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# Financial and Pension Literacy: A Survey of Pension Scheme Members in Kenya



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## EXECUTIVE SUMMARY

Financial and pension literacy influences the saving behavior of individuals that in turn contributes to economic growth of countries. The gist of the study was to assess the levels of finance and pension literacy, determine the financial literacy needs, establish the challenges to participation in finance and pension education and to recommend the strategies that can be put in place to enhance financial and pension literacy amongst members of pension schemes in Kenya. A sample of 2395 employees was drawn from the members of the 1308 pension schemes across Kenya in the RBA register on 31 May 2010. The results indicate that the pension scheme members have higher level of knowledge on pension scheme practices than general financial literacy issues and identify the lack of forum for involvement and lack of understanding of pension fund matters as the major hindrances to participation in pension scheme affairs, both of which can be addressed through appropriate finance and pension literacy programs. Additional findings disclose that the ideal pension literacy program should focus on the pension law, investments, design and computation of retirement benefits while the finance program should focus on investments, cost and debt management. Key challenges to participation in finance and pension literacy programs include; lack of finance, lack of the programs at the work place, unavailability of the courses in the market, work load, perception that pension education does not have immediate benefits and increased family commitments. The study recommends the strategies to encourage members to participate in finance and pension literacy courses as; financial support to members, use of practical approaches in teaching, changing the attitude on pension and finance literacy programs and specializing training based on management levels.

## 1.0 INTRODUCTION

Financial literacy plays a critical role in influencing the savings behavior and member participation in pension schemes in addition to reducing debt loads and accumulating wealth and managing it effectively (Agnew, Szykman, Utkus and Young, 2007; FSD, 2008a; Lusardi, Mitchell and Curto, 2010).

Financial literacy has been defined as: *the ability to make informed judgments and to take effective decisions regarding the use and management of money* (Worthington, 2005, p.2). Remund (2010) on the other hand defines it as *a measure of understanding key financial concepts*. The authors suggest that financially literate population is able to make informed decisions and take appropriate actions on matters affecting their financial wealth and well being. Financial literacy requirements change over the life time of an individual in response to the changing financial needs and is therefore important in the private pension's field due to the unique nature of the financial products supplied which are complex, long-term and have wide social coverage (OECD, 2008).

Apathy, indifference to pension planning (and personal finances in general) and access to financial education programs form a large barrier to improving people's knowledge of the pension systems and how it affects them (Besley and Prat, 2005; Worthington, 2005; Skog, 2006; Tippet and Kluvers, 2007; James, 2009). Evidence from both developing and developed countries indicates that many individuals do not know where to get trustworthy and impartial advice about pension and financial issues for instance, in the United States of America, where households have a wide array of financial products, low levels of financial literacy prevents consumers from making good decisions on financial products (Lusardi and Mitchell, 2006; OECD, 2008; James, 2009; Lusardi et al, 2010).

According to Kefela (2010), financial knowledge is directly correlated with self beneficial financial behavior and so financial education should take a wholesome perspective to include the fundamentals of finance since without understanding the basic finance principles, pension education would be ineffective. In the words of Kefela (2010, p.205), " participants who are less financially literate are more likely to have problems with debt, are less likely to save, are more likely to engage in high cost mortgages and are less likely to plan for retirement" and by extension are less likely to make better choices for their pension schemes.

Financial literacy levels in developing countries are quite low. For instance, DFID (2008) shows evidence that only half of the adult population knew how to use basic financial products. The same study found that in seven African countries only 29% of adults had a bank account and that approximately 50% used no financial products whatsoever, not even informal financial products. In Kenya, FSD (2009) reported that 59.5% of the population was

excluded from the use of formal financial services. According to FSD (2009), exclusion decreases as the level of education increases from 55.9% for those with no education to 8% for those with tertiary education.

As the African financial markets expand, there is great need for training and research activities to be highly customized and should include a pragmatic approach to policy options and practical implementation problems (Calvert, Campbell and Sodini, 2005; Mandell, 2006a; Mandell, 2006b; FSD, 2008b).

A saving for retirement culture is largely absent in African countries due to the traditional systems of old age support by children and lack of knowledge on savings options (Odundo, 2003), which is evident in the fact that only 15% of Kenyans were in any form of pension arrangement by 2009 (Nyakundi, 2009). While private foundations are also supporting a number of initiatives to look in to improving financial literacy in Kenya, these initiatives are mostly being implemented through client-led finance institutions such as Equity Bank and microfinance institutions (Cole and Fernando, 2003; FSD, 2008b; FSD, 2010).

Kenya's Vision 2030 (strategic plan to achieve key economic milestones by 2030) documents pension provision as an important pillar to achieving economic growth and faster development of the financial markets. In the long term therefore, the population should be empowered to make financial decisions which will in turn contribute to reduction in old age poverty as the population will be empowered to make rational financial decisions for their interests in both the short term and the long term (Kafele, 2010). Furthermore, the expansion of financial services in Kenya creates not only great opportunities, but also more potential for the general population to take wrong financial decisions hence the need to enhance financial literacy initiatives.

By 2007, RBA had trained over 1,000 schemes with 2611 trustees which accounts for approximately 83% of the total registered pension schemes in Kenya (Mutuku, 2007). However, this training is only centered on the trustees with the hope that the knowledge and information they acquire will trickle down to the other members of the pension scheme, which may not necessarily be the case.

Literature and data on Africa's pension reforms and financial literacy programs is limited, with very little evidence of any studies evaluating the financial literacy programs in Africa. Moreover FSD (2008b) challenges policy makers to address financial literacy needs of the general population in Kenya. This study seeks to address the knowledge gap by establishing the financial literacy levels amongst members of pension schemes in Kenya, determine the finance and pension literacy training needs, the challenges to participation in finance and pension literacy programs and determine the strategies to improve finance and pension literacy amongst pension scheme members in Kenya.

This paper is organized as follows; section 2 discusses the research methodology, sections 3 and 4 addresses the empirical findings and managerial implications of the study while section 5 makes pertinent conclusions.

## **2.0 RESEARCH METHODOLOGY AND DATA COLLECTION**

### *2.1 Population and Sampling Design*

The population of the study comprised of members of occupational pension schemes in Kenya. The regulator of the retirement benefits sector in Kenya (Retirement Benefits Authority; RBA) provided the sampling frame that reported 1308 pension schemes with an estimated membership of 2 million. A sample of 2 395 active members was drawn in stages. The schemes were first clustered in eight provinces namely; Nairobi, Central, Rift Valley, North Eastern, Eastern, Coast, Western and Nyanza as registered by the Retirement Benefits Authority. Purposive sampling was then used to determine the number of participating schemes with a condition to include at least 40% of the schemes in every province since some provinces had very few schemes. The participating schemes were then randomly drawn from the sample. Proportionate stratification was used to select the number of members to participate in the survey from each scheme. The participating members were then randomly selected at the data collection stage with a condition to include at least one trustee (member of the pension scheme's board) from each scheme. Data was collected between 19 August and 31 October 2010. The eventual sample comprised 1554 members, representing a 65% response rate.

