IFA
Iranian Journal of Finance
Print ISSN 2676-6337
Online ISSN 2676-6345

# Can Spending Management mediate the relationship between financial literacy, English Teacher's Risk Tolerance, and financial anxiety?

**Anita Omidinia ***

*Corresponding Author, Bachelor of English Language Teaching, Department of English Language Teaching, Farhangian University, Tehran, Iran. (Email: anitaomidinia@cfu.ac.ir)

**Abbas Ramazani**

Assistant Prof., Department of Educational Administration, Farhangian University, Tehran, Iran. (Email: a.ramezani@cfu.ac.ir)

Iranian Journal of Finance, 2024, Vol. 8, No.3, pp. 73-97.
Publisher: Iran Finance Association
doi: https://doi.org/ 10.30699/ijf.2024.424727.1440
Article Type: Original Article
© Copyright: Author(s)
Type of License: Creative Commons License (CC-BY 4.0)
Received: January 13, 2024
Received in revised form: April 02, 2024
Accepted: Juan 01, 2024
Published online: Juan 26, 2024

## Abstract

Financial literacy is a globally recognized priority, acknowledged for its significance in various countries. The present study endeavors to investigate the influence of financial literacy on Risk Tolerance and financial anxiety among teachers of English as a second language in Iranian Public Schools. The focal point of this investigation revolves around the mediating responsibilities associated with Spending management. To gather the necessary data, an online survey was conducted, collecting responses from a total of 214 participants. Through an extensive exploratory and confirmatory factor analysis, these data were analyzed. As a result, two hypotheses were found to be invalid; it was determined that financial literacy plays a pivotal role in shaping saving attitudes and managing spending habits. Furthermore, it was observed that both saving attitudes and financial anxiety significantly affect one's risk tolerance level.

**Keywords:** Financial literacy, financial anxiety, English Teachers, Risk Tolerance, Spending management, Confirmatory factor analysis

## Introduction

Comprehending monetary matters, commonly referred to as financial literacy, has emerged as a topic of growing significance. It encompasses the indispensable abilities and awareness required to handle personal finances proficiently. Atkinson and Messy (2012) provide a comprehensive definition of financial literacy, describing it as the amalgamation of consciousness, expertise, aptitude, attitude, and conduct necessary for making prudent financial choices and attaining individual fiscal prosperity. Lusardi (2008) emphasizes the profound importance of possessing financial literacy in order to navigate the intricacies inherent in various financial instruments and render rational decisions within our daily lives.

As the realm of finance grows increasingly intricate, it is imperative for individuals to strive for a heightened grasp of its concepts. This urgency is particularly pronounced in young people navigating this convoluted financial landscape (Amagir et al., 2018). Expanding one's knowledge and comprehension of financial principles and vulnerabilities can enhance financial decision-making among adults and the younger generation (Organization for Economic Co-operation and Development (OECD), 2017).

The literature review reveals that a significant amount of research has been conducted on financial literacy and financial behavior. Numerous studies have investigated these subjects, involving diverse participant groups, such as:

- College students (Chen & Volpe, 1998; Lusardi, Mitchell, & Curto, 2010, and Nidar & Bestari, 2012)
- Students' teachers (Widyastuti et al., 2016 Amarasena, B. W. C. M., & Peiris, T. U. I. (2021))
- Young adults (Allgood & Walstad, 2016; Lusardi, Mitchell, & Curto, 2009)
- Employees (Clark et al., 2017 Banks, J., & Oldfield, Z. (2007).)
- Working women (Bhabha et al., 2014; Rahim et al., 2022)

After thoroughly analyzing the literature, the researchers (Lusardi & Mitchell, 2011; Jorgensen & Savla, 2010; and Shim et al., 2013) have discovered a strong link between financial literacy and improved financial outcomes. This includes higher savings rates and better credit management. The study highlights the significance of Financial Education Programs, specifically designed to enhance financial literacy and contribute to a flourishing economy. Consequently, the findings emphasize the need for policies and interventions promoting financial literacy and education (Hastings et al., 2013).

According to a study conducted by Fernandes et al. (2014), individuals with a greater understanding of financial concepts are more inclined to exhibit favorable financial habits, including saving, investing, and planning for retirement. Additionally, the research highlights the beneficial effects of financial education programs on individuals' capacity to comprehend and make sound financial choices. These findings underscore the significance of financial knowledge and education in fostering responsible financial behavior.

Risk preferences are crucial in various financial decisions (Sun et al., 2020), and they significantly influence individual life outcomes (Mudzingiri, 2021), contributing to enhanced well-being, health, and life fulfillment (Becker et al., 2012).

Cole et al (2011) highlight the significant impact of financial literacy on the demand for financial services among individuals in emerging markets. A strong correlation is observed between high levels of financial literacy and increased utilization of Formal Financial Products and Services. Additionally, the influence of financial literacy on access to and usage of financial services is also affected by factors such as the price and availability of these products.

The perspective of English teachers on financial literacy and its influence on financial behavior has yet to be extensively studied in existing literature. This research aims to address this gap by examining the effects of financial literacy on risk tolerance, financial anxiety, and spending management. A model will be constructed to explore these connections (Park & Martin, 2022).

Studying English teachers is fascinating because they often need more financial education and professional support. According to Cameron et al. (2014), financial literacy is positively linked to student proficiency in English language and mathematics, as well as their experience in banking and parental wealth. This study aims to investigate the potential impact of financial literacy on the risk-taking behavior of English teachers and alleviate their financial anxiety.

