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# Financial strategies and investigating the relationship among financial literacy, financial well-being, and financial worry

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## Abstract

Global competition, technology, value changes and population along with expense increase and lack of awareness about features and functions of these advantages caused countries to take into account the importance of financial planning training. Thus, individuals' financial awareness, financial well-being, and financial worry have become the matter of interest of investigators and some studies have been conducted in this area. In this regard, the current study investigated the relationship between financial literacy, financial well-being, and financial worry in the professors of Yazd Islamic Azad University. For this purpose, a questionnaire was designed; then, using random sampling, it was distributed among selected individuals. The data was analyzed using statistical analyses such as correlation and binomial. Results showed the strategy of "reducing expenses and the cost of living" is agreed on by most groups, except the group "having both financial literacy and financial well-being". In addition, none of the groups use specialized consulting services in financial area. Also, purchasing real estate is one of the common strategies. Finally, higher financial well-being caused less financial worry.

**Keywords:** financial literacy, financial well-being, financial worry, Financial strategies

## Introduction

Having an appropriately established financial strategy is one of the most important factors in organizations' successful financial management as well as family management. The requirement to have a proper financial strategy in organization's management and personal life is to be financially literate. Financial literacy is considered as the awareness of financial principals and terminologies. Having a financial strategy have an active effect on an individual and makes him ready to react properly when facing bad financial conditions and worries; by making a positive attitude, financial literacy can also cause the individual's performance improvement and this consequently results in reaching appropriate decisions and decreasing financial well-being and gaining financial well-being for an individual (Vitt *et al.*, 2000). In the practical view, financial well-being, financial literacy, and financial worry are among factors affecting individual's performance in workplace. Individuals with higher financial literacy make better decisions for their families and enjoy higher financial security and well-being; they also experience less social and psychological pressures. High financial literacy causes less financial problems and increases the marital quality. Higher financial literacy brings about better marital relationships as well. These effects cause the person to act better in his workplace with his mental and psychological health. In addition to all these cases, the organizations that enjoy having staff with high financial literacy and well-being, have higher hob satisfaction, enjoy higher efficiency, understand their organization's advantage better, and show higher commitment to their organization. Financial literacy and financial well-being can also cause them reduce their absence and this leads to preserving valuable staff (Kim, 2007).

The effects of financial worry on business and personal life have also been approved in many studies. Not only higher financial worry cause less life satisfaction, it also threatens the person's performance in the workplace. Financial worry threatens depression level, confidence and the ability of business and personal life management. Financial worries decrease individual's productivity, quality, and efficiency in his workplace and increase his absence, lateness, and distraction in the workplace (Leech, 1997).

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This study can provide useful information about the level of financial literacy, financial well-being, and financial worry of Azad University professors. The results of this study can help the university in increasing staff's efficiency in workplace and their quality of life. So far, there is no research conducted to simultaneously investigate the relationship between the three variables consisting of financial well-being, financial literacy, and financial worry. This study can help bridge the literature gap in this area. The results of this study determined the relationship among these three variables and could also determine university professors' financial strategies in expense and income management.

## Theoretical Background and Literature Review

### *Financial literacy*

Financial literacy includes the ability of balancing bank accounts, budgeting, saving for the future and learning strategies to manage debts. An individual is considered to be financially literate if he's able to manage his personal finance in the changing life and society; to do so, he should gain essential perceptions and develop his skills in this area and also he should be able to perceive the effects of his personal financial decisions on himself, on others and the environment (Raymond, 2010).

According to the definition given by United States Financial Literacy and Education Commission, financial literacy includes the ability to make informed judgments and effective practice, given the current and future use of money and its management.