### *2.2 Measuring Instruments*

Self constructed instruments were used to determine financial literacy levels and needs, barriers to participation in pension scheme matters, challenges to participation in finance and pension literacy programs and the possible strategies to enhance participation in finance and pension literacy programs.

The financial literacy measurement instrument was developed by contextualizing basic literacy questions which respondents were required to answer. These questions were adapted from Moore (2003) and Lusardi and Mitchell (2006) and contextualized to fit the Kenyan scenario. The eventual instrument used in the current survey included three basic financial knowledge questions and four questions related to pension scheme knowledge. The financial literacy quiz asked the respondents; the method used by commercial banks to calculate interests on loans (simple or compound interest), whether it is possible for an investment in ordinary shares listed at the stock exchange to reduce in value after six months and the product to invest in to have the highest expected long-term growth (ordinary shares or treasury bills). The pension literacy quiz included; identification of the respondent's

pension scheme design (defined contribution or defined benefit), whether members are allowed to borrow from the pension scheme, the persons who elect pension scheme trustees (members alone, sponsors alone, RBA or a combination of sponsors and members) and whether members can withdraw 50% of their savings from pension schemes to attend to their personal emergencies.

A self constructed instrument was used to determine the financial and pension scheme literacy needs. The instrument included twelve personal finance and eleven pension literacy concepts drawn from empirical studies. The respondents were asked to indicate on a 5 point scale (Not at all to very large extent) the degree to which they would want to be trained on specific matters. *Not at all (1)* implied that they had sufficient knowledge and therefore did not need training while *very large extent (5)* implied that they were not knowledgeable and therefore required much training. The financial literacy concepts included; setting personal financial goals, calculating personal incomes, identifying short term and long term personal expenses, identifying and assessing assets to invest in, identifying and assessing sources of debt, reducing personal debt, developing and applying cost saving strategies, determining saving avenues, developing personal budgets, keeping records, reading and interpreting statements generated by financial institutions and using financial knowledge to make personal financial decisions. The pension literacy concepts included; operations of pension schemes, member's rights in the pension schemes, investment options for pension schemes, the pension law as stipulated by the RBA Act, calculation of benefits due at retirement, pension scheme design, decision making in pension schemes, responsibilities of pension scheme trustees, relationship between the pension scheme service providers and trustees and members, role of the pension scheme service providers and the role of the Retirement Benefits Authority.

The instrument used to capture barriers to participation in pension scheme matters included six elements namely; lack of personal interest, lack of understanding of pension issues, lack of finance education, work involvements, absence of forums to get involved and the gender. These factors were anchored on a 5 point scale ranging from not at all to very large extent. *Not at all (1)* meant that the factor was not a barrier while *large extent (5)* meant that the factor was a major barrier. An additional instrument required the respondents to state the extent to which involvement in financial education would help to deal with the barriers to involvement in pension scheme affairs.

A self constructed instrument to determine the barriers to involvement in finance and pension literacy programs included 17 elements namely; availability of money to pay for the courses, gender, current level of education, lack of prior training in business, age, individual's income, culture and beliefs, work experience, family commitments, belief that



finance is a difficult subject, failure by employers to offer such education opportunities, work load, health, lack of personal interest, absence of the courses in the market, accessibility to training venues and the lack of immediate benefits of studying pension education. The factors were put on a 5 point likert scale ranging from not at all to large extent. *Not at all (1)* implied that the factor was not a barrier while *large extent (5)* meant that the factor was a serious barrier to participation in finance and literacy programs.

The strategies to enhance participation to finance and pension literacy programs instrument, had eleven constructs that included; financial support, offering specialized training for men and women, providing basic personal finance education opportunities, starting finance and pension education at an early age, providing specialized training to people in different management levels, changing the attitude on finance courses, using practical approaches when teaching finance programs, employer's providing pension literacy programs, allowing pension scheme members time off to attend financial literacy programs and improving accessibility to finance and literacy programs. A 5 point likert scale ranging from not at all to large extent was used to measure the constructs. *Not at all (1)* implied that the factor was not an effective strategy while *large extent (5)* meant that the factor was a valuable strategy in the enhancement of participation in finance and pension literacy programs.

The questionnaire further contained questions that captured the respondent's age, education level, gender, job experience, management level, income, marital status, pension plan design, having attended previous literacy program, areas of specialization and membership to the pension plan's board of trustees. Respondents who had undertaken previous finance or pension training were required to indicate the frequency of attendance in the previous two years and those who had been trained by RBA were required to indicate the effectiveness of the training offered by RBA in addition to suggesting the means that were most effective for imparting finance and pension knowledge.

### *2.3 Validity and Reliability of the Questionnaire*

The questionnaire's content validity was guaranteed by the inclusion of items that were supported by literature review. The quiz used to measure financial and pension literacy levels included items that tested specific form of knowledge, ability or skills to apply the knowledge and perceived knowledge as recommended in Hung, Parker and Yoong (2009). Besides, the quiz questions were drawn from empirical studies (Moore, 2003; Lusardi and Mitchell, 2006) and customized to fit the Kenyan situation. The questionnaire was pre-tested on 128 respondents and all the likert scale instruments produced cronbach alpha values in excess of 0.7.

## 2.4 Data Analysis

To determine pension finance literacy levels, a binary measure of literacy advanced by Moore (2003); Lusardi and Mitchell (2006); Hung, Parker and Yoong (2009) was used. The methodology involves contextualizing basic literacy questions which respondents answer. The quiz used in the current survey included seven questions. Based on their responses, individuals were separated into a “low” literacy group (0 – 3 correct answers) and a “high” literacy group (4 – 7 correct answers). Percentage scores were calculated for each of the respondent, question, classification (finance or pension literacy) and the overall score. One way ANOVA was used to test whether the means of the literacy scores differ significantly on the basis of the independent variables (age, education level, gender, job experience, management level, income, marital status, pension plan design, having attended previous literacy program, areas of specialization and membership to the pension plan’s board of trustees). Where applicable, post hoc analysis was conducted by use of the Tukey approach using SPSS version 17 to determine the specific categories whose mean differed significantly from the others.

Finance and pension literacy needs, hindrances to participation in pension scheme matters, hindrances to enrollment in finance and pension literacy programs and the strategies to enhance participation to finance and pension literacy programs (measured on a likert scale) were ranked on the basis of importance indices. The importance index discussed in Jacobs, Whittington and Greyling (2010) was constructed as a quotient of the mean and the standard deviation to eliminate the extreme effects of the mean. The index; a reciprocal of the coefficient of variation, shows the weight of each factor on a likert scale and so the higher the index, the highly rated a factor is deemed to be (Jacobs *et al*, 2010). In each case, the average of the importance index was calculated to determine the factors that were significant.

## 3.0 EMPIRICAL FINDINGS

### 3.1 Demographic Characteristics of the Sample

Table 1 shows that most of the respondents were male (58.5%), from Nairobi province (76.8%), aged between 30 and 35 (27.2%), with university education (46.3%), predominantly married (70.9%), in the middle management (53.4%), non trustees (80.3%), specialized in arts based courses (75.5%), in the monthly income levels of between Ksh. 40,001 – 60,000 and with job experience ranging from 6 to 10 years (30.7%).

