected values, hence his behavior does not include psychological factors. As a result, behavioral finance is taken as a new approach to explain individuals' behavior in the market.

### The Theory of Planned Behavior

The Theory of Planned Behavior (TPB), developed by Ajzen as an extension of the earlier theory of reasoned action developed by Ajzen and Fishbein (Ajzen 1991; Ajzen, & Fishbein, 1980), has been applied to predict and understand the consumer behavior. The theory emphasizes that human behaviors are governed not only by personal attitudes, but also by social pressures and a sense of control. As in the original theory of reasoned action, a central factor in the theory of planned behavior is the individual's intention to perform a given behavior. The TPB suggests that actual act is determined by behavioral intention and perceived behavioral control. Behavioral intention is determined by three factors: attitude, subjective norms and perceived behavioral control. Each factor is in turn generated by a number of beliefs and evaluations.

Figure 1: The structure of the Theory of Planned Behavior.



The TPB indicates that the precedence of any behavior is the formation of an intention towards that behavior. Individual's intentions or readiness to act is the most proximal determinant of his or her behavior. The intentions provide critical insights into behavioral processes, and robustly predict and explain behaviors. Intention means personal volition and the volition would influence customers final decisions. Behavior is predicted using attitudes toward a specific behavior and subjective norms to form a behavioral intention that determines the actual behavior. Behavioral intention is predicted,

in turn, by three main determinants: attitude toward the behavior, subjective norm, and perceived behavioral control.

Attitude is defined as the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question, in this case readiness to retirement planning. Attitude includes combined behavioral beliefs and it means the feelings of customers when they try to do the specific thing. It could be good and bad, advantageous and disadvantageous, interesting and boring, or else (Ajzen, 1985).

Subject norm is combined normative belief with motivation to comply, and it means people are under pressure when they try to do something. The pressure is created by the people's parents, spouses, children, relatives, religious beliefs, etc. The individual's perceived norms are based on the beliefs they hold about what is acceptable or permissible behavior within their group or society. These individual suggestions would influence the behavior intention. Perceived behavior control could directly influence the final actual action in some research, and some research shows the relationship between these two aspects is indirect. (Fishbein & Ajzen, 2010).

Perceived behavioral control is combined control belief with perceived facilitation. It may influence the behavioral intention on behavior performance and such intentions lead to behavior performance. It means when people try to do something, they would estimate how much resources and how many opportunities they have and what kind of predicaments they might face to. The individual perceives that they have a high level of control over the behavior (Fiske & Taylor, 1991; Rodin, 1986; Thompson & Spacapan, 1991).

Behavioral intention is defined as intention of a person's subjective probability of performing a behavior (Ajzen, 1991). It means that the willingness of an individual to engage in a certain behavior. In this study, behavioral intention refers to the intention of an individual to readiness or willingness to retirement planning.

### **The Theory of Planned Behavior and Financial Behavior**

Studies on applied theory of planned behavior to consumer behavior have been conducted employing several different approaches in financial behavior such as investment decisions (East, 1993), Mortgage behavior (Bansal & Taylor, 2002); Consumer behavior in debt management (Xiao & Wu,

2006); Consumer's e-commerce venture intention (Dubinsky, 2005; Gopi & Ramayah, 2007; Lim & Kang, Hahn, Fortin, Hyun, & Eom, 2006; Shim, Easlick, Lotz, & Warrington, 2001); Cash, credit, and saving management (Shim, Xiao, Barber, & Lyons, 2009; Xiao, 2008); Credit card usage (Rutherford & deVaney, 2009) and Individuals' investment behavioral intention in stock market (Cuong & Zhou, 2014; Pascual-Exama, Scandroglio, de Liano, 2014). However, TPB model to measure intention behavior of readiness to retirement planning has not been widely used. With results of this paper, researchers could get valuable information from relationships among aspects.

## **Methods**

This study mainly used primary data collected through a field survey carried out between January and March of 2016. The survey employed the quantitative survey method via the use of face-to-face interviewing technique using a questionnaire. The target population was estate sector employees in Sri Lanka. Simple random sampling method was used to select the respondents and the survey of 900 households was conducted in the Nuwara Eliya district of the Central province in Sri Lanka.