Economic Cooperation and Development Organization defines financial literacy in this way: the combination of consumers' and investors' understanding of financial productions and its concepts, their ability and certainty in financial risk taking, making informed decisions, acting effectively in financial improvement and health. Huston (2010) knows financial literacy as the knowledge of utilizing financial awareness and tools. According to Jacob *et al.* (2000), financial awareness is personal financial skills and knowledge that involves the ability to understand financial conditions and concepts and changing this knowledge to a behavior. These subjects includes the concept of saving, profit, investment, budgeting, insurance purchase, credit and debt management, and how to use financial service institutions, the least financial knowledge, and the knowledge necessary for successful participation in the economy. These are a set of essential tools that defines the how of every day expenses. In 2006, the amount of personal saving decreased to minus one percent which was the lowest amount since the Great Depression. About one third of outstanding debts of consumers around the world are due to credit cards (Goodferry, 2006). Due to the raise of these problems in the U.S, an institution called National Institute of Financial Education was founded to train the specialists in financial issues. As the financial and economic practices got more complicated, the institute came to the conclusion that the public essentially needs to be trained about financial issues and their sources. Thus, in 1997 the institute targeted all public to be trained (National Institute of Financial Education, 2010).

Financial literacy and planning the financial issues of the family is a general deterrence strategy that can help decrease social and psychological pressures and increase family welfare (Titusu *et al*, 1989). Economic tensions or in other words, economic hardship and pressure or financial pressure may be the result of lack of ability to satisfy financial necessities, lack of trusting income sources, job instability, or lack of income for satisfying the needs. Gender is one of the most effective factors on financial literacy. Dans and Hubberman (2007) studied the differences between financial knowledge of male and female high school students among 5329 individuals. The results showed that male students got higher marks in these exams. Another factor affecting financial literacy is age. According to a study by Lusardy *et al.* (2006), financial knowledge and awareness among American young people is less than adults. Nill *et al.* (2005) conducted a study about the relationship between financial practices, financial well-being and health among 3121 clients of Institute of Financial Consultants. The results showed that individuals with educated parents enjoy higher financial literacy. In 2010. Cud investigated factors influencing individuals' financial literacy. The results showed that the following factors increase financial literacy: higher education, risk-taking, higher age, high working experience, family income, parents' occupations, and participation in financial courses.

Tamimi *et al.* (2009) examined the impact of financial literacy on financial decisions. Their results showed that the field of individual activities affects financial literacy level and people who invest in the areas of banking and stock have higher level of financial literacy. The survey also showed that men have higher financial literacy and income, age and education level are followed by higher level of financial literacy.

Cude in 2010 examined effective factors on people's financial literacy. His results showed that higher levels of education, risk appetite, higher age, more work experience, family income, parental occupation and attending in training classes will increase financial literacy. In this research it is expressed that people with higher financial literacy are more successful in their business and personal lives. Their financial concerns were well lower and they had longer -term savings and investments and triggered a better future with more lon.

According to Champion (2001), organizations should try to present their staff a comprehensive training system of financial issues. This system causes the increase in staff's job satisfaction as well as their productivity. This also results in the decrease in their absence and helps the preserve of valuable staff. Chen and Volpe (1998) studied the financial literacy of 924 college students from 13 campuses located in the United States. They also examined the relationship between financial literacy and gender, age, nationality, race, income, work experience, university system, education and years of experience. The results showed that the subcategories of university system, education, and years of work experience vary significantly based on the level of financial literacy. Jobless MA students, students of lower degrees and individuals with little work experience have low level of financial literacy. In addition, woman was much less financially literate than men and foreign students were less conscious in this area than American citizens. In a semi-experimental study, Sherraden *et al.* (2010) examined the productivity and effectiveness of a financial literacy training course entitled "I can save money" on the improvement of financial literacy of elementary students. The results showed that when children have access to financial training and saving accounts, their financial capabilities increase. In a study entitled "Approaches to personal financial planning", Murphy and Yetmar (2010) investigated higher education students in two American universities. The results included the following: 33% of the participants stated that they have the required knowledge and skill to prepare a personal financial plan (this comprised 68 individuals, 47 of them were employed in financial and accounting jobs). More than 86% of the sample felt it was important to have a financial plan, and almost 80% of them were interested in planning. Only 33.5% (69 persons) of the participants stated that they provided a comprehensive written financial plan unique to themselves. In an investigation entitled "Pupil's perceptions of financial literacy", Kindle (2010) tried to measure the awareness of the students and graduates of social aids about the relationship between financial literacy and the problems they practically encountered. The results showed that respondents totally evaluated the effects of financial literacy on 11 problems out of the total 15 problems presented in the questionnaire as medium, and its effect of the two problems as small. But they recognized the high effects of financial literacy on the two problems of losing a job and poverty. Also, except the variable "age", none of demographic variables were related to participants' responses.