### 3.2 Participation in Previous Finance and Pension Literacy Programs

Overall 39.5% of the respondents had participated in a finance or pension training. Much of this training had been offered by RBA (56.8%), at the pension scheme’s AGM (36.1%) and

in-house (42.3%) by service providers. The respondents reported having attended the finance or pension literacy training once (54.6%), twice (23.1%), thrice (12.6%) and more than three times (9.7%) in the previous two years.

### *3.3 Financial Literacy Levels*

Overall 45.3% of the respondents are in the “low” literacy group (correct answers ranging from 0 – 3). The respondents demonstrated a strong understanding of pension scheme issues (58.7%) as opposed to the personal financial issues (49.3%). Table 2 shows the percentage respondents who answered the questions correctly. Regarding the specific literacy questions table 2 discloses that 60.8% (standard deviation 0.416) knew that banks apply compound interest principles in determining the interest charges, 60.3% (standard deviation 0.489) knew that stocks can have a value less than the cost six months after purchase, 26.9% (standard deviation 0.444) knew that investment in stocks give long-term returns compared to the treasury bills, 72.5% (standard deviation 0.447) were aware of their pension designs, 65.8% (standard deviation 0.474) knew that they are not allowed to borrow from their pension schemes, 41.2% (standard deviation 0.492) knew that the pension board trustees are appointed by both the members and the sponsors while 55.1% (standard deviation 0.498) knew that it was not possible to withdraw pension benefits prematurely. Each of the responses has a range of 100% with 4.8% of the respondents having answered all questions wrongly and 5.7% having answered all the questions correctly. An analysis of the respondents who answered at least one question correctly shows that, 10.3% answered one, 15.6% answered two, 24.5% answered three, 15.4% answered four and 16.2% answered five. The results indicate a normal distribution that is slightly skewed to the right.

### *3.4 Determinants of Pension Finance Literacy*

One way Anova results in table 3 show significant differences in the pension finance literacy levels on the basis of education level, gender, management level, income, pension plan design, participation in previous finance education, and membership in a pension plan board (trustee) ( $\alpha < 0.01$ ) while age, job experience and area of specialization were significant at  $\alpha < 0.05$ . The results are consistent with previous studies. The only variable in which significant differences in the level of pension finance literacy was not noted was marital status. This result contrasts with Bell, Carraso and Steuerle (2005) who find married workers outperforming unmarried ones in terms of pension awareness and knowledge. In Kenya therefore, the marital status does not influence the level of pension literacy. With regard to the variables that did not require post hoc analysis namely; gender, pension plan design, participation in previous education and membership to the pension plan board; men had higher literacy scores than women (mean 56.2%, 50.1% respectively) confirming the findings in Chen and Volpe (2002) and Arnone (2004), members of defined contribution designs had

higher literacy scores than those in defined benefit designs (mean 64.6%, 31.3% respectively), those who had participated in previous pension finance education had higher literacy scores (mean 63.4%; 47.3% respectively) and pension plan board members (trustees) had higher literacy scores than the other members (mean 61.3%; 51.8% respectively) since RBA's training targets trustees and not the general membership of the pension plan (Mutuku, 2007).

### 3.5 Post Hoc Analysis

Post hoc analysis summarized in table 4 shows that pension literacy differs significantly between the age groups 24 - 29 and 42 - 47 (mean 50.2%, 58.1% respectively) ( $\alpha < 0.05$ ). The finding confirms the assertions of Arnone (2004); FSD (2009); Bell *et al* (2005), RBA (2005) and Edmiston and Gillet-Fisher (2006) who argue that older employees are likely to have more exposure and hence higher pension finance literacy. Post hoc analysis in table 5 shows that pension finance literacy levels do not differ significantly between those with primary education and secondary education (mean 35.6%; 42.3% respectively). The literacy levels however differ significantly between those with primary and secondary education on one hand and those with college and university education on the other ( $\alpha < 0.01$ ). These findings confirm those in Lerman and Bell (2006) and Hastings, Mitchell and Chyn (2011) who document that education exposes individuals and enables them to learn and acquire knowledge in different spheres of life. Further, Post Hoc analysis (table 6) discloses that pension plan workers with less than 5 years of work experience have significantly lower pension literacy scores (mean 49.6%) compared to those with more experience (6-10, mean 54.6%; 11-15, mean 55.7%; 16-20, mean 54.6%; 20+, mean 53.9%). On the basis of the management level; table 7 shows that the literacy levels differ significantly between top, middle and lower management levels (mean 65%, 55.2% and 49.8% respectively) confirming the findings in RBA (2005) and Edmiston and Gillet-Fisher (2006). Regarding the specialization of the respondents, the mean pension finance literacy scores differ significantly between those with arts and business specializations (mean 51.2% and 55.8% respectively) although those with specialty in sciences have a lower overall score (mean 51.1%) (table 8). On the basis of income, table 9 disclose that those who earn less than Ksh. 20 000 have significantly different average pension literacy scores (mean 37.5%) than those who earn 20 001-40 000 (mean, 48.3%), 40 001-60 000 (mean 53.1%), 60 001-80 000 (mean 54.8%), 80 001-100 000 (mean 58.1%) and those who earn more than 100 000 (mean 65.9%). There is however no significant difference between the pension finance literacy scores by the 20 001-40 000 and 40 001-60 000 categories, 40 001-60 000 and 60 001-80 000 groups, 40 001-60 000 and 80 001-100 000 groups, 60 001-80 000 and 80 001-100 000 groups and 80 001-100 000 and over 100 000 groups. These findings are congruent with Lerman and Bell (2006); Agnew *et al* (2007) and Hastings *et al* (2011).

Lastly, financial literacy levels differ significantly amongst the provinces pointing that the worker's geographical environment influences their financial literacy levels. The interpretation of this finding is however not conclusive since a majority of the respondents (76.8%) were drawn from Nairobi province.

### *3.6 Financial Literacy Training Needs Assessment*

The overall financial and pension literacy needs score was 70.8% (3.45 on a scale of 5) with a 10.4% variance. The average need score for the financial literacy needs was 63.8% while the pension literacy needs score was 74.4% indicating that respondents had more interest to learn pension fund matters as opposed to basic financial literacy probably because the sample was drawn from members of the occupational pension plans. The importance indices show that pension scheme members perceive their knowledge in the pension law, their skills in calculating pension benefits and their understanding of pension scheme investments and design as low and hence the need to focus the training efforts on the areas as indicated in table 10. A similar conclusion is reached by Mutuku (2007) and RBA (2008) who single out training of pension scheme trustees on investments, cost-benefit analysis and pension law as important discussion topics. Moreover OECD (2008) advises that financial education for pension scheme members be undertaken in the context of the pension regulation and supervisory framework. The inadequate understanding on how to calculate retirement benefits had also been highlighted in RBA (2008). Knowledge on pension scheme operations, member's rights and the role of the various stakeholders seems to be high. Participants who had attended financial and pension literacy training forums indicated that they had been trained by the service providers (42.3%) or the RBA (56.8%) implying that knowledge on the existence and role of the parties was prevalent. Additionally, the AGM serves as a meeting point for the members, trustees, custodians, auditors, fund managers and the administrators. This seems to have boosted the awareness levels on the rights, duties and responsibilities of the pension scheme's stakeholders.

