Review of the Relationship between Behaviors, Strategies and Financial Literacy of the Employees of Islamic Azad University of Yazd and Their Financial Welfare

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ABSTRACT

A person who is considered to be littered in terms of financial information has become aware of the necessity and significance of sufficient financial information for doing tasks accurately and is able to present an accurate analysis and evaluation by taking the available information into account. Financial literacy is knowledge of principles and terms which are required for financial issues. Having financial strategy has a dynamic impact on the person and prepares him or her for a proper reaction to financial concerns and situations. Financial literacy can also lead to the improvement of the person's performance by creating a positive approach and therefore it leads to achievement of proper decisions and reduction of financial concerns and obtainment of financial welfare for the person. The present research is an applied research in terms of purpose and in terms of data gathering method it is of descriptive, correlation clustering type. And its required data has been gathered by using survey and questionnaire as tools distributed among 188 persons of the employees of Islamic Azad University of Yazd. In this research, path analysis technique and univariate and multivariate regression equations have been used for analyzing data and the results obtained from testing the research hypotheses show that the employees of Islamic Azad University of Yazd have sufficient financial literacy; but due to lack of usage of this financial literacy, they have financial concerns and do not have proper financial welfare.
KEYWORDS: Financial Behavior, Financial Strategy, Financial Literacy, Financial Welfare, Financial Concern.

INTRODUCTION

If a person is able to acquire sufficient information and proper financial literacy related to the society and the current economic situation and uses it in his or her life, he/she will certainly achieve a desirable level of welfare; thus, in proportion with the rate a person achieves financial literacy in his or her area of work, he or she will select and implement proper financial strategies and will naturally have good financial behaviors and will take a step towards creating a desirable situation in terms of his or her own and his or her family's welfare.

In terms of application, financial welfare, financial strategy and financial behaviors are some factors which are effective in the working environment. People with a proper financial strategy can make better decisions for their families and have higher levels of welfare and economic safety and experience less mental and social pressures. Proper financial behavior can lead to the reduction of financial problems and increase the quality of life. These impacts cause the person to feel better and have better mental and spiritual health in the workplace. In addition to these items, organizations whose employees have more proper financial strategies and have financial welfare, higher professional satisfaction and higher efficiency, understand the advantages of the organization better and show more commitment to their organization. Also the financial literacy and welfare of the employees lead to the reduction of the rate of their absence and helps the organization to save their valuable employees (Kim, 2007).

Researchers have reported that financial problems and issues and economic pressures, a part which is naturally due to the insufficiency of financial literacy, can be related to anomalies such as: family hostilities, aggressive and harsh behaviors of parents, reduction of adults' power for facing the daily problems and issues, increase of abnormal behaviors at the level of society, addiction to alcoholic beverages and occurrence of violent behaviors (Moeen-adin, 2011). In order to find peace and manage the earnings of the family prudently, having a program for types of costs is necessary. The considerable point is that in some families, the more and easier the earning is achieved, the more it is spent for unessential expenses and luxury. Unfortunately, this process turns into consumption addiction in some families and disturbs the health of the family. Doing this research can provide useful information about the rate of financial behaviors, financial strategies, financial literacy and financial welfare of the employees of Islamic Azad University; the results of this research can help the university to increase the efficiency of the employees in the workplace and their living quality. And in terms of theory, it is necessary to mention that no study has been done that has considered and reviewed all of these

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four variables – financial welfare, financial behavior, financial strategy and financial literacy. Therefore, doing this research can help filling out the gap in the research literature. Accordingly, the present research seeks to find the response to the primary question:

How is the relationship between financial behaviors, strategies and literacy and financial welfare of the employees of Islamic Azad University of Yazd?