### *Financial well-being*

This has always been defined in various ways. Since 18th century, Jeremy Bentham and David Hume defined welfare as synonymous with benefit, desirability and luckiness; Pigo (1965) considered it as a quantitative issue which is measurable by money and related to a person's wishes; Souler (1974) emphasized individual's preferences and tendencies. John Rawls (1972) knew it as fairly distributed sources. Fitz Patrick considered social well-being in a very broad term and defined it as "happiness, supplying preferences and needs, relief and comparisons an individual makes about his well-being to others". Financial well-being is the level of sufficiency and economic security of the individual or family which protects an individual against routine economic risks such as losing a job, illness, bankruptcy, and poverty when retired (Gold & Smith, 2002). Well-being involves the satisfaction of an individual in 6 areas: occupation, financial issues, home, entertainment, health and environment (Van Praag, 2003). Hayhu (1990) defined financial well-being as the person's satisfaction about his financial situation. Financial well-being is the persons' viewpoint about his financial situation which is achieved by concrete aspects and judgments about them compared to the standards (Porter, 1990). According to Strumpel (1976), although in the past financial well-being was defined as individual's general satisfaction of his financial situation and prosperities, the definition has currently changed by the life improvements and individual's perception of material and non-material aspects of financial position; these perceptions include satisfaction with income and savings, situation awareness, the ability to meet the needs, financial security and a sense of comfort and satisfaction about income and reward distribution. Brad *et al.* (1999) described life quality as the individual's general mental evaluation of his life situation and some special areas of his life such as social and financial issues, work situation, and livelihood state. Family financial well-being is another factor affecting individuals' financial literacy. In an investigation by Monticone (2010), financial awareness among Italian was measured. This study showed that welfare influences financial awareness and individuals living in families with higher income enjoy higher financial awareness. Individuals with higher income and financial well-being are financially less stressful. These individuals are highly motivated to involve in financial practices such as in stock exchange and investment. Regarding health issue, individuals with higher financial well-being are financially satisfied, have more family relationships, and enjoy higher mental and physical health. Nill *et al.* (2005) studied 3121 clients of Institute of Financial Consultants in order to examine the relationship between financial activities, financial well-being and health. The results showed that individuals with higher income and financial well-being are financially less stressful. Malone *et al.* (2010) explored financial well-being among American women. In this study, the data was collected from 367 women aging between 30 and 65 years old with the lowest income of 40,000 dollars. Results showed that women with non-traditional families were financially more stressful. Also, women who have just married suffered the same problem. Women with higher age are financially less stressful. Educated women and those with higher income enjoyed higher financial well-being. These individuals had financial independence in buying thins and had positive attitude towards buying and were hopeful to future. Joo and Gable (2004) conducted a study to extract a framework for determining financial satisfaction and recognizing factors affecting it. Their sample consisted of 220 office clerk. They use a questionnaire to collect the data. The results showed that the level of financial risk and financial pressure had a negative relationship with financial satisfaction. In addition, there was not relationship between financial satisfaction and variables such as age, gender, race, marital status, owning a house, level of family income and number of dependents.

### *Financial worry*

Financial worry is an unpleasant feeling experienced by a person who is not able to meet his financial needs. Worry is a special unpleasant feeling that is felt when a value is threaten or is to be lost (Friedman, 1991). In a study on 810 adults by Otah *et al.* (1988), it was reported that high financial stress not only cause less life satisfaction, it also leads to less marital satisfaction and parents' responsibly. Galambos and Silbereisen investigated 112 families with two parents and noticed that there is a relationship between income reduction and men' and women' pessimistic view of life and it also negatively influenced children's view.

