The Role of Financial Education in Retirement Planning

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Michael Ntalianis
Victoria University

Victoria Wise
Deakin University, Victoria.wise@deakin.edu.au

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Abstract

Governments in many countries are facing the challenge of providing sufficient retirement incomes for a population that is ageing as a result of lower mortality and fertility rates. An ageing population places considerable financial stress on government budgets as spending on welfare increases, further compounded by a proportional reduction in working-age taxpayers. Exposure to financial education programs can positively influence the retirement planning and savings behaviour of individuals. Research indicates that seminars, written communications and website information are effective methods in communicating financial education. In this study an investigation is conducted into the views of retirement fund members regarding elements of financial education resources made available to them through their retirement fund. Four aspects are investigated, that is, whether there are differences with respect to members' views between the genders, older and younger members, levels of qualification, and size of superannuation balances. Empirical evidence suggests that gender and age are important factors with females and younger people less likely to utilise educational information and more at risk of not accumulating sufficient funds for retirement.

Keywords

Ageing population; Retirement incomes; Financial education

The Role of Financial Education in Retirement Planning

Michael Ntalianis[1], Victoria Wise[2]

Abstract

Governments in many countries are facing the challenge of providing sufficient retirement incomes for a population that is ageing as a result of lower mortality and fertility rates. An ageing population places considerable financial stress on government budgets as spending on welfare increases, further compounded by a proportional reduction in working-age taxpayers. Exposure to financial education programs can positively influence the retirement planning and savings behaviour of individuals. Research indicates that seminars, written communications and website information are effective methods in communicating financial education. In this study an investigation is conducted into the views of retirement fund members regarding elements of financial education resources made available to them through their retirement fund. Four aspects are investigated, that is, whether there are differences with respect to members' views between the genders, older and younger members, levels of qualification, and size of superannuation balances. Empirical evidence suggests that gender and age are important factors with females and younger people less likely to utilise educational information and more at risk of not accumulating sufficient funds for retirement.

Keywords: Ageing population; Retirement incomes; Financial education

JEL Classification: D14.

[1] Victoria University
[2] Deakin University, Victoria.wise@deakin.edu.au

Introduction

This study was motivated by the growing literature that suggests that a substantial number of Australians lack adequate levels of financial literacy to structure a retirement savings plan properly. Indeed, survey evidence suggests (ANZ, 2008; Mercer, 2006) that many Australians are not adequately saving for retirement and that a number of groups within the community will not accumulate sufficient funds to provide them with a comfortable retirement lifestyle.

Evidence from behavioural research indicates that individuals exhibit peculiar characteristics when it comes to saving and investing for their retirement. Behavioural life-cycle theory suggests that individuals will deviate from the standard economic model because they have limited cognitive abilities to solve the multi-period retirement saving problems (branded 'bounded rationality') and further, they lack the necessary willpower to execute a long-term retirement savings plan (Shefrin, 2002). Inertia and procrastination in decision making appear to be behavioural influences that inhibit the retirement savings behaviour of individuals (Madrian & Shea, 2001; Choi et al., 2002; Gallery & Gallery, 2005). Other behavioural influences such as heuristics, decision framing and loss aversion have also been identified as behavioural influences that can potentially inhibit efficient decision making. The implications of financial behaviour when it comes to retirement savings decisions was emphasised by Kahneman (2003, p. 1468) in his Nobel lecture where he refers to the study of Benartzi and Thaler (2001) as part of a "…growing literature of field research and field experiments that documents large and systematic mistakes in some of the most consequential financial decisions that people make, including choices of investments…".