The research followed the recommendations by Ajzen (2002) to design to elicit self-reported responses of behavior. The questionnaire used in this study consisted of three domains; each domain was surveyed using an adapted questionnaire, revised from previous studies addressing similar issues to this one, as well as questions developed by the present researcher (Castro-González, 2014; Hershey & Mowen, 2000; Jacobs-Lawson, & Hershey, 2005; Lai & Tan, 2009; Moorthy et al., 2012; Noone, Alpass, & Stephens, 2010; Petkoska, & Earl, 2009; Rosle, Jamal, Geetha, Sang, & Karim, 2013). A 50-item questionnaire was used to elicit the major domains that might influence each component (Attitudes, Subjective norms and Perceived control). Items were measured on a 5-point Likert scale and coded so that higher values reflected higher levels on the variable.

The principal component analysis was used to calculate factors with Varimax rotation applied factor extraction. The Kaiser-Guttman criterion is used and all factors with eigenvalues greater than 1 are retained in each domain, which is generally seen as the level of acceptability. Reliability of the measures was assessed with the use of Cronbach's alpha for internal consistency. Cronbach's alpha allows us to measure the reliability of the different categories. It consists of estimates of how much variation in scores of different variables is attributable to chance or random errors (Selltitz, Wrightsman, & Cook, 1976). Study used the Kaiser-Meyer-Olkin index to measure sampling adequacy and similarly, Bartlett's sphericity test was used to measure redundancy. The regression



analysis method was used to facilitate a path analysis of respondents' attitude, behavioral intention and actual behavior. This path analysis (shown in Figure 2) further examined the effects among different variables. The Statistical Package for Social Sciences (SPSS) version 20 was used to analyze data.

## Results

The factor analysis and scale reliability testing were used to determine the factors used in the TPB model. The results of the factorial analysis have shown that 150-item questionnaires are connected into 27 significant domains in following three components in the TPB.

**Component of Attitudes:** The TPB suggests that attitude is an important component that informs the intention to engage in a behavior. Attitude towards behavior is based on an evaluation of an individual's positive or negative feelings about executing the behavior. Results from previous research have indicated that many different factors influence attitudes toward retirement planning. Nine domains (Table 1) were developed using factor analysis concerning attitudes towards various aspects of retirement planning. We have also determined Cronbach's  $\alpha$  index. This index measures how much a set of items corresponds to a single latent phenomenon.

Table 1 Results of factor component analysis of attitudes

Domains	Number of items	Cronbach's alpha	Eigen value	Explained variance%
Financial plan is important	5	0.922	7.865	15.12
Interested in planning	5	0.856	6.845	13.21
Goal clarity	5	0.852	6.541	12.23
Saving towards retirement	5	0.823	5.654	11.85
Planning horizon	4	0.812	5.123	10.21
Expectations of a pension	4	0.796	5.021	9.54
Risk tolerance	4	0.752	4.953	8.75
Knowledge on retirement planning	4	0.735	4.231	6.53
Economic pressures after retirement	3	0.741	3.865	4.25
<b>Constraints the overall reliability</b>				0.942
<b>Total explained variance (%)</b>				91.69
<b>Kaiser-Meyer-Olkin (KMO) Index</b>				94.25
<b>Bartlett Spherical Test</b>				4528.32

**Component of Subjective Norms:** Subjective norms are social factors that include perceived social pressures to engage or not in a certain behavior. Measure of subjective norms was constructed by

Kennedy and Wated (2011) in accordance with Ajzen's (2002) guidelines for scale construction in the frame of the TPB. Factor analysis revealed eight factors (Table 2) of subjective norm. This indicates that the higher social influence on respondent planning.