In another study conducted by Pearlin *et al.* (1981), it was shown that financial worry changes the level of depression, confidence and the ability of personal life management. Specifically, as financial pressure rises, the depression also increases and life control decreases. Stokes and Cochrane (1984) showed that the jobless were more depressed and aggressive and less confident than their employed counterparts.

The negative effects of financial well-being in workplace have been approved in different studies. Studies showed that financial well-being can decrease productivity, quality, quantity, and efficiency and can also increase work-related accidents, absenteeism, health care costs and loss of work. In addition, financial worry can have positive effects on individual in the workplace. These positive effects include increasing the employees' direct savings, reducing absenteeism, improving attendance, improving quality and efficiency, and reducing the time to address personal financial issues in the workplace (Williams *et al.*, 1996).

The negative effects of financial worry on staff are more than its positive effects in the workplace. Workers who have financial problems cannot work with their total capabilities and abilities, and this imposes costs on their employers. In a study by Luther *et al.* (1997), it was shown that staff's financial problems have a great effect on their productivity and performance. This study also showed that due to financial worries in America's Navy, at least $ 36 million is annually imposed the government. Also, about 43% of working personnel stated that they had problems paying off their loans, and financial concerns influenced more on their readiness to work rather than some issues such as problems with their children, household and health care.

Kim *et al.* (2003) examined the relationship between financial worry, financial well-being, financial behaviors and health. The data in this study was collected from clients of Institute of Financial Consultants in two American states in 2000 and 1003. 1800 individuals were randomly selected among 4000. A 57-item questionnaire was used to collect data. The results of this study showed that personal characteristics (including income and age), and financial planning influence individuals' financial behaviors. Personal characteristics, the past financial worries, and financial consulting affect individuals' current financial worries. Also, personal characteristics, past financial behavior, financial worries and financial consulting influence individuals' financial well being. Individuals' health is affected by personal characteristics, financial behaviors, financial worries, financial well-being and financial consulting.

Williams *et al.* (11996) studied the effect of financial well-being on workforce productivity. Using a field study, this investigation was conducted among 1000 staff with over $ 25000 income. The results showed that staff's financial worries had a devastating impact on productivity. This study also showed that those staff who participated in financial counseling programs and financial activity training courses were financially less worried and were more productive. Also, that staffs who was involved in firms' financial activities were financially less worried and had higher productivity.

Kim and Garman (2003) conducted a research on exploring the relationship between staff's financial worries and their absences. The data was collected among 476 staff via e-mails. The results showed that financial worry negatively affected staff's organizational commitment and caused more absences. This study also revealed that age, gender, education, and family income are positively related to financial worry and absence from work. Also, financial worry more threatened mental and spiritual health and organizational commitment decreased it and this led staff to make more absents from the workplace.

### *Financial strategy*

Strategy has been defined in a comprehensive view of long-term objectives, short-term objectives and major policies and plans for achieving these objectives and also clarification of current or future organizational mission, or current or future organizational characteristics (David, 2000). One of the issues that is of significant importance to human being and that is considered as a crucial element of life, is life's financial issues; it has basically been reformed by the changes in sets of related issues and its management and it also needs the development of knowledge power in both personal level and the level of financial policy makers. In this regard, the preliminaries provided for personal finance strategies in the world can be considered at two levels:

1. Leading financial institutions in the world widely provide financial services to individuals. In this regard, the following services can be outlined:

Planning and consulting services, estate planning services, retirement services, financial products, investment services, business financial services, professional money management, wealth protection, cross-border solutions, banking services and so on.