As teachers are supposed to have a crucial impact on shaping habits like the financial literacy of future generations, it is essential to comprehend the elements that contribute to risk and financial anxiety, among them having more referent power. English teachers are the focus of this paper. Hence, this study aims to explore the connection between these variables and investigate the role of spending management in mediating this relationship.

## Literature Review

In the forthcoming sections, we will examine various hypotheses derived from the theoretical foundations of the connections between financial literacy, risk tolerance, financial anxiety, and spending management.

### Financial literacy

Financial literacy is the term used to describe an individual's understanding of financial concepts and their ability to make informed decisions based on that knowledge. It is considered an investment in a person's human capital, as highlighted by Lusardi and Mitchell (2014). Llewellyn (2012) further explains that financial literacy involves interpreting and comprehending basic financial concepts, which can then be applied to practical decision-making.

Hence, a deficiency in financial knowledge or an absence of financial education can result in suboptimal financial decision-making by an individual, thereby leading to financial difficulties (Yew et al., 2017). Consequently, financial literacy equips an individual to adopt effective financial conduct (Akhtar et al., 2017).

The prevalence of inadequate financial literacy has emerged as a universal occurrence (Yew et al., 2017). Xu & Zia (2012) revealed that insufficient levels of financial literacy are prevalent across various socioeconomic strata, encompassing low-income, middle-income, and high-income nations.

The significance of financial literacy is readily apparent in light of the recent financial crises like the Turkish economic crisis (2018–current), the Argentine monetary crisis (2018–present), the Lebanese liquidity crisis, the Sri Lankan economic crisis, the Chinese property sector crisis (2020–present), and the economic outcomes of the Russia-Ukraine war (Abdullah & Chong, 2014) and the emergence of intricate financial instruments (Lusardi, 2008). Consequently, exploring financial knowledge has become a compelling subject to investigate. Authors (Huston, 2010) (Opletalova, 2015) and Santos, 2020) posit that financial literacy encompasses the capacity of individuals to effectively manage their personal finances while also serving as cognitive tools that facilitate more discerning decision-making.

Consequently, this subject has become a prominent scholarly inquiry and investigation area. This indicates that financial literacy entails profound knowledge acquisition, generating meaning, and cultivating critical thinking skills. Additionally, it emphasizes the necessity for financial education to extend beyond mere content provision (Danes et al., 2013).

Financial literacy significantly influences individuals' attitudes toward saving, as indicated by various theories. Those with a higher level of financial literacy tend to display a greater degree of optimism regarding saving than those with a lower level of financial literacy (Rahim et al, 2022). The research conducted by Bhabha et al. (2014) aimed to investigate the effects of financial literacy on the saving and investment behaviors of employed women residing in developing nations. The results demonstrated that the level of financial knowledge has a beneficial influence on the savings behaviors of women, thereby highlighting the significance of financial education in facilitating the adoption of saving attitudes among this demographic. Another investigation, undertaken by a cohort of researchers named Jonsson, Söderberg, and Wilhelmsson (2017), evaluated the impact of financial literacy on mitigating the predisposition bias among investors in mutual funds. The inquiry determined that understanding mutual funds and prevailing market conditions plays a crucial role in decreasing the inclination to divest shares in a poorly performing fund. Thus, the level of financial knowledge could potentially influence the selection of investments and subsequently shape individuals' perspectives on saving. In the case of individuals with limited financial literacy, an enhanced level of financial understanding may result in improved control and management of expenditure patterns. A recent investigation by Seraj, Alzain, and Alshebami (2022) unveiled a positive correlation between the impact of financial illiteracy on investment decision-making and financial literacy.

The main emphasis of the study revolves around investment decisions; however, it emphasizes the significance of financial literacy in making well-informed financial choices. Moreover, this literacy can also be applied to the management of expenditures. Individuals with a higher level of financial literacy are more inclined to make prudent decisions regarding their expenses, efficiently allocate their resources, and refrain from engaging in unnecessary or impulsive spending. Accordingly, the observations above lead to the formulation of the following hypotheses.

Hypothesis 1 posits a notable correlation between the variables FL[1] and SA[2].

Hypothesis 2 asserts a noteworthy association between the variables FL and SP[3].

**Risk Tolerance [4]**

Financial risk tolerance is commonly defined as the utmost degree of unpredictability an individual is willing to embrace when making financial judgments. As financial risk has a role in most vital economic decisions, comprehending an individual's risk tolerance is linked to comprehending economic conduct. Consequently, a significant body of evidence illustrates that individuals with a lower level of financial knowledge exhibit a higher propensity for risk-taking behavior and allocate a more significant portion of their investments to precarious assets in comparison to individuals with a higher level of financial knowledge, for example, (Bannier & Neubert, 2016; (Dimmock et al., 2016; Van Rooij, Lusardi & Alessie, 2011). People with a strong understanding of financial matters tend to possess more financial assets, as stated by Feng, Lu, Song, and Ma (2019). The willingness to take on risk varies among individuals, reflecting their level of financial knowledge. Sharma (2020) conducted a study examining the effects of financial literacy and risk tolerance on investment choices. The findings indicated a positive correlation between financial literacy and risk tolerance.

The research has discovered that individuals possessing greater expertise in financial matters are more disposed towards assuming risks in their investment choices and exhibit a heightened tolerance towards risk. This concurs that financial literacy can impact one's capacity to tolerate risk.