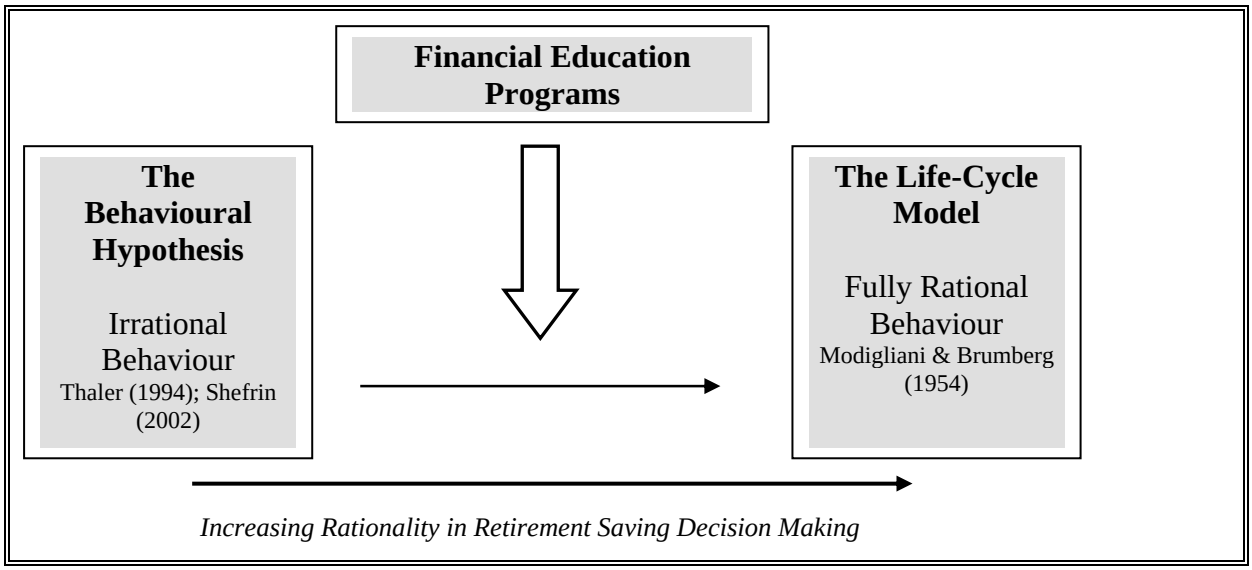
Lusardi and Mitchell (2006) suggested that those with more financial knowledge are more likely to plan for retirement. The importance of this matter is reinforced by an OECD report (OECD 2005) titled: 'Improving Financial Literacy' where it is stated that "there is much more to do and learn about financial education programmes and how to make them better" (p. 16). Research also shows that different types of financial education programs and the dissemination of information can positively influence retirement savings behaviour (Bayer, Bernheim & Scholz, 1996; Clark & Schieber, 1998; Lusardi, 2005; Clark et al., 2006). Educational seminars, written communications and website information have all been found to be effective educational tools in this process.

Research indicates that employers and fund managers use educational resources such as seminars and workshops, written communication and websites to educate employees about retirement saving (Bernheim 1998; Ernst & Young LLP Human Capital 2004; Krajnak, Burns & Natchek 2008). It has also been shown that these educational resources can influence an individual's retirement saving intentions and behaviour (Clark & Schieber 1998; Lusardi 2003; Muller 2003; Nyce 2005). In this study, investor attitude towards the level and adequacy of financial information and education provided by superannuation funds is investigated. This study extends previous research in Australia by determining whether superannuation-fund-provided information and education is adequately structured and communicated to meet the needs of individuals exercising investment choice.

The theoretical framework underpinning this study depicts 'informed' investor choice as a prerequisite to maximising retirement income (Brown, Gallery & Gallery, 2002). The framework recommends education programs as a policy resolution for those retirement fund members prepared to actively engage in decisions regarding their retirement savings. Using the OECD (2005) definition of financial education, an evaluation was undertaken in this study to establish the role financial education plays in providing advice, information and instruction to retirement fund members about their retirement savings and investment strategies. An outline of the theoretical framework for the research is presented in Figure 1.

The theory suggests that the life-cycle permanent income hypothesis (Modigliani & Brumberg 1954) represents the rational ideal for individuals saving for retirement income. However, the behavioural model (Thaler 1994; Shefrin 2002) suggests that full rational reality does not occur when individuals are making decisions for their retirement savings. Educational programs for those individuals engaging in active investment choice was a partial resolution specified by Brown, Gallery and Gallery (2002) to achieve informed choice.