2. In addition, for financial institutes to provide wide services, various training have been provided for individuals ranging from kids (e.g. for three year-olds) to adults. Numerous articles and several books have been published in this field and several educational institutions have been established in order to achieve this objective. The main benefits of personal financial management resulting from a series of training and financial services are to achieve the following objectives. Financial success: achieving financial desires; financial security: the ability to fulfill the needs and desires; Wealth: abundant money or other financial resources; Financial happiness: the satisfaction of financial issues. Personal financial strategy deals with the essential issues for personal and family financial success. Having personal financial management knowledge in dealing with challenges, responsibilities, and financial opportunities of life can provide more success. Being successful in this field requires the understanding and utilization of information for adjusting to the economic environment. These abilities include the knowledge of economic conditions, prediction of future economic direction, and also prediction of future direction of prices and inflation; this requires utilization of financial information resources. In order to get familiar with personal financial strategy, it's required to have a comprehensive look. Therefore, it's needed to mention some issues related to personal financial strategy. The main topics to be accounted for in personal financial management are as follows briefly: 1) financial planning; 2) money management; 3) cost management; 4) income and asset protection; 5) investment planning 6) retirement and assessment planning.

## Materials and Methods

As the findings of this study deals with solving a real-world problem and the results can be applied in actual decision making situations, this study is considered as an applied research. Regarding data collection, this is an analytic survey, as it examines the characteristics of a population and analyzes the obtained data. Three hypotheses were discussed to achieve the main objective. These hypotheses are as follows:

Primary hypothesis I: there is a relationship between financial literacy and financial well-being of professors of Yazd Islamic Azad University.

Primary hypothesis II: there is a relationship between financial literacy and financial worry of professors of Yazd Islamic Azad University.

Primary hypothesis III: there is a relationship between financial worry and financial well-being of professors of Yazd Islamic Azad University.

Pearson correlation test was used to verify hypotheses I, II, and III. The population under investigation is professors of Islamic Azad University of Yazd. The following formula is used to determine the sample size.

$$n = \frac{z^2_{\alpha/2} \times p \times {}^{q}\!/_{d^2}}{1 + \frac{1}{N}\left(\left(z^2_{\alpha/2} \times p \times {}^{q}\!/_{d^2}\right)\right)} \quad (1)$$

Where n (= 94) is the sample size, N (=550) is population size, α (= 0.05 (is SE of the percentage of acceptable reliability, p (= 0.5) is proportion of the population having a certain feature, 0.5 equals q =1-p and d (= 0.07) is the degree of confidence or potential efficiency. Based on statistical analysis, the sample size has been taken as 94 individuals who were selected from the population through simple random sampling.

## Functionalizing Variables

The questionnaire developed by Chen ad Valp (1998) was used to measure individuals' financial literacy. This questionnaire attempts to take into account important factors of personal finance in financial literacy. These factors include: general knowledge of finance (composed of 9 questions), savings and loan (composed of 9 questions), insurance (6 questions), investment (7 questions), and financial decisions, financial opinions and financial education (composed of 8 questions). A five-point Likert scale was used in this questionnaire in which score 1 indicated a bad condition and score 5 indicated the best condition for a person in that question.

The standard questionnaire of Higgins and Stone-Roberts (2010) was used in order to make the financial well-being questionnaire. University professors' financial well-being was measured out of 5 in such a way that individuals who got higher than 3 enjoyed financial well-being and the average greater than 3 indicated the general financial well-being of university professors. Higgins and Stone-Roberts (2010) was also used to provide the financial worry questionnaire. Individuals' financial well-being was calculated out of 5; individuals with marks higher than 3 had financial worry and the average greater than 3 indicated the general financial worry of university professors.

In order to check the validity of the questionnaire, it was given to several professors and the necessary modifications suggested by them were applied for the final design. The reliability of the questionnaire was calculated using Cronbach-alpha; the alpha coefficient for the financial well-being and financial worry questionnaires was calculated and it was 0.707. In order to determine the dominating and common financial strategies, university professors were classified according to different features (such as being financial literate and having financial well-being; being financial literate but lacking financial well-being; low financial literacy and having financial well-being; low financial literacy and lacking financial well-being) and their attitudes toward adopting strategies were examined.

## Results

The data was analyzed using SPSS. The results of descriptive statistics are presented in Table 1.