Theoretical framework and research hypotheses
Financial literacy

The necessity of having a proper financial strategy in the personal life and organization management is having financial literacy. Financial literacy is knowledge of principles and terms which are required for financial issues. Having financial strategy has a dynamic impact on the person and prepares him or her for a proper reaction to financial concerns and situations. Financial literacy can also lead to the improvement of the person's performance by creating a positive approach and therefore it leads to achievement of proper decisions and reduction of financial concerns and obtainment of financial welfare for the person (Vitt, *et al.* 2000). The ability of using the knowledge and skills for effective management of sources is necessary in the respect of achieving financial welfare for a lifetime (Moeen-adin, 2011). Financial literacy is the ability of one in understanding and using financial issues (Remund, 2010). Despite the significance of financial literacy of the previous research has shown that this ability is not that much advanced among people of the world especially in the developing and developed countries and obstacles such as lack of knowledge of personal financial issues, complexities of financial life, existence of high costs at the time of financial decision making and lack of sufficient time for learning personal financial issues have led to the low financial literacy in the societies (Vitt, 2000).

Financial behavior

Financial behaviors can be evaluated based on techniques of financial management which are important components for financial welfare. Financial management includes: 1) financial programming for achieving short-term and long-term financial purposes, 2) managing earning and credit, 3) buying houses, insurance, automobile and other durable consumption goods and services including banking, insurance and investment; and 4) future investments (Garman and Forgue, 2000). Positive financial behaviors such as capital maintenance, keeping saving modes and avoiding overusing credit cards have positive relationships with financial welfare and lower levels of financial pressure (Gutter, *et al.* 2010). People who experience positive financial behaviors report a higher level of satisfaction in association with their personal investments (Jeago, Tong, and Shim, 2009). Using social, cognitive and emotional factors in understanding the economic decisions of the individuals and executive institutions of economic functions, including consumers, loaners and investors has some impacts of in the expressive behaviors (Sewell, 2007: 1-9). Thus, the following hypotheses have been considered for this research:

Hypothesis (1): employees of Islamic Azad University of Yazd have the required sufficiency in the field of financial literacy.
Hypothesis (2): financial literacy affects the financial behavior of the employees of Islamic Azad University of Yazd.

Financial concern

Man experiences different stresses and concerns in the workplace, in the way of home to the workplace and in the family; some concerns about health, children, debts, earnings, job improvement and future. Although most people consider stress and concern as an undesirable and annoying issue, but it is not necessarily as such. Man at least needs a little stress to force him/her to be active. Stress often leads to positive consequences. Stressful experiences can lead to learning new skills, new views and new ways for life (Tedeschi and Calhoum, 2004).

Financial concern is an undesirable feeling which is experienced by a person who can't fulfill his/her financial needs. These feelings usually include emotions such as fear and encouragement and might even include rage and aggression (Friedman, *et al.* 1991).

Therefore, the following hypotheses are recommended for this research:
Hypothesis (3): financial concern affects the financial behavior of the employees of the Islamic Azad University of Yazd.
Hypothesis (4): financial literacy affects the financial concern of the employees of the Islamic Azad University of Yazd.

Financial strategy

Strategy has been defined as a comprehensive impact of long-term purposes, short-term goals and objectives and main programs and policies for the realization of those purposes and expression of the existing and future mission and existing and future personality of the organization. Financial strategy is a dimension of strategy which is in the area of financial management and includes decision making in terms of investment, funding and division policy. Jacobs (2009) considers personal financial knowledge as the knowledge of concepts and skills of personal financial managements. In their opinion, the word financial is a wide scope of daily activities of life which are related to money which include activities such as controlling checkbook to managing credit card, budget preparation, buying insurance or investment. Then according to the research literature, the following hypotheses are recommended for this research:

Hypothesis (5): financial literacy affects the financial strategy of the employees of the Islamic Azad University of Yazd.
Hypothesis (6): financial concern affects the financial strategy of the employees of the Islamic Azad University of Yazd.