Figure 1
Theoretical Framework for the Research



The Australian university sector superannuation fund system has a defined benefit plan or a defined contribution plan. Defined contribution fund members were chosen as they participate in the investment decision making process by nominating where their funds will be invested from a list of available investment options. It was not within the parameters of the study to capture those retirement fund members who have opted for a defined benefit fund at retirement. In a defined benefit plan the members' investment allocation decisions and the investment risks are the responsibility of the fund managers, not the members. Instead, the focus in this study is on members who are part of a defined contribution plan and who make investment decisions involving the allocation of their accumulated savings to various investment plans offered by the superannuation fund, an action described as 'within fund choice'. The retirement wealth of these members is directly influenced by the investment choices they make. Informed investment choice is important and linked to their understanding of the investment options. This study occurs within the context of defined contribution superannuation fund members in the university industry (a public sector fund). Validity to members of other types of superannuation funds remains to be tested in future research.

Defined contribution fund members were asked to evaluate the educational information provided by their superannuation fund (educational seminar, website and written communications), and the importance they place on this information. The evaluation is based on the financial education guidelines provided by the OECD (2005) that suggest that financial education is a process by which financial consumers improve their understanding of financial matters through information, instruction and/or objective advice. The research literature indicates financial education impacts on how individuals plan and save for retirement. Educational seminars, website information and written communications were all identified in the literature as educational resources that informed and changed individual

retirement savings behaviour. The evaluation provided by respondents determines whether superannuation fund members believe that they are being informed on superannuation fund matters.

The remainder of this paper proceeds as follows: in the next section the research method and the research questions are outlined. This is followed by a discussion of the descriptive statistics and then the analysis of data and results are presented. The final section of the paper provides a summary and implications of this research.

Research Method and Questions

The aim of this study was to examine whether retirement fund members thought they were being informed when they accessed generic and specific financial education information provided by their retirement fund. A survey questionnaire was employed to explore and to examine similarities and differences based on gender, age, different level of qualifications of members, and level of superannuation account balance as these factors have been identified in the literature as having the potential to influence an individual's superannuation decision making. For instance, the literature suggests that the amount in an individual's superannuation savings account will influence how active they will be in their superannuation decision making. The inclusion of these demographic characteristics allows for useful cross-sections of the questionnaire to be developed from the various respondent demographic and background categories, and the information can be statistically tested to detect any significant relationship between a respondent's answers to a particular question with their demographic characteristics.

The sample comprised 6000 staff (see Table 1) from 27 Australian universities. Because of the geographical dispersion of the sample an electronically mailed questionnaire (web-based survey) was used to ascertain members' perceptions of the benefit of educational information in enabling them to make informed decisions regarding their retirement incomes. Knowing whether members exercising choice use the educational information supplied by their superannuation fund, and whether this contributes to them being informed on superannuation issues is of critical importance in determining the level and adequacy of the information provided.

A purposive (judgement) sample was used to obtain responses. Purposive sampling was utilised in this study because generating a purely random sample was not possible. Purposive samples are not considered to be random as the sample is selected from a researcher's judgement as a representation of a population. The researcher's opinions of what constitutes a representative sample are likely to introduce some bias into the process. However, a carefully chosen purposive sample can be deemed to represent a population.

Questions were included to determine whether the respondent had an employment history or formal educational training in finance, investment analysis, sharemarket investing or financial planning. These questions facilitated the categorisation of respondents into two groups: one group having acquired financial knowledge through education or employment; with a potentially less knowledgeable second group. One question required respondents to rate their knowledge of financial and investment matters. This question allows an understanding of the self-perceived financial knowledge of the respondents. Another question asked participants to rate their attitude towards investment risk in order to examine their level of confidence in using the information to make superannuation decisions. Accordingly, the research questions posed in this study are:

1. Do any significant differences exist between groups in respect of mean responses on the usefulness found in superannuation fund provided educational resources?

2. Do any significant differences exist between groups in respect of utilising the superannuation fund provided educational resources?

Five-point Likert-style rating scales were used in the questionnaire to allow for the measurement of agreement (attitude), intensity and frequency to responses from prepared statements and questions. The scales were used to measure the respondents' strength of agreement to a statement; frequency scales were used to determine how often respondents accessed each educational resource provided by the superannuation fund; and intensity scales were used to determine the importance respondents placed on educational information.