**Table 1. Respondents characteristics**

| Demographic features | Status | N | Percentage |
|---|---|---|---|
| age | below 35 yrs | 46 | 49 |
| | 36-45 yrs | 34 | 36 |
| | 46-55 yrs | 11 | 12 |
| | Above 65 | 3 | 3 |
| sex | Male | 65 | 69.15 |
| | Female | 29 | 30.85 |
| Marital status | Single | 19 | 20.21 |
| | Married | 75 | 79.79 |
| Employment status | Visiting professor | 57 | 60.64 |
| | Faculty member | 37 | 39.36 |
| Field of study | Economy, management & accounting | 29 | 30.9 |
| | Human sciences | 25 | 26.6 |
| | Basic Sciences | 18 | 19.1 |
| | Technical & engineering | 21 | 22.3 |
| | Medical sciences | 1 | 1.1 |

### *Results of testing research hypotheses*

Pearson correlation test was used to verify hypotheses I, II, and III. The results are presented in Table 2. This table shows that there is a negative relationship between financial well-being and financial worry, but there is no significant relationship between financial literacy and financial well-being of university professors and also between their financial literacy and financial worry.

**Table 2. Results of correlation test**

| | | |
|---|---|---|
| | | Financial well-being |
| Financial literacy | Pearson correlation coefficient | 0.67 |
| | Sig. | 0.529 |
| | N | 94 |
| | | Financial worry |
| Financial literacy | Pearson correlation coefficient | -0.179 |
| | Sig. | 0.093 |
| | N | 94 |
| | | Financial well-being |
| Financial worry | Pearson correlation coefficient | -0.567 |
| | Sig. | 0.000 |
| | N | 94 |

According to correlation coefficient (0.67) and P value (0.529) which is greater than 0.05, the null hypothesis is rejected. It can be said that there is no significant relationship between financial literacy and financial well-being of professors of Yazd Islamic Azad University. Thus, hypothesis I is rejected at a confidence level of 95%. According to correlation coefficient (-0.179) and P value (0.093) which is greater than 0.05, there is no significant relationship between financial literacy and financial worry of professors of Yazd Islamic Azad University at a confidence level of 95%. Thus, hypothesis II is rejected at a confidence level of 95%. According to correlation coefficient (-0.567) and P value (0.000) which is greater than 0.05, the null hypothesis is rejected. It can be said that there is no significant relationship between financial worry and financial well-being of professors of Yazd Islamic Azad University at a confidence level of 95%. Thus, hypothesis III is rejected at a confidence level of 95%.

### *Views about choosing financial strategy*

Which financial strategy is dominant for the group "having financial literacy and having financial well-being"?

The group having both financial literacy and financial well-being comprise 8 persons; using a binomial test at a confidence level of 90% and regarding the significance level which is less than 0.1, the No percent was higher; therefore 3 strategies can be rejected but no opinion can be given about the other cases as there is no significant difference between the answers or in other words, there is no sufficient evidence for rejecting null hypothesis.

**Table 3. The viewpoint of individuals having financial literacy and financial well-being about choosing financial strategy**

| Financial strategy | Yes | | No | | Binomial test / test comparison = 0.50 | Confirming or rejecting the strategy from the respondent' s viewpoint |
|---|---|---|---|---|---|---|
| | N | Percent | N | Percent | Sig. | |
| Reducing expenses and the cost of living | 2 | 0.25 | 6 | 0.75 | 0.289 | - |
| Working more | 6 | 0.75 | 2 | 0.25 | 0.289 | - |
| Getting experts' advice in field of finance | 2 | 0.25 | 6 | 0.75 | 0.289 | - |
| Purchasing life insurance or similar cases to guarantee the income | 4 | 0. 50 | 4 | 0. 50 | 1.00 | - |
| Increasing savings for retirement | 1 | 0.12 | 7 | 0.88 | 0.07 | rejected |
| Transferring wealth and properties to reduce the risk | 1 | 0.12 | 7 | 0.88 | 0.07 | rejected |
| Purchasing real estate and investing in assets | 6 | 0.75 | 2 | 0.25 | 0.289 | - |
| Moving to cheaper areas of the city or moving to a smaller house | - | 0.00 | 8 | 1.00 | 0.008 | rejected |

Which financial strategy is dominant for the group "having financial literacy but lacking financial well-being"?