Financial welfare

Financial welfare is a concept with multiple sections. Strumpel (1986) argues that although financial welfare has meant happiness or a person's general satisfaction of his financial condition or asset in the past, but it has changes to person's understanding of financial and nonfinancial aspects of his or her financial condition in the current situation by improving the level of people's life. Perceptions including satisfaction of earning and saving, knowledge of situations, ability to meeting the needs, the feeling of financial safety and the feeling of comfort and satisfaction of the system of income and reward distribution. Fergusson, *et al.* (1981) describes financial welfare as earning and asset based on levels of financial input. Williams (1983) considers financial welfare as a function of financial and nonfinancial aspects of financial condition of a person. Also Hayhoe (1990) considers financial welfare as the person's understanding and feeling of satisfaction of his or her own financial conditions. In his researches, Porter (1990) defines financial welfare as the feeling and view of the financial condition which is based on objective and abstract views which are judged and compared based on the standards so that they would form an evaluated view of financial condition. Ardlet (1997) considers satisfaction of life, feeling of happiness and lack of the feeling of sadness in the person's life as mental welfare. Brad (1999), *et al.* have described quality of life as the person's general mental evaluation of his or her living condition in general and in specific areas such as social life, financial issues, career condition or living condition. Therefore, hypotheses as follows can be stated for the research as well:

Hypothesis (7): financial behavior affects the financial welfare of the employees of the Islamic Azad University of Yazd.
Hypothesis (8): financial concern affects the financial welfare of the employees of the Islamic Azad University of Yazd.
Hypothesis (9): financial strategy affects the financial welfare of the employees of the Islamic Azad University of Yazd.
Hypothesis (10): financial literacy affects the financial welfare of the employees of the Islamic Azad University of Yazd.
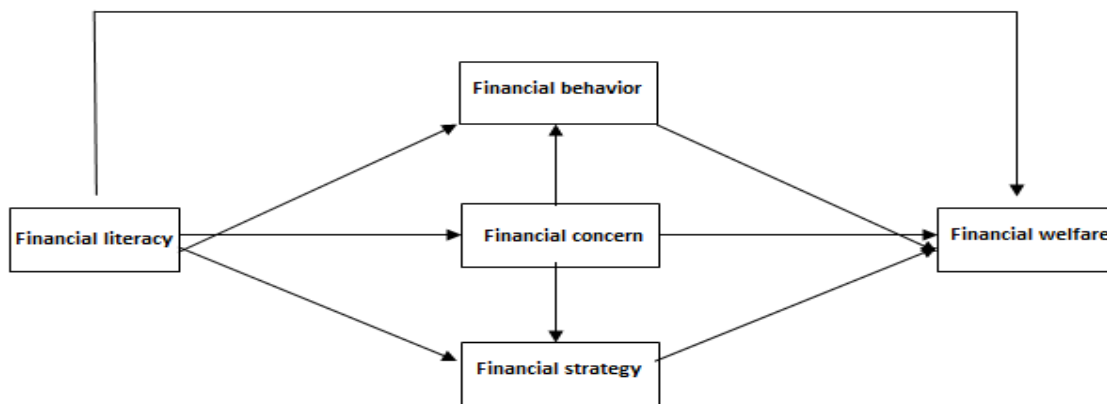
Conceptual model of the research

Figure 1 – conceptual model of the research

Research method

The method of the present research is an "applied" research in the respect that its results can be used in the process of improving the knowledge of the employees and managers of the studied population and other similar societies in the area of financial literacy, welfare and attempts. The method of the present research is of the "correlation" type and it is cross-sectional in terms of implementation. The employees of Islamic Azad University of Yazd who have diploma as their academic degree and higher are 360 person who form the statistical population of this research. In this research, the Cochran formula has been used in order to calculate the sample volume and a number of 188 persons have been selected as the sample with the method of sectional sampling method.

Table 1 – statistical population (number of employees working in the university) and the number of sample

Working area	Number in the population	Percentage in the population	Number in the sample
Chairmanship	18	5%	10
Education deputy	117	33%	62
Financial administrative deputy	78	22%	41
Research deputy	58	16%	30
Student deputy	34	9%	16
Development deputy	16	4%	9
Hospital	39	11%	20
Total	360	100	188

Descriptive statistics

Given the fact that from 188 of the individuals of the sample who have responded, 126 were men and 62 were women which shows that 67% were men and 33% were women and 5% were single and 95% were married. In table 1, the statistical descriptive of the demographic features of the 188 respondents have been provided.