Table 2 Results of factor component analysis of subjective norms

Domains	Number of items	Cronbach`s alpha	Eigen value	Explained variance%
Social capital	5	0.954	7.124	14.32
Household decision-making	5	0.932	6.586	12.54
Peer influence	5	0.785	6.452	11.46
Influence of trade unions	5	0.751	6.125	11.42
Influence of microfinance	4	0.749	5.964	10.74
Role of financial institutions	4	0.722	5.456	9.21
Impact of ROSCAs	4	0.719	5.941	8.53
Workplace support	4	0.710	4.278	5.49
Potential conflict in retirement	4	0.701	3.568	3.47
<b>Constraints the overall reliability</b>				0.887
<b>Total explained variance (%)</b>				87.18
<b>Kaiser-Meyer-Olkin (KMO) Index</b>				91.38
<b>Bartlett Spherical Test</b>				3785.54

**Component of Perceived Control:** Ajzen (1991) defined perceived behavioral control as the ease or difficulty in performing a behavior considering the past experiences and future obstacles that need to be overcome to perform the behavior. Through factor analysis, nine dimensions (Table 3) were identified for perceived behavior.

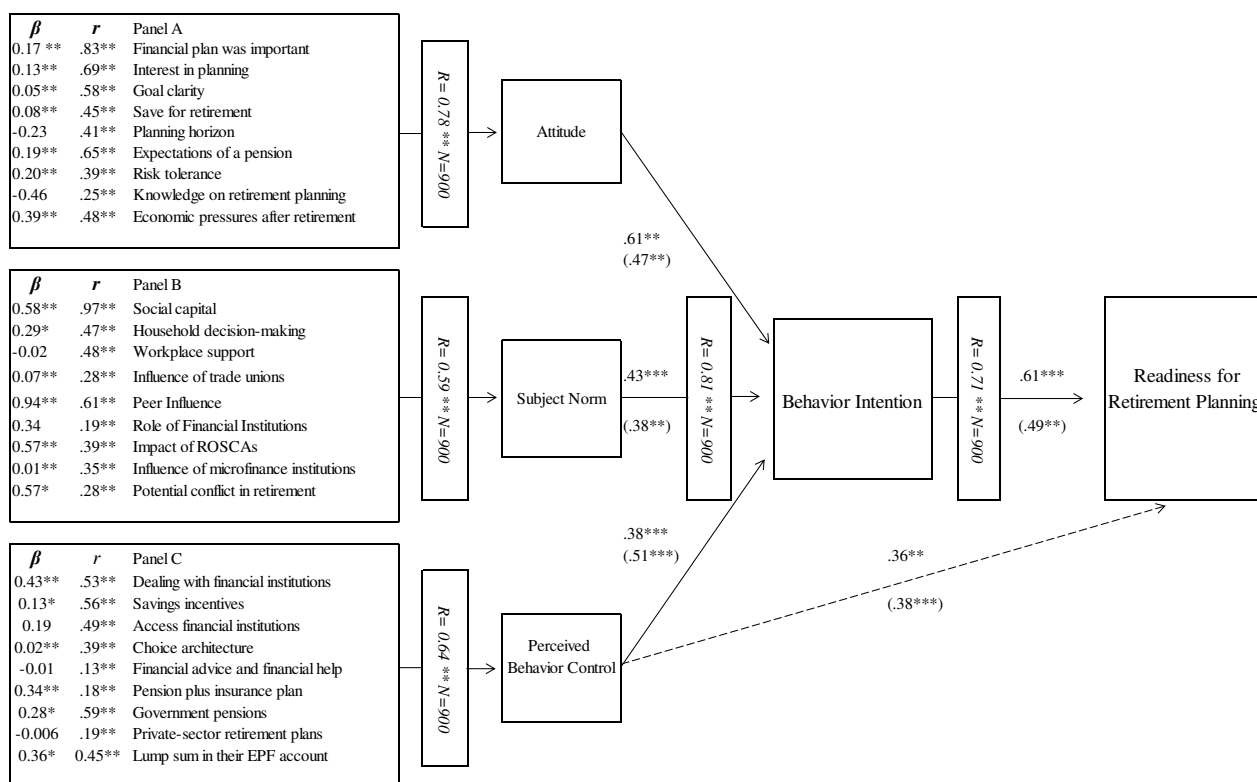
Table 3 Results of factor component analysis of Perceived Control