The importance index for the financial literacy needs (table 11) indicate a high preference for the impartment of skills necessary to enhance investments, cost saving, debt and savings evaluation in addition to setting personal financial goals. The finding compares to Lusardi (2006) who conclude that finance literacy programs should include identifying; assets and debt, cost saving strategies, setting personal financial goals and saving avenues. Although Lusardi (2006) ranked preparing personal budgets, keeping records, identifying expenses and reading statements from financial institutions as critical, this study finds the variables as not critical to pension plan membership in Kenya.

Further one way ANOVA test indicates that all the finance and pension literacy needs are significantly different on the basis of education level, occupational level, monthly income and

participation in financial literacy programs. This finding calls for specialized financial literacy programs to be tailored to satisfy the various niches on the basis of education, management level, income and those who have already attended past finance and pension literacy forums. Further analysis was conducted to explain the unique training needs between the independent variables. Table 12 reports the training needs that were differentiated amongst the independent variables.

### *3.7 Factors Hindering Member's Involvement in Pension Scheme Matters*

Six factors derived from empirical literature as hindrances to member's involvement in pension scheme matters were analyzed for their perceived importance and whether financial education could help minimize their effects. The importance index generated is reported in table 13 which shows that the main barrier for participation in pension scheme matters by members is the lack of forums for involvements as well as the lack of understanding on pension scheme matters. The finding compares with Choi, Laibson and Madrian (2005) who conclude that effective participation and quality decision making can only be achieved if pension scheme members, understand how pension schemes operate. Moreover RBA (2008); FSD (2008a) document that in Kenya, the lack of a unified financial education campaign impacts negatively on the general saving culture as well as the level of financial awareness of the public. However lack of personal interest and gender are not major hindrances to involvement in pension fund matters in Kenya.

One way ANOVA on the variables, indicate that the hindrances are significantly different on the basis of gender, age education levels, occupational level, trustees, job experience, income and participation in finance and pension literacy programs. Identification of forums for one's involvement in pension scheme matters are differs on; gender, age, education levels, occupational level, job experience, income and involvement in previous training. Lack of personal interest is significantly different on the basis of gender, education level, occupational level, trustees, job experience, income and participation in previous finance education. The finding implies that personal interest on pension matters is invoked by one's gender (male employee have more interest), education level (highly educated individuals have more interest), occupational level (middle and top managers have more interest), trustees (trustees have more interest than the non-trustees), experience (highly experienced individuals have more interest), income (higher income earners have more interest) and participation in previous finance and pension literacy programs (individuals who have participated in finance and pension literacy have more interest). Lack of understanding on pension matters significantly varies on the basis of gender, age, education levels, occupational level, whether the individual is a trustee, job experience, monthly income and participation in previous finance education. Lastly inadequate finance education as a barrier

to involvement in pension scheme affairs differs significantly on the basis of gender, age, education level, specialization, occupational level, whether one is a trustee, income and participation in financial education.

Further analysis was conducted to determine whether finance and pension literacy education would help to solve the challenges to participation in pension scheme activities. Table 14 reveals that pension and finance literacy programs would be useful to create forums for individuals to be involved in pension fund matters. Additionally, they would stimulate the personal understanding of the pension matters but would not help to stimulate personal interest amongst the participants.

### *3.8 Challenges to participation in finance and pension literacy programs*

Importance indices were calculated to rank the perceived obstacles to the participation in finance and pension literacy programs. The challenges and corresponding indices are ranked in table 14. The results point the most important challenges as finance, unavailability of literacy programs at the work place, inaccessibility of the training venues, unavailable literacy courses in the market, excessive workload at the workplace, absence of immediate benefits to pension education and family commitments. However, personal interest, perception of finance as a difficult subject, inadequate job experience, gender, culture, absence of training in a business related field, education, health and age were not considered as significant challenges.

Finance and pension literacy courses are offered by experts and are generally quite expensive (Lerman and Bell, 2006). The present study seems to concur with Lerman and Bell (2006) as it identifies finance as the most highly ranked challenge to participation in finance and pension literacy programs. Milne, VanDerhei and Yoboski (1996) argue that employers play a lead role in encouraging employees to undertake retirement education. In absence of such initiative by the employer employees take less interest in retirement preparation and planning. It is not surprising then that the lack of finance and pension literacy programs at the work place hinders effective participation of employees to the finance and literacy programs. The study further supports Chen and Volpe's (2002) proposition that workload and family commitments are significant barriers to participation in finance and pension literacy programs. The study however differs with Chen and Volpe (2002) on the assertion that gender, level of education, area of specialization and age are major hindrances to participation in the finance and pension literacy programs. The difference could be attributed to the demographic differences between the respondents identified in both studies.

Arnone (2004) and Lusardi (2006) finds culture and belief as a major impediment to participation in finance and pension literacy however the present study does not consider it

to be a major barrier. Family commitments have been identified as a major challenge to participation in finance and pension literacy programs (table 15). This finding agrees with Marcolin and Abraham (2006) who concluded that single people were more likely to be less financially literate than those who were married with children or those who were single and had responsibility to care for their extended families.

Edmiston and Gillet-Fisher (2006) mention that psychological processes such as information processing, learning, and attitude and/or behavior change will influence financial literacy. However the present study does not consider perception of finance and pension education as important hindrances. According to Schellenberg, Turcotte and Ram (2005), individuals with good health condition are more likely to participate in finance and pension literacy education programs. The present study however does not find health to be a major impediment to the participation of pension scheme members to finance and pension literacy programs.

One way ANOVA indicate that all the challenges vary significantly on the basis of the education level, occupational level, monthly income and respondent's participation in a finance or pension literacy program. It can be concluded that the challenges to participation in the finance and pension literacy programs affect individuals differently depending on the four variables.

### *3.9 Strategies to enhance Participation to Finance and Literacy Programs*

Importance index for the strategies to augment finance and pension literacy shown in table 16 disclose that providing finance, use of practical approaches when teaching finance matters, starting pension and finance education at an early age, changing the attitude on financial literacy and encouraging finance and pension training in school as well as providing specialized training for people in different management levels can improve finance and pension literacy. However, providing the literacy program by the employer, employers giving individuals time off to attend to the courses, offering finance courses close to the individuals and providing basic finance education and providing specialized training for both men and women were not ranked highly. Lusardi (2006) documents that providing financial support to individuals can help them participate in finance and pension literacy programs. The present study supports the view as financial support was ranked as the highest strategy. The use of practical approaches in teaching finance and pension literacy programs was also ranked highly. Although Chen and Volpe (2002) recommend the need to design a financial literacy course for women that will be delivered by factoring in their educational background, life experiences and socio-economic status as they were disadvantaged by the conventional finance literacy curriculums, the present study does not consider it a significant strategy to address the problem of participation in finance and pension literacy courses. The present



study identifies the incorporation of finance and pension literacy courses in high school curriculums as a moderate strategy. The same views were upheld by Lerman and Bell (2006) who designate high schools as good education avenues as education is mandatory, the audience wide and participants are at an age where they are developing life skills. Clark d'Ambrosio and McDermed (2003) urges employers to offer retirement education programs at the work place. The present study however does not find this a highly effective strategy amongst the Kenyan workers.