Another investigation by Gustafsson and Omark (2015) scrutinized the impact of financial knowledge on individuals' capacity to tolerate financial risks. The findings of the study revealed that financial literacy exhibits a favorable and escalating influence on risk tolerance. This implies that individuals with a higher degree of financial literacy are more inclined to withstand risks than those lacking adequate financial knowledge. Consequently, this leads to the formulation of the following hypothesis:

---

[1] Financial literacy

[2] Saving attitude

[3] Spending management

[4] RT

H3 – A noteworthy correlation exists between FL and RT.

## Financial Anxiety[1]

Financial literacy refers to the collection of skills required to interpret, assess, comprehend, oversee, and proficiently convey essential financial terminology and economic principles utilized in individual financial choices (Kharchenko, 2011; Noctor et al., 1992; Servon & Kaestner, 2008). Financial literacy and financial distress are interconnected ideas. Individuals with greater financial knowledge tend to experience lower anxiety about their finances, as they have the expertise and abilities to handle their financial affairs and make well-informed financial choices effectively. Conversely, individuals with limited financial capabilities may encounter heightened financial distress due to feelings of uncertainty and being overwhelmed by financial challenges. Bialik (2018) elucidates that a significant portion, specifically 45%, of individuals facing financial difficulties encounter heightened levels of stress in various aspects of their lives, such as work, health, and relationships. According to the study conducted by Netemeye et al. (2018), it is observed that possessing a certain level of financial knowledge has a limited adverse effect on one's prospective financial stability and does not influence the stress associated with financial management. This correlation underscores the significance of advocating for financial literacy as a means to diminish financial distress and enhance overall financial well-being. The existing body of literature acknowledges the correlation between heightened financial strain, exemplified by mounting debt or a deficit in finances, and the potential escalation of financial turmoil (Boss, Bryant, & Mancini, 2016). Through the enhancement of financial literacy and understanding, individuals have the opportunity to adeptly cultivate the essential competencies and self-assurance required to oversee their monetary resources, thereby alleviating stress and anxiety.

Individuals with elevated levels of financial anxiety are inclined to adopt a distinct saving strategy compared to those with lower levels of financial anxiety. A study conducted in households earning between $20,000 and $80,000 annually revealed that individuals with lower anxiety levels are more inclined to engage in regular saving habits (Celia R Hayhoe et al., 2012). On the other hand, individuals with higher levels of anxiety exhibited a reduced inclination to engage in activities such as creating a budget, managing expenses, and establishing savings objectives. This illustrates how financial stress can compromise the consistency of one's saving habits.

[1] FA

Steinhart & Jiang (2019) discovered that individuals experiencing financial stress may encounter challenges in effectively managing their budgets and controlling behaviors such as overspending and making impulsive purchases. Moreover, these individuals may need help with adhering to budgets. The study also revealed that anxious individuals are less inclined to save money consistently and are unlikely to participate in activities such as creating financial plans, monitoring expenses, or establishing savings goals.

This demonstrates that the overall management of expenditures could be detrimentally influenced by financial distress. Moreover, elevated levels of financial strain have the potential to influence the mental health of individuals, heightening levels of psychological discomfort, unease, and despondency. This suggests that financial anxiety may have a broader effect on an individual's psychological welfare, which is probable to impact their management of expenditures, giving rise to the following hypotheses:

Hypothesis 4 asserts a noteworthy association between the variables FA and SA.

Hypothesis 5 asserts a noteworthy association between the variables FA and SP.

**Spending Management**

In terms of the connection between financial literacy, risk tolerance, and financial anxiety, spending management is an important mediator. The Hansen et al., 2003 study provides an overview of a key factor in expenditure management, which is the use of budgetary procedures. The literature pertaining to budgeting practices is assessed by the authors, who also identify emerging trends and challenges. The authors highlight the significance of aligning budgeting processes with the organization's strategy, as well as emphasize the necessity of flexibility and adaptability in the budgeting system. The implementation of efficient strategies for managing one's expenses allows individuals to optimize their available resources and make well-informed choices regarding the allocation of funds. By gaining a deeper comprehension of their cash inflows and outflows, individuals are more inclined to make financially sound decisions that foster economic stability and alleviate the burden of financial strain. Organizations that embrace sustainable expenditure practices have the potential to not only contribute to environmental and social objectives but also enhance their financial performance and long-term standing. Consequently, individuals who possess financial acumen and employ prudent fiscal management strategies may exhibit greater levels of risk acceptance and diminished financial distress. On the other hand, individuals who possess insufficient expertise in managing costs may encounter financial challenges, thereby resulting in suboptimal decision-making capabilities and reduced levels of risk acceptance. In the context of designing financial literacy initiatives that enhance overall welfare, it is crucial for educators specializing in English language instruction and other practitioners to acknowledge the mediating function of expenditure management endeavors. Different methods for managing spending patterns are more likely to be taken by individuals with a particular attitude toward saving than those who have different attitudes about saving. The study conducted by Celia Ray Hayhoe, Leach, and Turner in 1999 found that there was a role to be played with regard to saving attitudes for determining whether more indebted students could or could not pay off their debts, which included attitude towards effort and employability. It concludes that the prediction of credit card debt, as well as a savings stance, are crucial in terms of money attitudes and behaviour. It is in line with the idea that savings attitudes can have an impact on spending management. Another study, conducted by Godwin & Koonce in 1992, examined the relationship between financial management practices, such as budgetary control, saving and regulation of expenditure, and debt levels. Good financial management practices were found to be a key indicator of the level of indebtedness. This suggests that people with effective spending management practices, including saving, are more likely to have better control over their spending habits.