Domains	Number of items	Cronbach`s alpha	Eigen value	Explained variance%
Dealing with financial institutions	5	0.899	6.997	13.95
Savings incentives	5	0.869	6.568	12.78
Access to financial institutions	4	0.794	6.555	11.25
Choice architecture	4	0.758	6.025	10.96
Financial advice and financial help	4	0.747	5.895	9.23
Pension plus insurance plan	4	0.711	5.369	8.95
Government pensions	4	0.710	4.956	5.61
Private-sector retirement plans	3	0.700	4.258	4.69
Lump sum in their EPF account	3	0.701	3.502	3.44
<b>Constraints the overall reliability</b>				0.815
<b>Total explained variance (%)</b>				80.86
<b>Kaiser-Meyer-Olkin (KMO) Index</b>				90.55
<b>Bartlett Spherical Test</b>				3258.25

Based on the results of the factor analysis, reliability test was conducted to the domains and results are presented in second column of the results tables. Internal consistency of all dimensions, Cronbach's alpha values exceeded the benchmark of 0.70, indicating that the instrument possessed an acceptable internal consistency (Nunnally & Bernstein, 1994).

Figure 2 shows a path diagram representing the results of the five multiple regression analyses for predicting retirement planning readiness. The diagram highlights associations of predictors with dependent variables with correlation coefficient (r) and the independent association of each predictor with the dependent variables when other variables were held constant ( $\beta$ ).

Figure 2: Path diagram for predictors associated with retirement planning.



Note: Numbers in rotated boxes are R<sup>2</sup> from multiple regressions. Numbers in parentheses next to arrows are correlations; numbers not in parentheses are  $\beta$  coefficients. N represents cases with complete data. \*P < 0.05, \*\*P < 0.001

The results of Panel A (Attitude) in Figure 2 disclosed that there are seven dimensions of attitudes towards personal financial planning and they appeared to have significant and positive relationship to retirement planning behavior. The study found that the attitudes on planning horizon and knowledge on retirement planning were found to have no significant relationship with the retirement planning

readiness. However, planning horizon and attitude towards knowledge of retirement planning perceptions is inverse relationship to retirement planning behavior. The regression exhibited that the attitude aspect ( $R^2$ ) explained 71% of the variance.

The results of Panel B (Subjective Norms) in Figure 2 illustrated the regression, which showed that the subjective norm aspect ( $R^2$ ) explained 63% of the variance. While all the domains variables measured were statistically significant in relation to the subjective norm, there were only seven variables that had independent predictive power. Workplace support towards retirement planning behavior demonstrated inverse relationship and role of financial institutions were insignificant to retirement planning behavior.

The results of Panel C (Perceived Behavior Control) in Figure 2 indicated that six variables had independent predictive power. Assess financial institutions variable has a positive relationship and not statistically significant with the perceived behavioral control. Financial advice & financial help and Private-sector retirement plans show an inverse relationship to retirement planning behavior. Perceived behavioral control ( $R^2$ ) explained 54% of the variance explained.

The results show that there was a significant positive relationship between retirements planning readiness with intention as a function of attitude, subjective norm and perceived behavioral control. Regression analysis together ( $R^2$ ) explained 71% of its variance. The strongest predictor is attitude component, followed by subjective norm and perceived behavioral control. The study examined the direct influences behavior of perceived behavior too. Perceived behavioral control directly ( $R^2$ ) explained 48% of the variance explained. Final regression analysis, behavior intention together with perceived behavior control ( $R^2$ ) explained 83% of its variance.

## **Discussion and Conclusion**

This study examined the impact of psychological determinants on retirements planning readiness of estate sector employees in Sri Lanka. The TPB model explains that estate sector employees' retirements planning readiness intentions is 71%, and their behavior is 83%. To elaborate on this point, retirement planning behavioral intention is determined by three factors: the positive or negative valence of attitudes about the attitudes, subjective norms, and perceived behavioral controls.

Attitude is important component relevant to the observed behavior, which informs the intention to engage in a behavior. Most of the attitude variables were significantly related to the likelihood of

retirements planning readiness, among them, participants who indicated that they believed financial plan is important and had positive attitude on interested in planning. Thus, it may be an important indication that most respondents feel both that financial planning is important and that they are interested in developing a financial plan, which complies with findings from study by Yetmar & Murphy (2010).