### *3.10 Training and Awareness Campaigns Offered by RBA*

The respondents who had been trained by RBA regarded the training as effective (74.3%). However, only 41.2% of the overall respondents regarded the awareness campaigns carried out by RBA as effective to stimulate their interest and learning on pension matters. The respondents preferred RBA to communicate to them via newspaper adverts (50%), radio (44.4%), television (51.3%), newsletters (23.6%), emails (38%) and SMS alerts (30.1%). Other methods that were suggested by the respondents as effective for communication included; road shows, brochures, banners, billboards, door to door campaigns and making use of interactive websites for instance "face book" and "twitter" to create a network of interaction where pension information could be passed across.

## **4.0 MANAGERIAL IMPLICATIONS OF THE STUDY**

### *4.1 Summary of the Findings*

The following are the most important results of the study:

- 4.1.1 Financial and pension literacy levels amongst pension scheme members in Kenya averages 54.3%; with awareness on pension matters exceeding that of general finance matters. The literacy levels further differ significantly across gender, education level, occupational level, participation in previous education and provinces.
- 4.1.2 A pension literacy program for the pension scheme workers should include the "technical" aspects of pension scheme management such as the pension law, investments, designs and calculating the retirement benefits. The "operational" aspects such as rights of members and responsibilities of the various stakeholders require less effort in training.
- 4.1.3 A finance literacy program for pension scheme workers in Kenya should include investments, cost management, debt and savings options and setting personal financial goals.
- 4.1.4 The main hindrances to participation in finance and pension literacy programs are; lack of forums for involvement, lack of understanding on pension fund matters and

- work commitments. Having a suitable finance and pension literacy program can create forums for involvement and ensure understanding of pension fund matters.
- 4.1.5 The major challenges to participation in finance and pension literacy programs are finance, lack of the programs at the work place, courses not available in the market, work load, perception that pension education does not have immediate benefits and increased family commitments.
  - 4.1.6 Strategies that can be taken to enhance finance and pension literacy programs amongst members of pension schemes in Kenya include; financial support, use of practical approaches in teaching, changing the attitude on pension and finance literacy programs and specializing training based on management levels.
  - 4.1.7 Awareness campaigns carried out by the RBA have a moderate effect on stimulating interest and learning on pension matters.

#### *4.2 Immediate Measures for Improvement*

The study recommends the following measures for immediate implementation:

- 4.2.1 National awareness campaigns conducted by RBA need to be intensified through the use of a combination of measures to increase finance and pension literacy. The use of road shows can for example be complemented with newsletters and brochures and publicized on the television and radio. Attendance to face to face interactions for instance, during the open days can be enhanced by intensive promotion campaigns.
- 4.2.2 RBA should lobby all professional and trade associations to sensitize their members on financial and pension matters.
- 4.2.3 Social networking websites such as face book and twitter are quite effective in reaching a majority of the population. Finance and pension literacy tips can be passed on through these avenues.
- 4.2.4 Include basic finance and pension literacy tips in the RBA website and also provide a retirement calculator in the website.
- 4.2.5 Use of the television for publicity is the most popular media of communication to the pension scheme members and so its use should be maximized. Interactive sessions with audiences can be hosted on TV to encourage participation. This will not only create forums for involvement of the members of the public on pension matters but also increase their understanding.
- 4.2.6 The pension scheme AGM as a suitable venue to impart finance and literacy programs. RBA can target specially made newsletters on finance and pension literacy issues and have them circulated to the members at the AGM.

#### *4.3 Short-term Policy Implications*

- 4.3.1 RBA should seek partnerships with interested parties (universities, colleges and NGOs) on the provision of finance and pension literacy programs. The role of RBA will be to ensure that the programs offered have the suitable content especially relating to pension matters. The other partners will be responsible for training (including training of trainers) and availing the appropriate facilities and venues. The partnerships should ensure that the programs are relevant in terms of content and are delivered in a practical and simplified mode.
- 4.3.2 RBA should liaise with the central government to seek ways of raising funds to support finance and pension literacy programs. These funds can be channeled through training institutions (partnership agreements with RBA) to subsidize the literacy programs.
- 4.3.3 All the finance and pension literacy needs reviewed in the study are significantly different on the basis of education level, occupational level, monthly income and participation in financial literacy programs. This finding calls for specialized financial literacy programs to be tailored to satisfy the various niches on the basis of education, management level, income and those who have already attended past finance and pension literacy forums.
- 4.3.4 Some financial institutions (microfinance and commercial banks) have been offering finance literacy programs to their clients in specific products. There is need to encourage the finance services sector (commercial banks, insurance companies and others) to engage in a win-win situation by expanding their literacy programs to the general public with the aim of increasing their market shares and capturing the unbanked market niches. Additionally, finance and pension literacy issues should be introduced in tertiary education institutions in form of extra-curricular activities.

#### *4.4 Long-term Policy Implications*

- 4.4.1 Kenya should have a national financial literacy strategy that should include retirement planning. The strategy should aim to equip Kenyans with lifelong understanding of finance and pension matters and should be made in consultation with all the relevant stakeholders (business, government and non-governmental organizations).
- 4.4.2 RBA should mandate pension scheme trustees to orientate members once they join the pension schemes and make it a compliance requirement. This will create awareness of the existence and operations of pension schemes by the members but will require a change in the RBA Act.

4.4.3 Taxation incentives can be introduced to encourage both employers and employees to encourage work place financial literacy.

## **5.0 LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FURTHER RESEARCH**

The major limitation of the study lies in the fact that its scope was limited to the employees covered by the occupation pension schemes in Kenya thus excluding those covered by the individual pension schemes, employees on terms other than permanent and pensionable and employees in the informal sector. Additionally the pension schemes whose sponsors had more than one branch in different provinces posed a challenge as not all branches could be visited. Further exploratory research is needed to establish the nature of the contract that would effectively manage a public private partnership in the context of delivery of a finance and pension literacy program. Additionally, the present study should be replicated with informal workers and those who save with the individual retirement schemes.

## **6.0 CONCLUSION**

Although the finance and pension literacy levels for the members of Kenya's occupational pension schemes are above average, effort should be done to increase their participation in the management of their pension schemes. Appropriate finance and pension literacy programs should be crafted that meet the market needs identified in the study. Additionally, the Kenya government should put in place a national financial and pension literacy strategy and partner with other institutions to ensure that appropriate finance and pension literacy programs are available in the market.