Those with skills in spending management are more likely to experience tolerance for risk and willingness to take greater investment risks. One study investigates the correlation between tolerance to risk and diversification, which has a powerful influence on expenditure management (Sinclair & Cheung, 2016).

They further state that those who are able to diversify their investment portfolio in the light of risks and practices may be more likely to achieve higher risk tolerance. This means that effective expenditure management, which includes diversification of investments, can achieve a higher degree of risk tolerance. Furthermore, the investment of stocks, equity funds, or ETFs that are generally regarded as having a higher risk profile often has an effect on risk tolerance. Individuals with the ability to manage their spending effectively can be more comfortable in this type of investment because they know the risks involved and have a strategy for dealing with them, which is fair to propose the hypotheses below:

Hypothesis 6 asserts a noteworthy association between the variables SA and SP.

Hypothesis 7 asserts a noteworthy association between the variables SP and Rt.

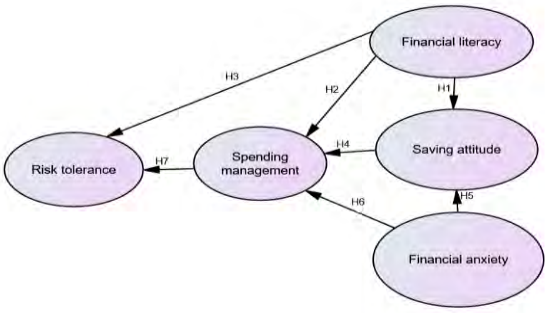


Figure 1. The proposed model

There are also seven hypotheses to be tested in the following order:

Hypothesis 1 asserts a noteworthy association between the variables FL and SA.

Hypothesis 2 asserts a noteworthy association between the variables FL and SP.

Hypothesis 3 asserts a noteworthy association between the variables FL and Rt.

Hypothesis 4 asserts a noteworthy association between the variables SA and SP.

Hypothesis 5 asserts a noteworthy association between the variables FA and SA.

Hypothesis 6 asserts a noteworthy association between the variables FA and SP.

Hypothesis 7 asserts a noteworthy association between the variables SP and RT.

## Research Methodology

The purpose of this study is to use a survey research design, where the main tool for collecting data is an autonomous questionnaire administered by volunteers. The questionnaire was designed for the purpose of collecting data on financial literacy, risk tolerance, financial anxiety, savings attitude, and expenditure management among English teachers. A pilot study was carried out in order to verify the questionnaire so that the collected data was valid and reliable. The final survey was then sent to a sample of English teachers selected using simple random sampling (SRS) method descriptive statistics. The data was then analyzed using exploratory and confirmatory factor analysis; the mediating effect of spending management on the relationship between financial literacy, risk tolerance, and financial anxiety was analyzed by structural equation modeling using IBM SPSS Amos.[1](SEM[2]). This method allowed for the exploration of a number of complicated financial literacy, risk tolerance, financial anxiety, and expenditure control relationships between England's teachers.

## Participants

The participants (English teachers) were selected from public schools in Guilan. As English teachers promote financial literacy in the classroom, this sample was selected by the authors. The study involved 214 English teachers between the ages of 24 and 31. They were a diverse group in terms of gender, educational background, and experience level. They were selected using a simple random sampling (SRS) technique, where teachers were randomly selected from the population of English teachers. The online questionnaire was sent via email to the participants. They were required to fill out a set of questionnaires to assess their financial literacy, risk tolerance, financial anxiety, and spending management. All participants gave their informed consent prior to participation in the study. The study was conducted in accordance with ethical guidelines, and all participants were respected for their confidentiality and privacy throughout the study period.

## Research Instruments

Seven indicators taken from (Amagir et al., 2020) and (Rey-Ares et al., 2021) were adapted to measure Saving attitude. Moreover, indicators taken from the previous analysis were modified by the authors with a view to measuring financial stress and spending management as well as risk tolerance. (Roll, Taylor, & Grinstein-Weiss, 2016), and (Choung et al., 2022) and (Hair, 2009). In addition, indicators from (Tavares et al., 2022) were adapted to measure financial literacy.

In order to ensure the reliability of the instrument, the reliability test is based on the value of composite reliability and Cronbach Alpha. When the p-

[1] Analysis of a moment structures

[2] Structural equation modeling

value is less than a significance level of 5%, it says that the instrument is reliable. As shown in Tables 1 and 5 above, the study shows that the measurement of each variable is reliable.

## Results

Table.1. represents two categories of factors: external and internal. The table has several financial literacy (FL) factors with corresponding values. It shows the correlation coefficients between the FL factors and the internal and external factors. The FL factors FL7, FL5, and FL6 have high positive correlations with the external factor, indicating that these FL factors are important in sticking to a budget and planning for future expenses. The FL factors FL3, FL2, and FL1 have high negative correlations with the internal factor, indicating that these FL factors are not important in making one feel better when planning for their financial future. The table suggests that certain FL factors are more important than others in influencing external factors, such as sticking to a budget and planning for future expenses. The table also suggests that certain FL factors may be less important in making one feel better when planning for their financial future.