Table 2 – table of distribution of the statistical samples of the research

variable	Group	Percentage	Variable	Group	Percentage
Gender	Male	67		undergraduate	13.8
	Female	33		Bachelor degree	5
Marriage status	Single	5.3	Academic degree	Master degree	30.9
	Married	94.7		PhD	1.1
age	Between 26 and 35 years	34		Less than 5 years	2.1
	Between 36 and 45 years	53.2		5-10 years	19.1
	Between 46 and 55 years	11.2	Working record	10-15 years	36.7
	Higher than 56 years	1.6		15-20 years	27.7
				Higher than 20 years	14.4

The method of data gathering in this research can be divided into two categories of library and field research. In the field data gathering method, questionnaire has been used as the tool. The questionnaire in the present research has 2 sections and in the first section, the questions related to research variables include 5 questions about financial behaviors, 8 questions about financial strategies, 22 questions about financial literacy, 7 questions about financial concern, 3 questions about financial welfare and the second section includes questions related to the demographic variables. In order to validate the questionnaires, image and content validity were used. In this research, by using the opinions of consultant and guiding professors in order to make sure of selecting accurate items which are able to measure the research variables at the level of the required statistical population, this effort was made and it was ensured. In order to determine the reliability of the questionnaire, Cronbach alpha coefficient has been used and the obtained alpha coefficient of the whole questionnaire and each of the variables have been obtained through SPSS 18 which shows the reliability of the questionnaire. Table 2 shows the values of Cronbach alpha and the number of questions related to the variables.

Table 3 – calculation of the reliability of the questions related to the questionnaire

Variable	Number of questions	Cronbach alpha	Source
Financial welfare	0.790	3	Malon et al(2010)
Financial behavior	0.776	5	Saliar(2009)
Financial strategy	0.721	8	Higgins and Roberts(2011)
Financial concern	0.867	7	
Financial literacy	0.709	22	

The following table provides the Cronbach alpha and the number of questions related to the variables of the questionnaire. Since the value of Cronbach alpha is more than 0.7, thus the test has significant reliability.

Method of data analysis

In this research, in order to analyze the data and to review the variables and hypotheses of the research, the path analysis model has been used.

In order to review the confirmation of the direct and indirect relationships between the variables and factors, the path analysis technique has been applied by using univariate and multivariate regression equations and in order to the data analysis and classification, the EXCEL and SPSS18 software have been used, also the intermediate role of the variables is reviewed by using assumption test.

Comparing the research variable with the mean of the measurement scale

The t-test of a sample has been shown for comparing the observed mean of the research variables with the theoretical mean of measurement scale. And by considering the fact that significance level is less than 0.05, the mean of all variables except for financial welfare is significantly different from theoretical mean and by considering the mean of the variables of financial behavior is 3.76 and financial concern's mean is 3.25, therefore mean of the variables of financial behavior and financial concern is significantly more than average and the mean of the financial strategy variable is 1.89, thus the mean of financial strategy variable is significantly less than average.

Table 4 – table of t-test of a sample for research variables

Variable	Comparison of the observed mean with the constant value 3				
	Mean	t-statistic	Freedom degree	Significance level	Mean difference
Financial welfare	3.0390	0.908	187	0.365	0.03901
Financial behavior	3.7622	17.417	187	0.000	0.76223
Financial concern	3.2534	4.234	186	0.000	0.25341
Variable	Comparison of the observed mean with the constant value 3				
	Mean	t-statistic	Freedom degree	Significance level	Mean difference
Financial strategy	1.8877	-3.734	187	0.000	-0.11227

Review of the rate of financial literacy of the reviewed sample

In order to review the rate of financial literacy of the employees of Islamic Azad University of Yazd and the first hypothesis (financial literacy of the employees of Islamic Azad University of Yazd has the necessary sufficiency), the mean of the variable of financial literacy has been compared with the score 60 and scores higher than 60 are considered littered.