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**TABLE 1: DEMOGRAPHIC COMPOSITION OF THE SAMPLE**

Variable		n	%
Gender	Male	909	58.5
	Female	<u>645</u>	<u>41.5</u>
	TOTAL	1554	100
Age of the respondents	18 – 23 years	29	1.7
	24 – 29	246	15.9
	30 – 35	422	27.2
	36 – 41	382	24.6
	42 – 47	271	17.5
	48 – 53	148	9.5
	54 >	<u>56</u>	<u>3.6</u>
	TOTAL	1554	100
Marital status	Single	395	25.4
	Married	1102	70.9
	Separated/divorced	28	1.8
	Widowed	<u>29</u>	<u>1.9</u>
	TOTAL	1554	100
Highest education attained	Primary school	14	1
	High school	185	11.9
	College/technical school/polytechnic	636	40.9
	University	<u>719</u>	<u>46.2</u>
	TOTAL	1554	100
Area of specialization	Arts (including business)	1176	75.6
	Sciences	<u>378</u>	<u>24.4</u>
	TOTAL	1554	100
Position in the pension scheme	Trustee	306	19.7
	Non-trustee	<u>1248</u>	<u>80.3</u>
	TOTAL	1554	100



**TABLE 1: DEMOGRAPHIC COMPOSITION OF THE SAMPLE (CONTINUES)**

Occupational level	Top management	102	6.6
	Middle management	830	53.4
	Lower management	<u>622</u>	<u>40.0</u>
	TOTAL	1554	100
Job experience	< 5 years	330	21.2
	6 – 10	477	30.7
	11 – 15	295	19.0
	16 – 20	230	14.8
	20 >	<u>222</u>	<u>14.3</u>
	TOTAL	1554	100
Monthly Income	< Ksh. 20,000	179	11.6
	20,001 – 40,000	351	22.6
	40,001 – 60,000	310	20.0
	60,001 – 80,000	224	14.4
	80,001 – 100,000	155	10.0
	> 100,000	<u>335</u>	<u>21.4</u>
	TOTAL	1554	100
Province	Central	39	2.5
	Coast	152	9.7
	Eastern	44	2.8
	Nairobi	1193	76.8
	North Eastern	14	1
	Nyanza	40	2.6
	Rift Valley	31	2.0
	Western	<u>41</u>	<u>2.6</u>
	TOTAL	1554	100

**TABLE 2: FINANCE AND PENSION LITERACY SCORES**

<b>Question</b>	<b>Answer</b>	<b>% Correct</b>	<b>Standard deviation</b>	<b>Range</b>
<b>Finance literacy</b>				
What form of interest do banks use when calculating interest on loans?	Compound	60.8	0.416	100%
Can the value of a Ksh. 100,000 investment in shares of a listed company reduce after six months?	Yes	60.3	0.489	100
Which product would you invest your money to have the highest expected long-term growth (ordinary shares or treasury bills)	Ordinary Shares	26.9	0.444	100
<b>Pension scheme knowledge</b>				
What is your pension scheme design? (defined benefit or defined contribution)	Either depending on the scheme	72.5	0.447	100
Are members of your pension or retirement scheme allowed to take loans from the scheme?	No	65.8	0.474	100
Who appoints the trustees of your pension or retirement scheme? (sponsors alone, members alone, both sponsors and members)	Both sponsors and members	41.2	0.492	100
I can withdraw 50% of my pension contributions from the pension scheme to attend to an emergency as long as I have worked with my employer for more than 5 years. (true or false)	False	55.1	0.498	100

Table 2 documents the questions that the respondents were asked to answer, the percentage of respondents who answered the questions correctly, the standard deviation and the range. The overall correct score was 57.3%, standard deviation 0.255, range 100% (4.9% did not answer any of the questions correctly while 5.7% answered all the questions correctly).

**TABLE 3: VARIATIONS IN FINANCIAL LITERACY LEVELS - ANOVA**

Factor		Sum of squares	Mean square	F-value	Sig. value
Age	Between groups	1.246	0.208	3.220	0.004*
	Within groups	99.474	0.065		
	Total	100.72			
Education level	Between groups	5.565	1.855	30.118	0.000**
	Within groups	95.155	0.062		
	Total	100.72			
Gender	Between groups	1.414	1.414	22.027	0.000**
	Within groups	99.306	0.64		
	Total	100.72			
Job experience	Between groups	0.712	0.178	2.748	0.027*
	Within groups	100.008	0.065		
	Total	100.72			
Management level	Between groups	2.459	1.230	19.346	0.000**
	Within groups	98.261	0.064		
	Total	100.72			
Income	Between groups	10.995	2.199	37.817	0.000**
	Within groups	89.725	0.058		
	Total	100.72			
Marital status	Between groups	0.430	0.143	2.209	0.085
	Within groups	100.290	0.065		
	Total	100.72			
Pension plan design	Between groups	27.909	27.909	592.962	0.000**
	Within groups	72.812	0.047		
	Total	100.72			
Attended previous finance education	Between groups	9.631	9.631	163.573	0.000**
	Within groups	91.089	0.059		
	Total	100.72			
Area of specialization	Between groups	0.813	0.406	6.288	0.002*
	Within groups	99.908	0.065		
	Total	100.72			
Membership to pension plan board	Between groups	2.206	2.206	34.673	0.000**
	Within groups	98.515	0.064		
	Total	100.72			

\*p&lt;0.05; \*\*p&lt;0.01

Table 3 indicates that pension literacy levels differ significantly on the basis of age, job experience and area of specialization at the 0.05 level of significance and education level, gender, management level, income, pension plan design, attendance to previous financial education and membership to the pension plan board at the 0.01 significance level. The pension finance literacy levels do not differ significantly on the basis of marital status.

**TABLE 4: POST HOC ANALYSIS USING THE TUKEY METHOD**

Age I – J	Mean I	Mean J	Mean difference (I-J)	Sig. Value
18 - 23 and 24 - 29	0.4487	0.5020	-0.0533	0.950
18 - 23 and 30 - 35	0.4487	0.5332	-0.0845	0.653
18 - 23 and 36 - 41	0.4487	0.5481	-0.0994	0.460
18 - 23 and 42 - 47	0.4487	0.5812	-0.1325	0.146
18 - 23 and 48 - 53	0.4487	0.5282	-0.0795	0.762
18 - 23 and 54+	0.4487	0.4851	-0.0364	0.997
24 - 29 and 30 - 35	0.5020	0.5332	-0.0312	0.729
24 - 29 and 36 - 41	0.5020	0.5481	-0.0461	0.288
24 - 29 and 42 - 47	0.5020	0.5812	-0.0792	0.008*
24 - 29 and 48 - 53	0.5020	0.5282	-0.0262	0.957
24 - 29 and 54+	0.5020	0.4851	0.0169	0.999
30 - 35 and 36 - 41	0.5332	0.5481	-0.0149	0.982
30 - 35 and 42 - 47	0.5332	0.5812	-0.0480	0.187
30 - 35 and 48 - 53	0.5332	0.5282	0.0050	1.000
30 - 35 and 54+	0.5332	0.4851	0.0481	0.838
36 - 41 and 42 - 47	0.5481	0.5812	-0.0331	0.658
36 - 41 and 48 - 53	0.5481	0.5282	0.0199	0.984
36 - 41 and 54+	0.5481	0.4851	0.0630	0.594
42 - 47 and 48 - 53	0.5812	0.5282	0.0530	0.388
42 - 47 and 54+	0.5812	0.4851	0.0961	0.134
48 - 53 and 54+	0.5282	0.4851	0.0431	0.934

\*p<0.05; \*\*p<0.01

Table 4 shows that the pension literacy level is not significantly different across the age groups except between the age groups 24 - 29 and 42 - 57.