In Table 2. the first column is labeled as "Rt1", "Rt2", and "Rt3", which stands for Risk Tolerance. The second column contains statements related to taking risks, and the third column contains the corresponding scores for each statement. The table measures the risk tolerance of individuals based on their responses to statements related to taking risks. The score ranges from 0 to 1, with the highest score indicating an increased risk tolerance. The highest score is for statement "Rt3", which suggests that individuals believe that taking risks is necessary to gain anything. A quantitative measure of risk tolerance, which can be useful for analyzing individual behavior when making financial decisions, is provided in the table. For the identification of any differences in risk tolerance levels, these scores may be compared between groups. The table can be used to identify individuals who may be more willing to take risks and those who may be more risk-averse. According to the table, risk tolerance is greater among people who think that taking risks is a precondition for success. Those scores may be used to develop strategies for the management of financial risks based on individual risk tolerances.

Table.3. shows the results of a survey on saving attitudes, with each row representing a different attitude statement and its corresponding score. Higher scores indicate a more favorable attitude towards saving, and the score ranges from -0.647 to 0.807. Sa4 ("Saving money for the future is important to me") has the highest score of 0.722, indicating that most respondents have a favorable attitude towards saving for the future. Sa7 ("I am living for today, without thinking about the future") has the lowest score of 0.405, indicating that most respondents do not have an unfavorable attitude towards saving for the future. The overall score for favorable attitude is 0.492, while the overall score for unfavorable attitude is 0. 453. The results suggest that most respondents have a favorable attitude towards saving for the future but also prioritize paying bills and saving for unforeseen costs. However, there is still a significant portion of respondents who prioritize spending money now over saving for the future. The scores can be used to identify areas where financial education and intervention may be needed to improve saving attitudes.

Table.4. shows the five statements related to financial anxiety (Fa). The highest correlation coefficient is 0.868 for statement Fa2, which says, "I would rather not think about the state of my finances." The second-highest correlation coefficient is 0.859 for statement Fa3, which says, "It can make my heart race to talk about the finances, which makes me feel anxious. “The lowest correlation coefficient is 0.653 for statement Fa5, which says, "It makes me feel uneasy when I think about my own finances. The table shows that some statements are more strongly correlated with financial anxiety than others. The table suggests that individuals who avoid thinking about their finances or feel anxious when discussing finances are more likely to experience financial anxiety. The table can be used to identify which specific statements related to financial anxiety are most strongly correlated with financial anxiety.

Table.5. contains three columns and multiple rows. The first column lists different aspects related to financial control, budgeting, and financial planning. The second column contains statements related to each aspect, which are rated on a scale of 0 to 1. The third column shows the Internal coherence reliability coefficient of all aspects (Cronbach's alpha), which measures how well the statements in each aspect are related to each other. Financial control has a reliability coefficient of 0.701, indicating that the statements related to financial control are moderately related to each other.

Budgeting has a reliability coefficient of 0.652, indicating that the statements related to budgeting are moderately related to each other. Financial planning has a reliability coefficient of 0.704, indicating that the statements related to financial planning are moderately related to each other. The statements related to financial control and financial planning have positive ratings, while the statements related to budgeting have mixed ratings (some positive and some negative). The statements related to financial planning have the highest ratings, followed by financial control and budgeting. The table provides a measure of the internal consistency reliability for different aspects related to financial control, budgeting, and financial planning. An assessment of an individual's level of control over his finances, budget, and planning can be carried out using the ratings for each aspect. According to the various ratings on budgeting, individuals are more likely than not to express a differing opinion of budgetary behavior, with some saying it is beneficial and others finding it difficult. Individuals may be more confident in their ability to plan for their financial future than in their ability to control their finances, according to a higher rating for financial planning.

**Table 1. Financial literacy (FL)**

| | external factors | į= 0.829 |
|---|---|---|
| FL7 | I am thinking about how to stick to my budget for a couple of years | 0.966 |
| FL5 | In the upcoming years, I aspire to organize my finances in order to prepare for forthcoming expenditures. | 0.859 |
| FL6 | I consistently monitor my financial plan to determine the amount of funds available for the upcoming years. | 0.859 |
| FL8 | In the next two to three years, I have already decided how my money will be used. | 0.479 |
| | internal factors | |
| FL2 | When strategizing my financial outlook for the upcoming years, I experience an enhanced sense of well-being. | -0.921 |
| FL3 | I have been consistently setting aside funds for future purposes, and I exercise great caution in financial matters. | -0.855 |
| FL1 | I possess the ability to recognize financial options and engage in conversations about financial topics without feeling uneasy. | -0.844 |
| FL4 | I am familiar with the financial concepts and terms. | -0.580 |

There are eight financial literacy items, categorized into two dimensions: external factors (4 indices) have a Cronbach's alpha of 0.829, while internal factors (4 indices) have a Cronbach's alpha of 0.849. The adapted items are taken from (Tavares et al., 2022), and the reliability of the items has been tested.

**Table 2. Risk tolerance (RT)**

| 1 | | į= 0.790 |
|---|---|---|
| Rt3 | To gain anything, I think one must take a risk. | 0.780 |
| Rt2 | Since the return is so weak, I would like a higher risk. | 0.768 |
| Rt1 | I am willing to bear the loss of a portion of my savings if the probability of obtaining a satisfactory yield is high. | 0.761 |

The Cronbach alpha of the three variables is į= 0.790, and the composite reliability exceeds the suggested threshold of 0.70. The adapted variables are taken from (Hair, 2009), and the reliability of the items has been tested.