DISCUSSION OF THE DESCRIPTIVE STATISTICS

Response Rate

With electronically mailed questionnaire surveys, response rate is a matter that can introduce bias which may affect the reliability of the research data. Certain procedures were implemented in this study in an effort to maximise the response rate including ensuring that the questionnaire layout, wording and design was appropriate. As part of the mitigation process, the questionnaire was tested prior to its final administration. In addition, two reminder letters were sent and this resulted in an increase in the final response rate to 30.1%. The response rate of 30.1% compares favourably to results obtained in some other web-based surveys where reported response rates varied between seven and 44% (Schonlau, Fricker & Elliot 2001).

As indicated in Table 1, from the initial sample of 6000, a total of 4649 were either unreachable or ineligible to respond. The response rate of 30.1% is described as an approximation as it incorporates an estimation of the level of ineligibility within the sample. It is determined that 4053 of the reachable sample are ineligible to participate in the survey, as they are likely to belong to the defined benefit plan. The 596 unreachable portion of the sample represents those individuals that could not be contacted for reasons such as an invalid email address or absence due to factors such as being on long-term leave.

Table 1
Response Rate Calculation

Sample size	6000
Unreachable	596
Ineligible* [(6000 - 596) x (1 - 0.25]	4053
Number of respondents	406
Response rate	406/[6000 – (596 + 4053)] x 100 = 30.1%

* Only 25 percent of those who received the survey are likely to belong to the defined contribution fund and therefore be eligible to respond to the survey.

Respondents' Characteristics

Descriptive data frequencies for three of the demographic characteristics (age, gender, education) reported in Table 2 show that 46.7% of the respondents were male and 53.3% were female. The respondent gender characteristics are consistent with the Department of Education, Employment and Workplace Relations (DEEWR) (2007) Higher Education Statistics Report, where the reported gender proportion in higher education is 47.2% male and 52.8% female. The age group of respondents shows that the largest number of respondents was in the 50-59 years age bracket representing 32.4%; the lowest responding group was in the 18-29 years age bracket: 58.1% of respondents in this study are younger than 50, with a majority aged between 40-59. The respondent age demographics are also

consistent with the university sector profile reported in the DEEWR (2007) Higher Education Statistics. Lastly, the respondents' qualification levels show that 48.4% hold a doctorate and that a large majority (86.6%) has qualifications at or above the under-graduate level. A relatively small number of respondents (4.8%) have no qualification. It was expected that a large percentage of respondents would hold a doctoral qualification as the DEEWR (2007) Higher Education Statistics show that 62.3% of academic staff hold this level of qualification. It is also not surprising that a large majority of respondents is at least educated to tertiary level as a significant percentage of respondents are academics and this level of qualification is consistent with academic appointments.

Table 2
Sample Group Demographics: Gender, Age, Qualification

Gender	**Frequency**	**Percent**	**Cumulative Percent**
Male	185	46.7	46.7
Female	211	53.3	100.0
Total	396	100.0	
Age	**Frequency**	**Percent**	**Cumulative Percent**
18-29	30	7.5	7.5
30-39	90	22.6	30.1
40-49	111	28.0	58.1
50-59	129	32.4	90.5
60+	38	9.5	100.0
Qualification	**Frequency**	**Percent**	**Cumulative Percent**
Other	2	0.5	0.5
No-qualification	19	4.8	5.3
Post Secondary	32	8.1	13.4
Undergraduate	53	13.3	26.7
Postgraduate	99	24.9	51.6
Doctorate	192	48.4	100.0
Total	397	100.0	

Descriptive statistics

Descriptive statistics such as frequency, mean and standard deviation were calculated to assist in understanding the usefulness of retirement fund provided financial education information which included seminars, superannuation fund websites and written communications issued by the fund. Information was gathered to determine the extent and frequency of use by members of these educational resources and the importance that they place on this information for their investment needs. Further analysis was performed to determine the degree to which these educational resources contributed to members being more informed on retirement savings matters.