**TABLE 5: POST HOC ANALYSIS FOR EDUCATION LEVEL USING THE TUKEY METHOD**

Education level I-J	Mean I	Mean J	Mean difference (I-J)	Sig. Value
Primary and high school	0.3556	0.4230	-0.0674	0.742
Primary and college	0.3556	0.5105	-0.1549	0.000**
Primary and university	0.3556	0.5929	-0.2373	0.001*
High school and college	0.4230	0.5105	-0.0875	0.000**
High school and university	0.4230	0.5929	-0.1699	0.000**
College and university	0.5105	0.5929	-0.0824	0.000**

\*p<0.05; \*\*p<0.01

Table 5 discloses that the pension literacy levels differ significantly on account of the education level of the participants since those with college and university education record higher pension finance literacy scores than those with primary and high school education. There is however no significant difference between the pension finance literacy levels amongst those with primary school and high school education levels.

**TABLE 6: POST HOC ANALYSIS FOR JOB EXPERIENCE USING THE TUKEY METHOD**

Job experience (years) I-J	Mean I	Mean J	Mean difference (I-J)	Sig. Value
<5 and 6 – 10	0.4964	0.5462	-0.0498	0.002*
<5 and 11 – 15	0.4964	0.5565	-0.0601	0.068
<5 and 16 – 20	0.4964	0.5464	-0.0500	0.152
<5 and 20+	0.4964	0.5392	-0.0428	0.302
6 - 10 and 11 - 15	0.5462	0.5565	-0.0103	0.983
6 - 10 and 16 - 20	0.5462	0.5464	-0.0002	1.000
6 - 10 and 20+	0.5462	0.5392	0.0070	0.997
11 - 15 and 16 - 20	0.5565	0.5464	0.0101	0.991
11 - 15 and 20+	0.5565	0.5392	0.0173	0.941
16 - 20 and 20+	0.5464	0.5392	0.0072	0.998

\*p<0.05; \*\*p<0.01

Table 6 shows that respondent's pension finance literacy scores increased with years of experience. The scores differed significantly amongst the respondents who had worked for less than 5 years and those who had worked for 6 – 10 years at the 0.05 significance level.

**TABLE 7: POST HOC ANALYSIS FOR MANAGEMENT LEVEL USING THE TUKEY METHOD**

Management level I-J	Mean I	Mean J	Mean difference (I-J)	Sig. Value
Top and lower	0.6503	0.5520	0.0983	0.001**
Top and middle	0.6503	0.4976	0.1527	0.000**
Middle and lower	0.5520	0.4976	0.0544	0.000**

\*p<0.05; \*\*p<0.01

Table 7 discloses significant differences in the pension finance literacy scores amongst all levels of management.

**TABLE 8: POST HOC ANALYSIS FOR THE AREA OF SPECIALIZATION USING THE TUKEY METHOD**

Specialization I-J	Mean I	Mean J	Mean difference (I-J)	Sig. Value
Arts and sciences	0.5123	0.5110	0.0013	0.998
Arts and business	0.5123	0.5576	-0.0453	0.017*
Business and sciences	0.5576	0.5110	0.0466	0.009

\*p<0.05; \*\*p<0.01

**TABLE 9: POST HOC ANALYSIS FOR MONTHLY INCOME USING THE TUKEY METHOD**

Income level I-J	Mean I	Mean J	Mean difference (I-J)	Sig. Value
<20 000 and 20 001 - 40 000	0.3750	0.4829	-0.1079	0.000**
<20 000 and 40 001- 60 000	0.3750	0.5307	-0.1557	0.000**
<20 000 and 60 001 - 80 000	0.3750	0.5478	-0.1728	0.000**
<20 000 and 80 001 – 100 000	0.3750	0.5806	-0.2056	0.000**
<200 00 and 100 000+	0.3750	0.6586	-0.2836	0.000**
20 001 - 40 000 and 40 001 – 60 000	0.4829	0.5307	-0.0478	0.112
20 001 - 40 000 and 60 001 - 80 000	0.4829	0.5478	-0.0649	0.021*
20 001 – 40 000 and 80 001 – 100 000	0.4829	0.5806	-0.0977	0.000**
20 001 - 40 000 and 100 000+	0.4829	0.6586	-0.1757	0.000**
40 001 – 60 000 and 60 001 – 80 000	0.5307	0.5478	-0.0171	0.966
40 001 - 60 000 and 80 001 - 100 000	0.5307	0.5806	-0.0499	0.286
40 001 – 60 000 and 100 000+	0.5307	0.6586	-0.1279	0.000**
60 001 - 80 000 and 80 001 - 100 000	0.5478	0.5806	-0.0328	0.785
60 001- 80 000 and 100 000+	0.5478	0.6586	-0.1108	0.000**
80 001 - 100 000 and 100 000+	0.5806	0.6586	-0.0780	0.012*

\*p<0.05; \*\*p<0.01

**TABLE 10: IMPORTANCE INDEX FOR PENSION LITERACY NEEDS**

Need	Index
Understanding of RBA Act	3.07
Calculating benefits due at retirement	2.92
Investment options of the pension scheme assets	2.90
Pension scheme's investment policy	2.75
Pension scheme designs	2.69
Member's rights in the pension scheme	2.68
How the pension scheme operates	2.59
The trust and governance relationship between trustees, service providers and RBA	2.53
Role of the Retirement Benefits Authority	2.49
Responsibilities of the pension scheme trustees	2.49
Role of the service providers (fund managers, administrators, auditors and custodians)	2.48

\*indices greater than 2.69 were considered significant

**TABLE 11: IMPORTANCE INDEX FOR FINANCIAL LITERACY NEEDS**

<b>Need</b>	<b>Index</b>
Identifying assets to invest in	2.57
Developing and applying personal cost savings strategies	2.40
Identifying and assessing sources of debt	2.31
Applying financial knowledge to make personal financial decisions	2.26
Determining ways to save money	2.26
Setting personal financial goals	2.21
Reducing personal debts	2.21
Developing personal budgets	2.01
Identifying short term and long term personal expenses	1.98
Reading statements generated from financial institutions	1.98
Calculating personal incomes	1.94
Keeping records	1.87