**Table 3. Saving attitude (SA)**

| | | |
|---|---|---|
| | Favorable attitude | į= 0.492 |
| Sa4 | I am very interested in saving money for the future. | 0.722 |
| Sa6 | My money is very important to me, and I need to be careful with it | -0.647 |
| Sa2 | Saving money for unforeseen costs is of great importance to me. | 0.610 |
| Sa5 | It is important for me to get the bills paid. | 0.492 |
| Sa1 | It is important that I keep track of my expenses. | 0.453 |
| | Unfavorable attitude | į= 0.405 |
| Sa7 | Without thinking about the future, I live for today. | 0.807 |
| Sa3 | I prefer to spend my money now rather than saving for the future. Money is there to be spent. | 0.660 |

Seven variables with Cronbach coefficients of 0.492 and 0.405 are maintained in two dimensions: seven indicators on saving attitudes that have a Cronbach coefficient of 0.492 or less; each indicator shall be used for the following dimension: Positive attitude, five indicators containing a Cronbach coefficient of 0.492 to Negative attitude. Despite the authors' assertion that those dimensions could not be trusted, they have been kept for the purpose of further calculations. Adjustment variables have been derived from Rey Ares et al., 2021 and their reliability has been tested.

**Table 4. Financial anxiety (FA)**

| | | |
|---|---|---|
| | | į= 0.862 |
| Fa2 | I do not want to consider the state of my finances. | 0.868 |
| Fa3 | It can make my heart race to talk about the finances, which makes me feel anxious | 0.859 |
| Fa1 | I do not do my job as well as I know how to because I worry about money. | 0.807 |
| Fa4 | It would have been better if I had someone else who trusted me to keep my finances in order. | 0.801 |
| Fa5 | It makes me feel uneasy when I think about my own finances. | 0.653 |

The Cronbach alpha of 0.862 and the factor loadings ranging from 0.601 to 0.868 remain in all five indicators of financial distress. The adapted items are taken by (Roll et al., 2016), and the reliability of the items has been tested.

**Table 5. Spending management (SP)**

| | | |
|---|---|---|
| 1 | Financial control | į= 0.701 |
| Sp4 | Dealing with life's problems is often difficult for me. | 0.792 |
| Sp6 | There are many things I cannot control in my life. | 0.738 |
| Sp11 | I have got very little control over what happens to me. | 0.618 |
| Sp12 | The problems I have are really impossible to solve. | 0.483 |
| Sp3 | Most of what I can and cannot do is determined by other people. | 0.477 |
| 2 | Budgeting | į= 0.652 |
| Sp8 | I am following a strict financial budget. | 0.410 |
| Sp7 | I am drawing up a financial plan for the future. | 0.740 |
| Sp10 | I am looking at my budget for the next two years to get a good idea of future expenses. | 0.780 |
| Sp9 | I am keeping a record of my money. | 0.866 |
| 3 | Financial planning | į= 0.704 |
| Sp2 | I can do whatever I think is right for me. | -0.684 |
| Sp1 | When I really want to do something, I usually find a way to succeed at it. | -0.847 |
| Sp5 | I will be largely responsible for what happens to me in the future. | -0.834 |

There are three dimensions in spending management: financial control, Five indicators with a Cronbach coefficient of 0.701; budget planning, Four indicators with a Cronbach coefficient of 0.652; and financial planning, Three indicators with a Cronbach coefficient of 0.704. The financial control and financial planning adapted items are taken from (Choung et al., 2022), and budgeting items are taken from (Tavares et al., 2022). The reliability of the items has been tested

## Confirmatory Factor Analysis

The research framework owns a fitted model with probability, CMIN/DF, CFI, and RMSEA scores of 0.355, 1.040, 0.996, and 0.014, respectively (see the figure below).

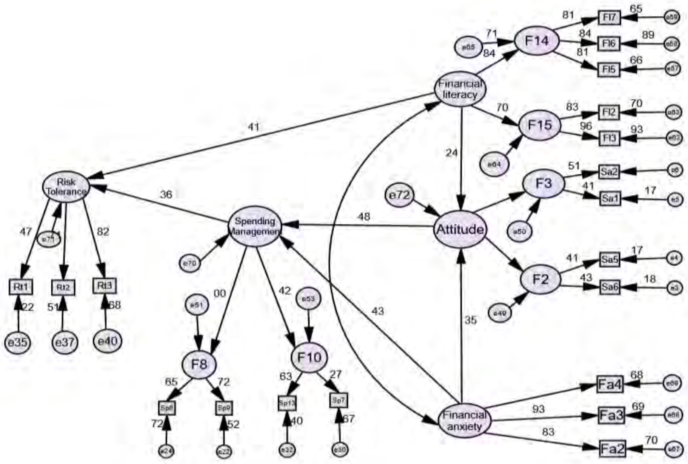


**Figure 2. Structural Equation Modeling (SEM) Output Model**

## Confirmatory factor analysis result

The attitude to saving and the management of spending are not influenced by financial literacy. For these routes, the C.R. score is between 1.440 and -0.577. Accordingly, H1 and H2 are rejected. On the other hand, with a C.R. score of 3,191, financial literacy has a significant influence on risk tolerance. H3 was, therefore, accepted. Furthermore, with a C.R. score of 3.695, savings attitudes have a very strong influence on spending management. To this end, H4 was accepted. This finding supports the study conducted by Sondari and Rensono (2015), Pascual Juarez et al. (2014), and Cuong and Jian (2014). With a C.R. score of 2.099 and 2.275, financial anxiety significantly influences saving attitude and spending management. Therefore, H5 and H6 are adopted. The impact of saving intentions on saving behaviour has been predicted by H7. In H7, the impact of spending control on risk tolerance was estimated. It was also accredited with a C.R. score of 3.695.