Table 5 – comparison of the observed mean of financial literacy variable with the score 60

Variable	Comparison of the observed mean with the constant value 60				
	Mean	t-statistic	Freedom degree	Significance level	Mean difference
Financial literacy	67.8917	8.935	187	0.0	7.89168

Using the t-test for a sample with H_0 tests the equation of means with the score 60 and the hypothesis of inequality of the means with the score 60. Given the t-statistic and significance level which is less than 0.05; therefore at the confidence level of 95% H_0 is rejected, which means that the difference between the mean of the scores of financial literacy of the employees of Islamic Azad University of Yazd is significant with the number 60. The mean of the scores of financial literacy, which is equal to 67.89, shows that the employees of Islamic Azad University of Yazd are sufficiently qualified in terms of financial literacy.

Test and analysis of research hypotheses

In this section, in order to find the relationships between variables and path analysis, a univariate regression model equation and three multivariate regression equations have been used which have been expresses as follows.

The results of the multivariate regression equations for the financial behavior variable as the dependent variable and independent variables of financial literacy and financial concern are as follows.

At the significance level (0.000), which has been obtained as less than 0.05, the linear regression equation is significant. Also by considering the determination coefficient, it can be said that only 10% of the changes of the response variable (dependent) can be expressed through predictive variables (independent). Also the Durbin-Watson statistic for this model is close to 2, which is indicative of the randomness of the residuals.

In the obtained output, linear regression equation coefficients and also the coefficients were tested to be zero which specifies that by considering the significance level of financial concern (0.014) and financial literacy (0.001) variables which is less than 0.05, at the significance level of 95%, the coefficient of financial concern

and financial literacy variables are significant in the regression equation. In addition, given the standard coefficient of financial literacy (0.238) and financial concern (-0.175) variables respectively have the highest impact on financial behavior variable. On the other hand, given the colinearity statistics show that the value of VIF statistic is less than 5. Therefore there is no colinearity.

The results of the univariate regression model for the financial concern variable as the dependent variable and independent variable of financial literacy are as follows. In the model, the regression significance test has been done, significance level (0.025) which is less than 0.05, therefore the linear regression equation is significant. Also by considering the determination coefficient, it can be said that only 3% of the changes of the response variable (dependent) can be expressed by the predictive variables (independent). Also the Durbin-Watson statistic is close to 2 for this model which is indicates that the residuals are random.

In the obtained output in the table of coefficients, the regression line equation coefficients and also testing the coefficients to see if they are equal to zero, it was specified that given the significance level of the financial literacy variable (0.025) which is less than 0.05, at the confidence level of 95%, the coefficient of financial literacy variable is significant in the regression equation.

The results of the multivariate regression model for the variable of financial strategy as the dependent variable and the independent variables of financial literacy and financial concern are as follows.

In the model, the regression and significance test have been done, and the significant level (0.443) which is more than 0.05, therefore the linear regression equation is not significant. Also by considering the determination coefficient, it can be said that only 1 percent of the changes of the response variable (dependent) can be expressed by the predictive variable (independent).

In the obtained output in the table of coefficients, the regression line equation coefficients and also testing the coefficients to see if they are equal to zero, it was specified that given the significance level of the financial concern (0.373) and financial literacy variables (0.295) which is more than 0.05, at the confidence level of 95%, the coefficient of financial literacy and financial concern variables are not significant in the regression equation.

The results of the multivariate regression model for the variable of financial welfare as the dependent variable and the independent variables of financial behavior, financial concern, financial strategy and financial literacy are as follows.

In the model, the regression and significance test have been done, and the significant level (0.000) which is more than 0.05, therefore the linear regression equation is not significant. Also by considering the determination coefficient, it can be said that only 32 percent of the changes of the response variable (dependent) can be expressed by the predictive variable (independent).