Goal clarity is a significant predictor of planning practices and encouraging individuals to pursue clear and difficult goals yields greater performance through planning ( Stawski, Hershey and Jacobs-Lawson, 2007). The results of this study also highlighted that goal clarity of the respondents was significant related to retirement planning behaviour. Grable and Lytton (1997) recognized that saving towards retirement also as essential contributors to retirements planning. Similarly this study shows that estate sector employees consider those components important for a retirements planning. Hershey and Mowen (2000) found that a strong future orientation positively impacted on financial planning and retirement preparedness. The respondents emphasized their concern on expectations of a pension or expectations of retirement outcomes, it implies their readiness for planning. Risk tolerance behavior is also an important component for financial planning and plays in shaping consumer financial decisions (Grable & Rabbani, 2014). Respondents show positive attitudes to take a risk. This is a promoting factor for future financial plan and tradeoff between current and future consumption. There is a strong relationship between economic pressure and retirement (Dew & Yorgason, 2010). The respondents feel that their economic pressure after retirement is an important factor and this experience leads to a significant result in retirement planning. In more general terms, the results imply that they seek the skills and knowledge on retirement planning and need amount of time to look into (planning horizon) a prepared retirement plan.

The findings indicate that, a number of factors of subjective norms have been shown to be related to retirement planning and readiness. Duflo and Saez (2003) acknowledged the relationship between social interactions and impact on retirement planning. Estate sector employees in Sri Lanka are found to have more bonding social capital, which appears to strongly influence social capital. Social norms as salient features of social interactions generate positive social capital that enables the community to retirement planning and readiness. The parts of social capital are peer influenced and influence of trade unions, which play a large role in estate sector employees and positive cognitive aspect for retirement planning. There is a collectivist culture and interactions among social groups and this is an important aspect of estate sector employees.

Research undertaken by Wood, Downer, Lees, and Toberman (2012) highlighted that the influence of household financial decision maker is paramount for retirement planning decision. This study shows that the position of household decision making influences the retirement planning. Financial intermediaries perform an important role in the consumption smoothing process, which provided advice to individuals across a range of financial products related to planning for retirement. Respondents identified the importance of the role of financial institutions to develop an awareness for retirement planning. Effects of interventions of microfinance institution, ROSCAs and influence of its financial culture may have an impact on retirements planning and readiness of estate sector employees to retirement planning. Moreover, study found that respondents' norm related to potential conflict in retirement was associated to planning behavior. Workplace or institutional support is significantly impact on financial preparedness for retirement (Segel-Karpas, & Werner, 2014). However, estate sector employees display a negative attitude towards workplace support for retirements planning. Employers can also provide assistance to their employees on retirement by sponsoring retirement seminars or perhaps set up a voluntary fund for retirement savings as extra coverage for retirement planning. The working individuals who received workplace financial education and advice earlier help them to have more confidence toward retirement planning (Power & Hira, 2004). It was determined that subjective norm is an important factor in retirements planning readiness.

Performing a behavior taking the past experiences and future obstacles into account, the findings of this study that examined some of the variables measuring perceived behavioral control were significantly related to retirement planning. Dealing with banks and financial institutions is an important factor for intention to retirement planning. Savings incentive appeared to play a significant role in predicting retirement planning. Choice architecture refers to how choices are presented; financial products can be designed in different ways in which choices can be presented to consumers and decisions are influenced by which choices are available. This study shows that the flexibility and choice variation is important on respondent decision-making. Another finding of this research was respondent motivation on integrated plan such as pension plus insurance plan. This experience is able to increase the intention to retirement planning. Respondents strongly believed that the motivating influence provided by government pensions and lump sum amount of the employees provident fund (EPF) for their retirement planning are important. Another noteworthy finding in this analysis was seeking behavior of financial advice and financial help. Knowledge about the private-

sector retirement plans was weak and fragmented. Results indicate that this perceived behavior of financial advice and financial help seeking behavior and private-sector retirement plans were negatively associated with the behavior and factor of access to financial institution is positively related.

The results of this analysis may also have important understanding and designs for proper retirement benefit of estate sector employees in Sri Lanka.