It was found that 43.6% of respondents had previously attended an educational seminar offered by their retirement fund. This result is consistent with Clark-Murphy and Gerrans (2001) who found a similar attendance level at educational seminars in their study of Australian university retirement fund members. Evidence provided by Helman and Paladino (2004) also found similar attendance rates at retirement seminars by United States (US) workers. The respondents rated the presentation of information in seminars highly, and agreed that they were being informed by the content presented in the seminars. These results are consistent with the findings of Kim, Bagwell and Garman (1998) who reported a high rating of both the presentation and content of a workplace seminar by corporate employees in the United States (US). This is also consistent with Clark-Murphy and Gerrans (2001) who

found that a substantial number of respondents rated the seminar as the most important source of information when making a retirement savings-related decision.

It was found that 61.5% of respondents had previously accessed their retirement fund website. This finding is not consistent with the findings of Clark-Murphy and Gerrans (2001) and Helman and Paladino (2004) who found low usage of online information from those receiving retirement savings educational materials. The results in this study appear to be signalling a changing pattern in website usage for the information requirements of retirement fund members. The overall mean rating of the website by respondents indicated that a majority of them agree that they are being informed by the web-based educational information. Furthermore, a large majority of respondents indicated that the website was important for their retirement decision making and provided support for Nyce's (2005) findings that web-based financial communications had a significant impact on US employee participation in 401(k) plans, and that internet based software influenced retirement knowledge (Loibl & Hira 2006). Website information on return performance, expected future return performance and the potential risk of retirement fund offered investment options was rated as the most important website based financial information. Financial calculators were also deemed by many respondents as an important information resource.

It was also found that almost 70% of respondents read the written communications. This result confirms the findings of Clark-Murphy and Gerrans (2001) who found that a very large number of retirement fund members read the written communications before making a retirement-related decision. Helman and Paladino (2004) also found that a majority of US workers used written communications for their retirement education needs. A majority of respondents in the current study rated most written communication items as important when it came to being informed about retirement issues, and for their retirement decision making. This result is consistent with the Clark-Murphy and Gerrans (2001) study where it was found that a majority (53%) of retirement fund members found the written communications to be the most important information resource when it came to making a retirement decision. Furthermore, Loibl and Hira (2006) concluded that US workers found written communications contributed to employee retirement saving knowledge. The current study also found that written communications were referred to more by fund members than other educational resources.

Data Analysis and Results

The groups analysed are gender, age, qualification, superannuation balance. It was proposed that there are no differences between groups based on their responses on the usefulness of retirement fund provided financial education resources including educational seminars, websites, and written communications; and by gender, age, level of qualifications or superannuation balance. Analysis of Variance, t-tests and F-tests were used to establish any significant differences in the mean responses of the demographic groups to questions relating to the experiences of those respondents who used the retirement fund provided financial education information. Significant results were obtained for differences in mean responses for groups with different qualification levels. It is therefore of importance to note that a respondent's level of education impacted on their perception of being informed by some of the educational resources.

Results

DIFFERENCES BETWEEN GROUPS BASED ON DOLLAR BALANCE IN SUPERANNUATION ACCOUNT

ANOVA F-tests were run to investigate whether there are any significant differences in mean values between the mean responses of those with the following account balances: less than $100,000; between $100,000 and $500,000; more than $500,000; balance unknown. The test results are presented in Table 3. The F-test shows no significant differences in mean values between the groups in their mean ratings for all of the superannuation fund educational information, except for seminar presentation. Therefore, the respondent groups with different account balances have the same perspective towards informed by seminar, informed by website and informed by written communications. Regarding seminar presentation it is not possible to perform a post-hoc test as one group (balance unknown) had fewer than two cases (one case). Ignoring this single case, the mean values for the group categories for seminar presentation, indicate that the group with a balance between $100,000 and $500,000 appears to have a relatively larger mean (13.821) than the other two groups: <$100,000 group (13.133), and >$500,000 group (13.268).

Table 3
Mean Differences to Educational Resources with Respect to Balance in Superannuation Account

Sample Group	Superannuation Fund Educational Information	F-Value	Sig.
Account Balances: < $100,000; Between $100,000 & $500,000; > $500,000; Bal Unknown	Seminar Presentation	2.247	0.085*
	Informed by Seminar	0.468	0.705
	Informed by Website	0.597	0.618
	Informed by Written Communications	0.289	0.834

*Significant at the 10 percent level

Chi-square tests of independence were then used to determine statistical significance relating to attendance at educational seminars, accessing the website and reading retirement fund provided written communications. Gender was the most significant factor when it came to accessing educational resources: age was also a contributing significant factor. Level of qualification was of less significance when it came to utilising the retirement fund provided financial education information.