In the obtained output in the coefficients table, linear regression equation coefficients and also the coefficients were tested to be zero which specifies that by considering the significance level of financial behavior (0.000) and financial concern (0.000) variables which is less than 0.05, at the significance level of 95%, the coefficient of financial concern and financial behavior variables are significant in the regression equation. In addition, given the standard coefficients of financial concern (-0.407) and financial behavior (0.302) variables respectively have the highest impact on financial welfare variable. On the other hand, given the colinearity statistics show that the value of VIF statistic is equal to 1.22 and less than 5. Therefore there is no colinearity.

Table 6 – result of testing the hypotheses

| Hypotheses	Coefficient	t-statistic	Significance level	Standard coefficient	Result of hypotheses
Financial literacy affects financial behavior of the employees of Islamic Azad University of Yazd.	0.012	3.356	0.001	0.238	Confirmed
Financial concern affects financial behavior of the employees of Islamic Azad University of Yazd.	-0.135	-2.475	0.014	-0.175	Confirmed
Financial literacy affects financial concern of the employees of Islamic Azad University of Yazd.	-0.01	-2.258	0.025	-0.164	Confirmed
Financial literacy affects financial strategy of the employees of Islamic Azad University of Yazd.	0.002	0.892	0.373	0.066	Rejected
Financial concern affects financial strategy of the employees of Islamic Azad University of Yazd.	0.039	1.050	0.295	0.078	Rejected
Financial behavior affects financial welfare of the employees of Islamic Azad University of Yazd.	0.279	4.469	0.000	0.302	Confirmed
Financial concern affects financial welfare of the employees of Islamic Azad University of Yazd.	0.039	1.050	0.295	0.078	Confirmed
Financial strategy affects financial welfare of the employees of Islamic Azad University of Yazd.	-0.002	-0.026	0.979	-0.002	Rejected
Financial literacy affects financial welfare of the employees of Islamic Azad University of Yazd.	0.001	0.446	0.656	0.029	Rejected

Ultimate model of the research:
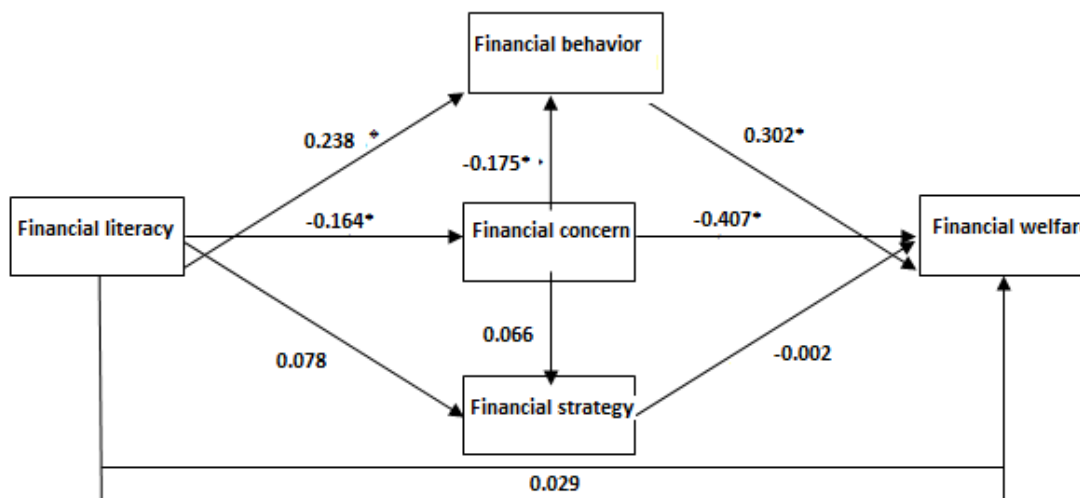
Figure 2 – ultimate model of the research
*There is a significant relationship at the 95% confidence level.