## Reference

- Ajzen, I. (1985). From intentions to actions: A theory of planned, In Kuhl J. & Beckman J. (Eds.), *Action-control: From cognition to behavior*, Heidelberg: Springer, pp.11-39.
- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, 32, 665-683.
- Ajzen, I., & Fishbein, M. (1980). *A theory of reasoned action*. Englewood Cliffs, NJ: Prentice-Hall
- Bansal, H. S., & Taylor, S. F. (2002). Investigating interactive effects in the theory of planned behavior in a service-provider switching context, *Psychology & Marketing*, 19, 407–425.
- Castro-González, K. (2014). Financial literacy and retirement planning: Evidence from Puerto Rico, *Global Journal of Business Research*, 8(1), 87-98. doi: 10.4148/jft.v3i2.1806
- Central Bank of Sri Lanka (CBSL) (2015). Annual Report. Colombo. Central Bank of Sri Lanka
- Cuong, P. K., & Zhou, J. (2014). Factors Influencing Individual Investors' Behavior: An Empirical Study of the Vietnamese Stock Market, *American Journal of Business and Management*, 3(2), 77-94.
- Dew, J., & Yorgason, J. (2010). Economic pressure and marital conflict in retirement-aged couples, *Journal of Family Issues*, 31, 164–188. doi:10.1177/0192513x09344168
- Duflo, E. & Saez, E. (2003). The Role of Information and Social Interactions in Retirement Plan Decisions: Evidence from a Randomized Experiment. *Quarterly Journal of Economics*, 118: 815-842.
- Donaldson, T., Earl, J.K., & Muratore, A.M. (2010). Exploring the Influence of Mastery, Planning and Conditions of Workforce Exit on Retirement Adjustment. *Journal of Vocational Behavior*. 77, 279-289

- East, R. (1993). Investment decisions and the theory of planned behavior, *Journal of Economic Psychology*, 14(2), 337–375.
- Earl, J. K., Bednall, T. C., & Muratore, A. M. (2015). A matter of time: Why some people plan for retirement and others do not. *Work, Aging and Retirement*, 1, 181–189. doi:10.1093/workar/wau005
- Fiske, S. T., & Taylor, S. E. (1991). *Social cognition*. New York: McGraw-Hill
- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach*. New York, NY: Psychology Press
- Foster, L. (2015). Young People and Attitudes towards Pension Planning. *Social Policy and Society*, available on CJO 2015. doi:10.1017/S1474746415000627.
- Grable, J. E., & Lytton, R. H. (1997). Determinants of retirement saving plan participation: A discriminates analysis. *Personal Finances and Workers Productivity*, 1, 184-189.
- Grable, J.E., & Rabbani, A. (2014). Risk tolerance across life domains: Evidence from a sample of older adults. *Journal of Financial Counseling and Planning*, 25(2), 174–183.
- Gopi, M., & Ramayah, T. (2007). Applicability of theory of planned behavior in predicting intention to trade online: some evidence from a developing country, *International Journal of Emerging Markets*, 2(4),348- 360.
- GTZ (2009). *Microfinance Industry Report*. Sri Lanka. GTZ ProMiS in collaboration with The Banking with the Poor Network. Available: <http://www.microfinance.lk/publications/1254465920.pdf>
- Heenkenda, S. (2014). Inequalities in the Financial Inclusion in Sri Lanka: An Assessment of the Functional Financial Literacy, *Ilorin Journal of Economic Policy*, 1 (1), 1-29.
- Heenkenda, S. (2016). The Determinants of Dropouts from Voluntary Pension Scheme: Evidence from Sri Lanka, *International Journal of Business and Management Society*, 1(1), 10-22.
- Helman, R., Greenwald, M., & Associates, Copeland, C. & Vanderhei, J. (2015). The 2015 retirement confidence survey: Having a retirement savings plan a key factor in Americans’ retirement confidence. Employee Benefit Research Institute, 413. Available: [http://www.ebri.org/pdf/surveys/rcs/2015/EBRI\\_IB\\_413\\_Apr15\\_RCS-2015.pdf](http://www.ebri.org/pdf/surveys/rcs/2015/EBRI_IB_413_Apr15_RCS-2015.pdf)
- Henkens, K., & Dalen, H. P. (2013). The employer’s perspective on retirement. In M. Wang (Ed.), *The Oxford handbook of retirement* (pp. 215–227). New York, NY: Oxford University Press.
- Hershey, D. A., & Mowen, J. C. (2000). Psychological determinants of financial preparedness for retirement, *The Gerontologist*, 40(6), 687-697.