FINDINGS ON THE GROUP DIFFERENCES IN MEAN RESPONSES

No statistically significant differences were found for gender or age for mean ratings of the retirement fund provided financial education information. There was a significant difference in mean responses to ‘informed by seminar’ between the ‘post-graduate’ qualified and the ‘under-graduate’ qualified groups, and for mean responses for ‘informed by website’ between the post-graduate qualified and ‘no-under-graduate’ qualification groups.

FINDINGS ON GROUP DIFFERENCES IN THE USE OF EDUCATIONAL RESOURCES

It was found that males were more likely to attend an educational seminar than females and that older retirement fund members were more likely to attend the seminar than were younger members. Tests of statistical independence indicated that males were also more likely to

access the retirement fund website than females, and males are more likely to read the written communications than females.

DIFFERENCES BASED ON GENDER

Independent samples t-test were conducted to investigate whether there are significant differences in mean values and variances between the mean responses of males and females to questions on the retirement fund provided financial education information resources (seminars, website, written communications). The values of the Levene's test (shown in Table 4) were insignificant in all cases, and so equality of variance is assumed between males and females for all the listed items. The t-tests indicate no significant differences in mean values between males and females for all the educational resources. That is, the two groups (males and females) almost always had the same perspective towards the educational information supplied by the retirement fund.

Table 4
Mean and Variance Differences to Education Resources - Gender

Sample Group	Retirement Fund Education Information	Levene's Test for Equality of Variances		t-test for Equality of Means		Differences in Means
		F	Sig	t	Sig (2-tailed)	
Male / Female	Seminar Presentation	0.764	0.383	0.980	0.328	0.3514
	Informed by Seminar	0.101	0.751	0.882	0.379	0.4874
	Informed by Website	1.547	0.215	0.764	0.446	0.6667
	Informed by Written Communications	1.482	0.225	1.076	0.283	0.4849

ANALYSIS OF VARIANCE (ANOVA) F-TEST IN MEANS FOR INDEPENDENT GROUPS

ANOVA is used to determine whether there are any significant differences in the means of the following combined age groupings: those aged between 18-39 years, 40-49 years, and 50+ years; educated at post-graduate level, under-graduate level, or with no-under-graduate qualification. The Fisher's LSD post-hoc test was used to identify any significant relationships existing between the groups and follows from the ANOVA discussions.

DIFFERENCES BASED ON AGE

The F-test shows no significant differences in mean values between the three groups in their ratings for all retirement fund educational information. That is, the three age groups have the same perspective towards the educational information. There is no need to proceed to the post-hoc tests as no significant relationships were found. The results to the ANOVA F-tests are presented in Table 5.

Table 5
Mean Differences to Education Resources - Age

Sample Group	Superannuation Fund Educational Information	F-Value	Sig.
Age Groups: 18-39 40-49 50+	Seminar Presentation	2.059	0.131
	Informed by Seminar	0.389	0.678
	Informed by Website	1.367	0.257
	Informed by Written Communications	1.570	0.210

DIFFERENCES BASED ON LEVEL OF QUALIFICATION

ANOVA F-tests were conducted to investigate whether there are any significant differences in mean values between the mean responses of those educated at the post-graduate level, under-graduate level and those with no-under-graduate qualification to questions on retirement fund provided financial education information. The results (presented in Table 6) indicate no significant differences in mean values between the three groups in their ratings for the educational information except for 'informed by seminars', and 'informed by (the retirement fund) website'. Therefore, the respondents in the three education levels have the same perspective towards 'seminar presentation' and 'informed by written communications'. They had different perspectives on 'informed by seminar', and 'informed by website'.