**Table 6. provides a summary of the hypotheses that were tested.**

| | Paths | | | C.R. | Results |
|---|---|---|---|---|---|
| $H_1$ | Financial literacy | Î | Saving attitude | 1.440 | R |
| $H_2$ | Financial literacy | Î | Spending management | -0.577 | R |
| $H_3$ | Financial literacy | Î | Risk Tolerance | 3.191 | A |
| $H_4$ | Saving attitude | Î | Spending management | 3.695 | A |
| $H_5$ | Financial anxiety | Î | Saving attitude | 2.099 | A |
| $H_6$ | Financial anxiety | Î | Spending management | 2.275 | A |
| $H_7$ | Spending management | Î | Risk Tolerance | 3.695 | A |

## Discussion and Conclusion

In this research, links were established between financial literacy, risk tolerance, financial anxiety, and spending management. Financial literacy and risk tolerance have been shown to be positively correlated in some studies. Financial literacy is associated with the highest level of risk tolerance among those with a low level of risk tolerance, while financial interest is the most common association when an individual has a higher level of risk tolerance, according to Hermansson & Jonsson, 2021. Financial interest has a significant influence on risk tolerance relative to financial illiteracy, according to the findings of this study Hermansson & Jonsson, 2021, H3. Moreover, the impact of financial literacy on saving behavior has been specifically explored in some literature. The study is also supported by Jamal, Ramlan, Karim, and Osman,2015, and Lusardi, 2008. With better knowledge and understanding of financial concepts, people will be able to make more efficient savings in the future. De Bassa Scheresberg (2013) observed that by considering emergency savings as well as daily activities and lending via high-cost methods, financial literacy has been beneficial for the behavior of young adults. However, teachers' views about saving for the future and their habits of saving money and drawing up a budget were investigated. This study also explored the views of teachers on saving for the future, as well as their habits of saving money and creating budgets. Nevertheless, according to the findings of this study, there is no relationship between financial literacy and saving attitudes (Rejecting H1), which is in line with hypothesis H4. However, in line with hypothesis H4, the findings of this study show that there is no relationship between financial literacy and attitudes on saving rejection h1, i.e., This study is intended to focus on financial planning and budgetary management. In accordance with

(Henager & Cude's 2016) definition of Short-Term Planning, it is spending or emergency saving activity.

This study has shown that, over a period of one to two months, financial literacy can have a positive effect on short-term behavior, such as setting budget targets and budgetary control. The study has shown that the savings attitude is very beneficial when it comes to spending management, H4. According to the findings of Lusardi (2008b, poor understanding of financial concepts could lead to insufficient retirement planning. The Lusardi and Mitchell 2011 paper also shows the inseparable link between finance knowledge and planning: when people are well aware of their finances, they can make good use of them. However, we did not find any relationship between financial literacy and English teachers' spending management, partially rejecting hypothesis 2.

In line with Jorgensen & Savla (2010) and Shim, Serido, Bosch, & Tang (2013), students who engage in conversations about financial matters and actively educate themselves about money management from their parents exhibit more favorable attitudes towards money and engage in healthier financial behavior. Saving attitudes, financial concerns, and spending management were found to be related to our study. H5, H6. These insights may be used by policymakers to develop initiatives that educate people about money and encourage them to make informed decisions on their spending, as well as support the level of risk tolerance (H7). However, we did not find any relationship between English teachers' financial literacy and their spending management, partially rejecting hypothesis 2. In this study, financial planning has been studied as part of spending management and the establishment of a budget covering expenditures up to two years from now. The study showed that, in English teachers, controlling spending is accompanied by a significant amount of stress over finances. This is similar to the analysis of Britt et al., 2008, which has shown a significant influence on financial satisfaction and fiscal stress as regards the perception of spending behavior. Encouraging people to develop a real sense of their expenditure behavior can lead to more efficient management of finances and reductions in fiscal stress. (H6). The findings of the current study are consistent with Drentea & Lavrakas (2000), who conclude that health and race play a significant role in financial anxiety, with individuals experiencing poor health and belonging to minority racial groups being more vulnerable. In order to reduce economic stress, efficient strategies will need to be put in place to deal with health disparities and encourage people to become financially literate. Our research has shown a strong link between financial literacy and financial anxiety among English teachers. Our results are in line with a previous study that examined factors linked to financial literacy, risk tolerance, financial excitement, and expenditure management among ESL teachers.

A complicated factor has been described as the phenomenon of financial literacy, which covers knowledge, attitudes, management, and behavior. On the basis of considerable differences in knowledge, attitudes, and management as well as an unknown level and way to represent them, these various components have been considered differently because it was not certain whether they could be properly incorporated into a single variable. Specific research to examine these relationships between English teachers is limited. The purpose of this study is to fill a gap in the literature and further understand how financial education interventions can have an impact on English language teaching's financial literacy. The aim of this study is to measure the effects of financial literacy training on risk tolerance, financial anxiety, and budgetary management for English teachers. The total number of hypotheses examined was seven. Two hypotheses, including the effect of financial literacy on savings attitudes and consumption management, have been rejected. On the other hand, five further hypotheses have been accepted. Saving attitude and expenditure management have an extremely strong influence on financial literacy, while savings attitudes and financial anxiety are of considerable importance for risk tolerance. The last savings attitude has been profoundly influenced by financial anxiety.