- Hershey, D. A., Henkens, K., & Dalen, Hendrick, P. (2010). Aging and financial planning for retirement: Interdisciplinary influences viewed through a cross-cultural lens. *International Journal of Aging and Human Development*, 70, 1-38.
- Jacobs-Lawson, J. M., & Hershey, D. A. (2005). Influence of future time perspective, financial knowledge, and financial risk tolerance on retirement savings behaviors, *Financial Services Review*, 14, 331–344.
- Kapoor, J.R., Dlabay, L.D. & Hughes, R.J. (2004). *Personal finance*, McGraw-Hill, New York, NY.
- Kang, H., Hahn, M., Fortin, D. R., Hyun, Y. J., & Eom, Y. (2006). Effects of perceived behavioral control on the consumer usage intention of e-coupons, *Psychology & Marketing*, 23(10), 841-864
- Kennedy, B. & Wated, G. (2011). Predicting credit card debt among college students: The attitudes-behavior relation, *Journal of Psychology & Behavioral Sciences*, 22, 43-50.
- Lai, M. M., & Tan, W. K. (2009). An empirical analysis of personal financial planning in an emerging economy, *European Journal of Economics, Finance and Administrative Sciences*, 16, 99-111.
- Lee, W. K. M., & Law, K. W.K. (2004). Planning for retirement in Hong Kong: An analysis of age, education, and income differences, *Social Development Issues*, 26(2/3), 109-126.
- Lewis, S., & Lindley, D. (2015). Financial Inclusion, Financial Education, and Financial Regulation in the United Kingdom. ADBI Working Paper 544. Tokyo: Asian Development Bank Institute. Available: <http://www.adb.org/publications/financial-inclusion-financialeducation-and-financial-regulation-united-kingdom/>
- Lim, H., & Dubinsky, A. J. (2005). The theory of planned behavior in e-commerce: making a case for interdependencies between salient beliefs, *Psychology & Marketing*, 22(10), 833-855.
- Lusardi, A., & Olivia, M. (2014). The economic importance of financial literacy: Theory and evidence, *Journal of Economic Literature*, 52(1), 5–44.
- Moorthy, M. K., Chelliah, T. D., Sien, C. S., Leong, L. C., Kai, N. Z., Rhu, W. C., & Teng, W. Y. (2012). A Study on the Retirement Planning Behaviour of Working Individual in Malaysia, *International Journal of Academic Research in Economics and Management Science*, 1(2), 54-72.
- Noone, J.H., Alpass, F.M., & Stephens, C. (2010). Do men and women differ in their retirement planning? Testing a theoretical model of gendered pathways to retirement preparation, *Research on Aging*, 32(6), 715-738.