Table 6
Mean Differences to Educational Resources – Level of Qualification

Sample Group	Retirement Fund Education Information	F-Value	Sig.
Education Groups: Postgraduate; Undergraduate; No-undergraduate qualification	Seminar Presentation	0.314	0.731
	Informed by Seminar	3.234	0.042*
	Informed by Website	4.770	0.009*
	Informed by Written Communications	0.601	0.549

*Significant at the 5% level

The LSD post-hoc tests on these significant educational resources shows that for the education information variable, 'informed by seminar', there was a significant mean difference between the post-graduate qualified and the no-under-graduate qualification groups (shown in Table 7). There was also a significant mean difference between the under-graduate-qualified with the no-under-graduate qualification groups. This indicates a significant mean difference between those educated at the under-graduate level and above, and those having no-under-graduate qualification.

Table 7
The Results of the Fisher's LSD test for Level of Qualification

Retirement Fund Education Information with Significant F-Test	Education Level Inter Group Relationships		Sig.
Informed by Seminar	Postgraduate	Undergraduate	0.040**
	Postgraduate	No-undergraduate	0.869
	Undergraduate	No-undergraduate	0.076*
Informed by Website	Postgraduate	Undergraduate	0.375
	Postgraduate	No-undergraduate	0.003**
	Undergraduate	No-undergraduate	0.086*

*Significant at the 10% level
** Significant at the 5% level

DIFFERENCES BETWEEN GROUPS - ATTENDING THE EDUCATIONAL SEMINAR

Chi-square tests of independence were conducted to determine whether the demographic groups were statistically significant when it came to attending the educational seminars. No significant relationships were found for qualification level. The following analysis focuses on those groups where significant differences in response categories were established. Statistical significance was found for 'gender' and 'attending a seminar' (p=0.014), which indicates that the probability of a male attending a seminar is greater than a female attending (see Table 8).

49.2% of male respondents indicated that they had attended a seminar whereas only 37% of female respondents indicated attending a seminar.

Table 8
Cross-tabulation of Seminar Attendance - Gender

Gender	Attended Seminar		Row Total
	Yes	No	
Male	91	94	185
	49.2%	50.8%	100.0%
Female	78	133	211
	37.0%	63.0%	100.0%
Total	169	227	396

Chi-square = 6.019 P = 0.014*

Statistical significance was found for ‘age’ and ‘attending a seminar’ (see Table 9, p=0.000). This result indicates that individuals in the older 50+ years group are far more likely to attend a seminar than those in either the 18-39 years or the 40-49 years age groups. It is also revealed that those in the 40-49 years age group are more likely to attend a seminar than the 18-39 years age group (only 24.2% in the 18-39 group had attended a seminar). In the 40-49 years age category 38.7% indicated that they had attended a seminar, and in the 50+ years age category 58.7% had attended a seminar.

Table 9
Cross-tabulation of Seminar Attendance - Age

Age Group	Attended Seminar		Row Total
	Yes	No	
18-39 Years	29	91	120
	24.2%	75.8%	100.0%
40-49 Years	43	68	111
	38.7%	61.3%	100.0%
50+ Years	98	69	167
	58.7%	41.3%	100.0%
Total	170	228	398

Chi-square 34.991 p =0.000*

DIFFERENCES BETWEEN GROUPS - ACCESSING THE RETIREMENT FUND WEBSITE

Chi-square tests of independence were conducted to determine whether the groups were statistically significant when it came to accessing the retirement fund website. No significant relationships were found for age or qualification level. Statistical significance was found for ‘gender’ and ‘accessing the retirement fund website’ (Table 10, p=0.011). The probability of a male accessing the website is greater than a female accessing it: Table 10 shows that 67.8% of male respondents had accessed the website, whereas only 55.1% of female respondents had accessed the website.

Table 10
Cross-tabulation of Accessing Superannuation Fund Website - Gender

Gender	Website Access		Row Total
	Yes	No	
Male	124	59	183
	67.8%	32.2%	100.0%
Female	113	92	205
	55.1%	44.9%	100.0%
Total	237	151	388

Chi-square = 6.496 P = 0.011*

DIFFERENCES BETWEEN GROUPS - READING THE RETIREMENT FUND WRITTEN COMMUNICATIONS

Chi-square tests of independence were conducted to determine whether the groups were statistically significant when it came to reading the retirement fund written communications. No significant relationships were found for age or qualification level, however statistical significance was found for gender (Table 11, p=0.017). The probability of a male reading the written communications is greater than a female reading them. Table 11 shows that 75.3% of male respondents indicated that they had read the written communications, whereas a lower 63.7% of female respondents indicated reading them. This is a similar result to that found for seminars and websites where significantly more males attended a seminar and accessed the fund website than females.