In the sample there is only one person grouped in having financial literacy but lacking financial well-being which has the following strategies: working more, purchasing real estate and investing in assets, and reducing expenses and the cost of living.

**Table 4. The viewpoint of individuals having financial literacy but lacking financial well-being about choosing financial strategy**

| Financial strategy | Frequency | |
|---|---|---|
| | Yes | No |
| Reducing expenses and the cost of living | 1 | - |
| Working more | 1 | - |
| Getting experts' advice in field of finance | - | 1 |
| Purchasing life insurance or similar cases to guarantee the income | - | 1 |
| Increasing savings for retirement | - | 1 |
| Transferring wealth and properties to reduce the risk | - | 1 |
| Purchasing real estate and investing in assets | 1 | - |

**Table 5. Which financial strategy is dominant for the group "low financial literacy and having financial well-being"?**

| Financial strategy | Yes | | No | | No answer | Binomial test / test comparison = 0.50 | Confirming or rejecting the strategy from the respondent's viewpoint |
|---|---|---|---|---|---|---|---|
| | N | Percent | N | Percent | | Sig. | |
| Reducing expenses and the cost of living | 36 | 0.71 | 15 | 0.29 | 1 | 0.005 | confirmed |
| Working more | 29 | 0.62 | 18 | 0.38 | 5 | 0.144 | - |
| Getting experts' advice in field of finance | 29 | 0.57 | 22 | 0.43 | 1 | 0.401 | - |
| Purchasing life insurance or similar cases to guarantee the income | 26 | 0. 50 | 26 | 0. 50 | - | 1.00 | - |
| Increasing savings for retirement | 39 | 0.75 | 13 | 0.25 | - | 0.00 | confirmed |
| Transferring wealth and properties to reduce the risk | 19 | 0.38 | 31 | 0.62 | 2 | 0.119 | - |
| Purchasing real estate and investing in assets | 33 | 0.65 | 18 | 0.35 | 1 | 0.049 | confirmed |
| Moving to cheaper areas of the city or moving to a smaller house | 14 | 0.27 | 37 | 0.73 | 1 | 0.002 | rejected |

## Conclusions

In exploring effective factors on individuals' life quality, being financially literate and not being worried about financial issues were recognized among the most important factors. One of the elements that can influence individuals' financial well-being is financial literacy which can be considered as one of the factors affecting individuals' financial well-being and being away from financial worries. In the current study, thus, financial literacy of the professors of Yazd Islamic Azad University and its impacts on financial worry and financial well-being were measured. Personal financial strategy studies the cases essential for achieving personal and family success in financial issues. Having the knowledge of personal financial management helps an individual in dealing with challenges, responsibilities, and life's financial opportunities. In the current study, university professors' financial strategies in cost and income management were studied.

**Table 6. Which financial strategy is dominant for the group "low financial literacy and lacking financial well-being"?**

| Financial strategy | Yes | | No | | No answer | Binomial test / test comparison = 0.50 | Confirming or rejecting the strategy from the respondent's viewpoint |
|---|---|---|---|---|---|---|---|
| | N | Percent | N | Percent | | Sig. | |
| Reducing expenses and the cost of living | 26 | 0.79 | 7 | 0.21 | - | 0.001 | confirmed |
| Working more | 25 | 0.83 | 5 | 0.17 | 3 | 0.000 | confirmed |
| Getting experts' advice in field of finance | 23 | 0.70 | 10 | 0.30 | - | 0.035 | confirmed |
| Purchasing life insurance or similar cases to guarantee the income | 20 | 0. 67 | 10 | 0. 33 | 3 | 0.099 | - |
| Increasing savings for retirement | 26 | 0.79 | 7 | 0.21 | - | 0.001 | confirmed |
| Transferring wealth and properties to reduce the risk | 19 | 0.61 | 12 | 0.19 | 2 | 0.281 | - |
| Purchasing real estate and investing in assets | 22 | 0.67 | 11 | 0.33 | - | 0.080 | - |
| Moving to cheaper areas of the city or moving to a smaller house | 13 | 0.39 | 20 | 0.61 | - | 0.296 | - |