\*Indices more than 2.16 were considered significant

**TABLE 12: UNIQUE FINANCIAL LITERACY NEEDS**

<b>Independent Variable</b>	<b>Unique Training Needs</b>
Gender	<ul style="list-style-type: none"> <li>• Setting personal financial goals,</li> <li>• Calculating personal incomes,</li> <li>• Identifying personal expenses,</li> <li>• Identifying and assessing assets to invest in,</li> <li>• Identifying and assessing sources of debt,</li> <li>• Determining ways to save money,</li> <li>• Developing personal budget,</li> <li>• Keeping records,</li> <li>• Reading statements from financial institutions,</li> <li>• Applying financial knowledge in decision making,</li> <li>• Operations of the pension scheme,</li> <li>• Member's rights in a pension scheme,</li> <li>• Investment options for the pension scheme,</li> <li>• The pension Law (RBA Act),</li> <li>• Calculation of retirement benefits,</li> <li>• Pension scheme design,</li> <li>• Investment decision making for a pension scheme,</li> </ul>

	<ul style="list-style-type: none"> <li>• Responsibilities of trustees,</li> <li>• Relationship between service providers,</li> <li>• Role of the service providers,</li> <li>• Role of RBA.</li> </ul>
Age	<ul style="list-style-type: none"> <li>• Identifying personal expenses,</li> <li>• Reading statements from financial institutions,</li> <li>• Operations of the pension scheme,</li> <li>• Member's rights in a pension scheme,</li> <li>• The pension law (RBA Act),</li> <li>• Calculation of retirement benefits,</li> <li>• Pension scheme design,</li> <li>• Investment decision making for a pension scheme,</li> <li>• Responsibilities of trustees,</li> <li>• Relationship between service providers.</li> </ul>
Education level	<ul style="list-style-type: none"> <li>• Setting personal finance goals,</li> <li>• Calculating personal incomes,</li> <li>• Identifying personal expenses,</li> <li>• Identifying and assessing assets to invest in,</li> <li>• Identifying and assessing sources of debt,</li> <li>• Reducing personal debts,</li> <li>• Developing and applying personal cost saving strategies, Determining ways to save money,</li> <li>• Developing personal budget,</li> <li>• Keeping records,</li> <li>• Reading statements from financial institutions,</li> <li>• Applying financial knowledge in decision making,</li> <li>• Operations of the pension scheme,</li> <li>• Member's rights in a pension scheme,</li> <li>• Investment options for the pension scheme,</li> <li>• The pension la (RBA Act),</li> <li>• Pension scheme design, Investment decision making for a pension scheme,</li> <li>• responsibilities of trustees,</li> <li>• Relationship between service providers,</li> <li>• Role of the service providers,</li> </ul>



	<ul style="list-style-type: none"> <li>• Role of RBA.</li> </ul>
Participated in finance education	<ul style="list-style-type: none"> <li>• Setting personal finance goals,</li> <li>• Calculating personal incomes,</li> <li>• Identifying personal expenses,</li> <li>• Identifying and assessing sources of debt,</li> <li>• Reducing personal debts,</li> <li>• Developing and applying personal cost saving strategies, determining ways to save money,</li> <li>• Developing personal budget,</li> <li>• Keeping records,</li> <li>• Reading statements from financial institutions,</li> <li>• Applying financial knowledge in decision making,</li> <li>• Operations of the pension scheme,</li> <li>• Member's rights in a pension scheme,</li> <li>• Investment options for the pension scheme,</li> <li>• The pension Law (RBA Act),</li> <li>• Calculation of retirement benefits,</li> <li>• Pension scheme design,</li> <li>• Investment decision making for a pension scheme,</li> <li>• Responsibilities of trustees,</li> <li>• Relationship between service providers,</li> <li>• Role of the service providers,</li> <li>• Role of RBA.</li> </ul>
Trustee	<ul style="list-style-type: none"> <li>• Identifying personal expenses,</li> <li>• Identifying and assessing assets to invest in,</li> <li>• Reducing personal debts,</li> <li>• Determining ways to save money,</li> <li>• Developing personal budget,</li> <li>• Reading statements from financial institutions,</li> <li>• Applying financial knowledge in decision making,</li> <li>• Operations of the pension scheme,</li> <li>• Member's rights in a pension scheme,</li> <li>• Investment options for the pension scheme,</li> <li>• The pension Law (RBA Act),</li> <li>• Calculation of retirement benefits,</li> </ul>

	<ul style="list-style-type: none"> <li>• Pension scheme design,</li> <li>• Investment decision making for a pension scheme,</li> <li>• Responsibilities of trustees,</li> <li>• Relationship between service providers,</li> <li>• Role of the service providers, role of RBA.</li> </ul>
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**TABLE 13: HINDRANCES TO PARTICIPATION IN PENSION SCHEME AFFAIRS**

Hindrance	Index
Lack of forums for involvements	2.02
Lack of understanding for pension scheme matters	1.91
Work commitments	1.71
Lack of appropriate education	1.68
Lack of personal interest	1.55
Gender	1.40

\*Indices more than 1.7 were considered significant

**TABLE 14: POTENTIAL OF FINANCE AND PENSION LITERACY PROGRAMS TO SOLVE THE HINDRANCES OF PARTICIPATION IN PENSION SCHEME MATTERS**

Issue	Index	Problem Significant?	Solution Index	Can Finance and Pension Literacy Solve?
Lack of forums for involvements	2.02	Yes	2.25	Yes
Lack of understanding for pension scheme matters	1.91	Yes	2.41	Yes
Work commitments	1.71	Yes	1.69	No
Lack of personal interest	1.55	No	1.83	No
Gender	1.40	No	1.35	No

**TABLE 15: HINDRANCES TO ENROLLMENT IN FINANCE AND PENSION LITERACY PROGRAMS**

<b>Hindrance</b>	<b>Index</b>
Availability of finance	1.85
Lack of finance and pension literacy programs at work	1.78
Access to training venues	1.69
Desirable finance courses are not available	1.63
Excess work load	1.59
No immediate benefit to pension education	1.55
Increased family commitments	1.51
Limited personal income	1.48
Lack of personal interest	1.47
Perception that finance and pension education is difficult	1.44
Inadequate job experience	1.43
Gender	1.43
Culture	1.40
Education background – not in business related field	1.39
Current level of education	1.39
Health	1.36
Age	1.35

\* Indices greater than 1.5 were considered significant

**TABLE 16: STRATEGIES TO ENHANCE PARTICIPATION TO FINANCE AND PENSION LITERACY PROGRAMS**

<b>Strategy</b>	<b>Index</b>
Financial support	3.64
Use of practical approaches when teaching finance and pension literacy programs	3.60
Changing the attitude on finance and pension literacy	3.47
Specializing finance and pension literacy programs for individuals in different management levels	3.39
Improving accessibility to the training venues	3.24
Encouraging finance and pension literacy training in schools	3.11
Provision of finance and pension literacy programs at the work place	2.96
Giving time off to attend finance and pension training	2.88
Providing specialized training for both men and women	2.53

\* Indices greater than 3.14 were considered significant