- Noone, J. H., Stephens, C., & Alpass, F. M. (2009). Preretirement planning and well-being in later life: A prospective study, *Research on Aging*, 31(3), 295-317.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill
- Overton, R. H. (2007). *An empirical study of financial planning: Theory and practice* (Unpublished doctoral dissertation). Minneapolis, MN: Capella University.
- Pascual-Exama, D., Scandroglio, B., de Liano, B. G. (2014). Can we predict individual investors' behavior in stock markets? A psychological approach, *Univ. Psychol.* 13(1).12-15. doi: 10.11144/Javeriana.
- Petkoska, J., & Earl, J. K. (2009). Understanding the influence of demographic and psychological variables on retirement planning, *Psychology and Aging*, 24(1), 245–251.
- Power, M. L., & Hira, T. K. (2004). University-provided retirement planning support and retiree financial satisfaction during retirement: Differences by gender, job classification, and planning behavior, *Risk Management and Insurance Review*, 7(2), 121-149.
- Ramesh, R., Rasnayake, S., & Kamalrathne, T. (2013). Women's Rights in Sri Lanka: An inquiry into the Rights of Plantation Women, *International Journal of Arts and Commerce*, 2(7), 11-24.
- Reitzes, D. C., & Mutran, E. J. (2004). The transition into retirement: Stages and factors that influence retirement adjustment, *International Journal of Aging and Human Development*, 59, 63-84.
- Rosle M., Jamal, A.A.A., Geetha, C., Sang, L.T., & Karim, M.R.A. Rahimie Abd (2013). Revisiting the relationship between attitudes and retirement planning behaviour: A study on personal financial planning, *International Journal of Multidisciplinary Thought*, 3(2), 449–461.
- Rodin, J. (1986). Personal control through the life course. In R. Abeles (Ed.), *Implications of the life span perspective for social psychology* (pp. 103-120). Hillsdale, N J: Erlbaum.
- Rutherford, L.G. & deVaney, S.A. (2009). Utilizing the theory of planned behavior to understand convenience use of credit cards, *Journal of Financial Counseling and Planning*, 20(2), 48-63.
- Segel-Karpas, D., & Werner, P. (2014) Perceived Financial Retirement Preparedness and Its Correlates: A National Study in Israel, *The International Journal of Aging and Human Development*, 79: 279-301.
- Selltiz, C., Wrightsman, L.S., & Cook, W. (1976), *Research Methods in Social Relations*, Holt, Rinehart and Winston, New York.
- Shim, S., Easlick, M. A., Lotz, S. L., & Warrington, P. (2001). An online pre-purchase model: The role of intention to search, *Journal of Retailing*, 77, 397–416.

- Shim, S., Xiao, J. J., Barber, B. L., & Lyons, A. (2009). Pathways to life success: A conceptual model of financial well-being for young adults, *Journal of Applied Developmental Psychology*, 30(6), 708-723.
- Sivapragasam, P.P, (2005). Right to Education in the Plantation Sector in Sri Lank, Human Development Organization, Kandy
- Stawksi, R. S., Hershey, D. A., & Jacobs-Lawson, J. M. (2007). Goal clarity and financial planning activities as determinants of retirement savings contributions, *International Journal Aging and Human Development*. 64(1), 13-32.
- Taylor, M. A. & Doverspike, D. (2003). Retirement planning and preparation. In A. Adams & Beehr, T. A. (Eds), *Retirement: reasons, Processes, and Results* (pp.53-82). New York, NY: Spring Publishing Company.
- Thompson, S. C., & Spacapan, S. ( 1991 ). Perceptions of control in vulnerable populations, *Journal of Social Issues*, 41, 1-21.
- Turnham, J. (2010). Attitudes to savings and financial education among low-income populations: Findings from the financial literacy focus groups. Center for Financial Security WP 10, 7
- Topa, G., Moriano, J. A., Depolo, M., Alcover, C. M., & Morales, J. F. (2009). Antecedents and consequences of retirement planning and decision-making: A meta-analysis and model, *Journal of Vocational Behavior*, 75, 38–55. doi:10.1016/j.jvb.2009.03.002
- Xiao, J. J., & Wu, J. (2006). Applying the theory of planned behavior to retain credit counseling clients, *Proceedings of the Association for Financial Counseling and Planning Education*, 91–100.
- Yetmar, S., Murphy, D. (2010). Personal Financial Planning Attitudes - A Study, *Management Research Review/ Emerald Publications*, 33(8), pp. 811 – 817.
- Wang, M. (2007). Profiling retirees in the retirement transition and adjustment process: Examining the longitudinal change patterns of retirees' psychological wellbeing, *Journal of Applied Psychology*, 92, 455-474.
- Wood, A., Downer, K., Lees, B. & Toberman, A. (2012). Household Financial Decision Making: Qualitative research with couples, Department for Work and Pensions Research Report 805, London: DWP.
- Xiao, J.J. (2008). Applying behavior theories to financial behavior. In Xiao, J.J. (Ed.), *Handbook of Consumer Finance Research* (Chapter 5, 69-81). NY, NY: Springer.
- Zacher, H. (2013). Older job seekers' job search intensity: The interplay of proactive personality, age, and occupational future time perspective, *Ageing & Society*, 33, 1139–1166.