DISCUSSION AND CONCLUSION

The first hypothesis in terms of reviewing the rate of financial literacy of the employees of Islamic Azad University of Yazd has been mentioned and analyzed by using the statistical method of comparing single-sample mean. In doing the test, the sufficient score for financial literacy has been considered to be at least 60. This scale has been extracted from the article "review of analysis of personal financial literacy among college students of financial services" (Chan and Welp, 1998) and according to the statistical tests; the total mean of financial literacy of the employees of Islamic Azad University of Yazd has been equal to 67.89. In total, the results obtained from application of statistical method has been indicative of the sufficiency of the financial literacy of the employees of Islamic Azad University of Yazd which are not in compliance with the findings of Moeen-adin (2011), Yousefi (2011), L. Timy and Ben Callie (2009). The considerable point is that the university staff, despite their sufficient financial literacy, do not have the required financial welfare and this is because of lack of usage of financial literacy in the financial decisions, lack of usage of proper financial strategies, lack of usage of financial and management consultants available in the university. The time of doing this research was the same as the period of sanctions and hyperinflation in Iran and economic depression throughout the country and the world and also responding the questions of the research has been done by considering the conditions which were mentioned above and these factors have affected the outcome of the other research hypotheses as well.

The second hypothesis reviewed the impact of financial literacy on the financial behavior of the employees of Islamic Azad University of Yazd. The results of the overall test of this hypothesis showed that financial literacy has a positive impact on financial behavior. Since no research has been done with the subject of this hypothesis according to the reviews of the researcher in the past, comparing the result of this hypothesis with other researches is not possible.

The third hypothesis was mentioned in terms of impact of financial concern on the financial behavior of the employees of Islamic Azad University of Yazd and the results of totally testing this hypothesis showed that financial concern has a diverse impact on financial behavior. In the fourth hypothesis, the impact of financial concern of the employees of Islamic Azad University of Yazd has been reviewed. The results have shown that financial strategy has a diverse impact on financial concern. The fifth hypothesis has been mentioned and testes in terms of the impact of financial literacy on the financial strategy of the employees of Islamic Azad University of Yazd. The results showed that financial literacy does not have an impact on financial strategy. The sixth hypothesis has been mentioned and tested in terms of the impact of financial concern on financial strategy of the employees of Islamic Azad University of Yazd. The results showed that financial concern doesn't have an impact on financial strategy. The seventh hypothesis has been mentioned and tested in terms of the impact of financial behavior on financial welfare of the employees of Islamic Azad University of Yazd. The results showed that financial behavior has a positive impact on financial welfare.

The eighth hypothesis has been mentioned and tested in terms of the impact of financial concern on financial welfare of the employees of Islamic Azad University of Yazd. The results showed that financial concern has a

diverse impact on financial welfare. The ninth hypothesis was mentioned and tested in terms of the impact of financial strategy on financial welfare of the employees of Islamic Azad University of Yazd. The results showed that financial strategy does not have an impact on financial welfare. The tenth hypothesis was mentioned and tested in terms of the impact of financial literacy on financial welfare of the employees of Islamic Azad University of Yazd. The results showed that financial literacy doesn't have an impact on financial welfare.

Applicable recommendations

Since the level of financial literacy of the employees of Islamic Azad University of Yazd has been average and close to normal and due to the significance of this issue in the personal and social and professional lives of the individuals, it is recommended to the university to hold educational classes of financial literacy in the form of courses in addition to serving, which shall be a section of its mission in the respect of improving this defect. Also, since financial literacy affects financial welfare of the employees through financial behavior and financial concern and that the subject of accurate and proper financial strategy and behavior is currently crucially significant; it is recommended to the university employees to take a step towards increasing the level of their financial literacy and improving their financial behaviors by studying the relevant issues and similar theses and asking for the opinions of the expert professors so that they would reduce the rate of their financial concern.

Given the wonderful significance of the issue for the employees and other members of the society and the fact that teaching literacy, including financial and nonfinancial, starts from schools and universities, it is recommended to make the necessary effort for putting the course of financial literacy in the curriculum of the schools and universities so that this gap would be filled out.

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