Table 11
Cross-tabulation of Reading Superannuation Fund Written Communications – Gender

Gender	Written Communications		Row Total
	Yes	No	
Male	128	42	170
	75.3%	24.7%	100.0%
Female	123	70	193
	63.7%	36.3	100.0%
Total	251	112	363

Chi-square = 5.665 P = 0.017*

Summary and Implications of This Study

The findings from this study provide important new evidence as to which groups of retirement fund members are more likely to use the financial education resources provided by their retirement fund. While it was found that most respondents do not frequently attend seminars, those who do attend generally perceive that as a result they become informed about retirement issues. In light of these results, it is recommended that retirement fund trustees broaden their seminar offerings to their members to include a variety of topics targeting specific groups of members. This could be done through a seminar awareness campaign that emphasises the importance of the seminar information to those members who have a lack of knowledge on retirement savings matters. The evidence in this study also suggests that those members who access the website generally believe that they are being informed about retirement matters. It is therefore important that the retirement fund make members aware of both the existence and the importance of the educational resources available on their website. The evidence on written communication indicates that it is highly utilised and generally leads to fund members becoming informed on retirement issues. Given the widespread use of the

written communications by fund members, an opportunity exists for fund trustees to supplement the educational material they provide in written communications with further information about the educational resources available to members (such as the website).

This research identifies several groups of respondents who fail to engage with the financial education provided to them when it comes to managing their retirement savings. Females and younger individuals are the key groups identified as less likely to utilise the educational information offered to them by the retirement fund. These results are consistent with the literature that continually shows that women possess lower levels of financial knowledge than males and are therefore less likely to adequately plan for retirement (ANZ 2008; Lusardi 2005; Lusardi & Mitchell 2007): and that females were more likely to find retirement decisions more difficult than males (Clark-Murphy & Gerrans 2001; Clark-Murphy, Kristofferson & Gerrans 2002). Accordingly, it is vital that these groups receive educational information on retirement savings issues given that the review of the literature also identified them as most at risk of not accumulating sufficient retirement savings.

The implications that flow from this study include that by failing to utilise educational resources females are at higher risk of not adequately solving the retirement savings problem and therefore not accumulating sufficient funds for retirement. Therefore, this study contributes to the literature that recommends that females be specifically targeted by governments and retirement fund trustees through both awareness campaigns and education programs that are tailored specifically for this demographic group.

Younger adults have also been identified as having low financial awareness when it comes to retirement savings (ANZ 2008; Lusardi & Mitchell 2006). There are difficulties associated with getting young individuals to adequately engage with their retirement savings because they perceive retirement to be something that is far too distant to consider and therefore place less value on it. The Australian government has instigated a taskforce to report on how education programs can better assist individuals in saving for retirement and, through the Australian Taxation Office, it has also instigated a program that allows individuals to search for any lost retirement savings. However, more needs to be done by relevant stakeholder groups to ensure that younger Australians improve their awareness of the importance of managing retirement savings and to ensure that they understand they will experience a less than comfortable retirement lifestyle if they do not generate the necessary savings. The future benefits associated with the adequate management of their retirement funds throughout their working lives needs to be stressed to this group.

While the results of this study have provided empirical evidence that superannuation fund provided educational resources are perceived by defined contribution fund members as generally contributing to them being more informed, the study contains several limitations, identified and discussed in earlier sections of this paper, and which are now summarised. The results were obtained within the context of a large public sector superannuation fund and the focus was on the higher education industry. They should be interpreted in this light as they may not be broadly generalisable to private sector or small superannuation funds. A purposive sample was used to obtain responses. A carefully chosen purposive sample can be deemed to represent a population however this limitation should be considered before generalising the results to other contexts, particularly as Table 2 indicates that consistent with DEEWR statistics, 72% of the respondents hold a postgraduate qualification. Lastly, this paper has provided a discussion regarding efforts to maximise the response rate in order to improve the reliability of the research data. While the response rate compares favourably to the range of response rates achieved in electronic surveys, potential response rate bias should be considered when comparing the results of this study to other studies.

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