Firstly, the increase in financial literacy doesn't lead to the increase in financial well-being. The results of this research are also compatible with the research by Tamimi and Kalli (2009) that proved the positive impact of financial literacy on financial well-being. Secondly, higher financial well-being leads to less financial worries in university professors. The results of the study is compatible with the results of Kim *et al.* (2003), Neill *et al.* (2005) who have confirmed the negative impact of the financial well-being on financial concerns. Also, increasing financial literacy cannot reduce financial worries. The results of this research is also compatible with the research by Joo and Grable (2004), Williams *et al.*(1996) and Cude (2010) who have demonstrated the negative impact of financial literacy on financial concerns. Regarding the strategies adopted by professors, as it can be clearly found in the table of strategy results, the strategy of "reducing expenses and the cost of living" is agreed on by most groups, except the group "having both financial literacy and financial well-being"; this indicates that most groups focused on cutting the expenses rather than increasing the income. This is to some extent acceptable since their incomes are mainly restricted by university laws and they confessed that they are not able to change their incomes. In addition, only individuals with both financial well-being and financial literacy chose purchasing life insurance and the other groups didn't use this strategy; this is a sign of weakness for other groups in the selection of appropriate risk coverage. One noticeable point among the strategies is that none of the groups use specialized consulting services in financial area; this is an obvious weakness among all the groups which is the result of general weakness of not having financial consultants and lacking specific counseling centers and teams in Iran. In addition, purchasing real estate is one of the common strategies which may be the result of high inflation in this area in the recent years. However, this is a useful strategy for maintaining purchase power in inflationary conditions. It should be noted that unfortunately individuals with low financial literacy and lacking financial well-being do not benefit from this strategy.

As presented in the table of strategy results, the strategy of "reducing expenses and the cost of living" is agreed on by most groups, except the group "having both financial literacy and financial well-being"; this indicates that most groups focused on cutting the expenses rather than increasing the income. This is to some extent acceptable since their incomes are mainly restricted by university laws and they confessed that they are not able to change their incomes. In addition, only individuals with both financial well-being and financial literacy chose purchasing life insurance and the other groups didn't use this strategy; this is a sign of weakness for other groups in the selection of appropriate risk coverage. One noticeable point among the strategies is that none of the groups do not use specialized consulting services in financial area; this is an obvious weakness among all the groups which is the result of general weakness of not having financial consultants and lacking specific counseling centers and teams in Iran. Also, purchasing real estate is one of the common strategies which may be the result of high inflation in this area in the recent years. However, this is a useful strategy for maintaining purchase power in inflationary conditions. It should be noted that unfortunately individuals with low financial literacy and lacking financial well-being do not benefit from this strategy.

The results of the current study indicate that financial worry exists among university professors and this can have negatives influence on their capabilities. Therefore, it is recommended that university professors study the texts and articles about financial worry in order to identify and recognize their sources of financial worries; this way, they can resolve their financial worries and concerns. They also get help from counseling services of specialists in this area. Not utilizing specialists' counseling services in the area of financial issues by four groups of university professors was among the obvious weaknesses of all investigated professors. Thus, it's recommended that organizations in charge of financial issues take some actions about establishing financial counseling centers and also issuing financial counseling qualifications and introducing appropriate consultants in the society; this way, they can provide the opportunity for all classes of people to benefit from financial counseling. It should be mentioned that these financial counselors are available in many countries including US. In the current study, the relationship between variables was studied regardless of factors such as dependent and independent variables. Thus, it is recommended that regarding the same or similar factors, further studies be conducted to investigate university professors' performance or the performance of other groups of society. Finally, it is recommended that a study be conducted to identify the main sources of university professors' financial worries and the solutions to them.

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