Participants who were English teachers from different public schools were invited to participate in this study. It is recommended that future studies compare participants from different categories of training, as well as distinguish respondents according to gender. Although only English teachers were included in the study, regular teachers could also be invited to participate in future studies.

## Declaration of Conflicting Interests

The authors declared no potential conflicts of interest concerning the research, authorship and, or publication of this article.

## Funding

The authors received no financial support for the research, authorship and, or publication of this article.

## References

Abdullah, M. A., & Chong, R. (2014). Financial literacy: An exploratory review of the literature and future research. *Journal of Emerging Economies and Islamic Research, 2*(3), 32-41.

Akhtar, M. S., Kumar, A., Ghosal, D., Ekbal, A., & Bhattacharyya, P. (2017). *A multilayer perceptron-based ensemble technique for fine-grained financial sentiment analysis.* Paper presented at the Proceedings of the 2017 conference on empirical methods in natural language processing.

Allgood, S., & Walstad, W. B. (2016). The effects of perceived and actual financial literacy on financial behaviors. *Economic Inquiry, 54*(1), 675-697.

Amagir, A., Groot, W., Maassen van den Brink, H., & Wilschut, A. (2018). A review of financial-literacy education programs for children and adolescents. *Citizenship, Social and Economics Education, 17*(1), 56-80.

Amagir, A., Groot, W., van den Brink, H. M., & Wilschut, A. (2020). Financial literacy of high school students in the Netherlands: knowledge, attitudes, self-efficacy, and behavior. *International Review of Economics Education, 34*, 100185.

Amarasena, B. W. C. M., & Peiris, T. U. I. (2021). Effect of Inflation on Sri Lankan Banks' Performance: Mediation Effect of Interest Income and Expenses. European Journal of Business and Management Research, 6(3).

Atkinson, A., & Messy, F.-A. (2012). Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study.

Bannier, C. E., & Neubert, M. (2016). Gender differences in financial risk-taking: The role of financial literacy and risk tolerance. *Economics Letters, 145*, 130-135.

Banks, J., & Oldfield, Z. (2007). Understanding pensions: cognitive function, numeracy, and retirement saving. Fiscal Studies, 28(February), pp. 143–170.

Becker, A., Deckers, T., Dohmen, T., Falk, A., & Kosse, F. (2012). The relationship between economic preferences and psychological personality measures. *Annu. Rev. Econ., 4*(1), 453-478.

Bhabha, J. I., Khan, S., Qureshi, Q. A., Naeem, A., & Khan, I. (2014). Impact of financial literacy on saving-investment behavior of working women in the developing countries. *Research Journal of Finance and Accounting, 13*(5), 118–122.

Britt, S., Grable, J. E., Goff, B. S. N., & White, M. (2008). The influence of perceived spending behaviors on relationship satisfaction. *Journal of Financial Counseling and Planning, 19*(1), 31.

Cameron, M. P., Calderwood, R., Cox, A., Lim, S., & Yamaoka, M. (2014). Factors associated with financial literacy among high school students in New Zealand. *International Review of Economics Education, pp. 16*, 12–21.

Chen, H., & Volpe, R. P. (1998). An analysis of personal financial literacy among college students. *Financial services review, 7*(2), 107-128.

Choung, Y., Chatterjee, S., & Pak, T.-Y. (2022). Depression and financial planning horizon. *Journal of Behavioral and Experimental Economics, p. 98*, 101877.

Clark, R. T., Bett, P. E., Thornton, H. E., & Scaife, A. A. (2017). Skillful seasonal predictions for the European energy industry. *Environmental Research Letters, 12*(2), 024002.

Cole, S., Sampson, T., & Zia, B. (2011). Prices or knowledge? What drives demand for financial services in emerging markets? *The journal of finance, 66*(6), 1933-1967.

Danes, S. M., Rodriguez, M. C., & Brewton, K. E. (2013). Learning Context When Studying Financial Planning in High Schools: Nesting of Student, Teacher, and Classroom Characteristics. *Journal of Financial Counseling and Planning, 24*(2), 20–36.

de Bassa Scheresberg, C. (2013). Financial literacy and financial behavior among young adults: Evidence and implications. *Numeracy, 6*(2), 5.

Dimmock, S. G., Kouwenberg, R., Mitchell, O. S., & Peijnenburg, K. (2016). Ambiguity aversion and household portfolio choice puzzles: Empirical evidence. *Journal of Financial Economics, 119*(3), 559-577.

Drentea, P., & Lavrakas, P. J. (2000). Over the limit: the association among health, race, and debt. *Social science & medicine, 50*(4), 517–529.

Feng, X., Lu, B., Song, X., & Ma, S. (2019). Financial literacy and household finances: A Bayesian two-part latent variable modeling approach. *Journal of Empirical Finance, 51*, 119-137.

Fernandes, D., Lynch, J. G., & Netemeyer, R. G. (2014). Financial Literacy, Financial Education, and Downstream Financial Behaviors (full paper and web appendix). *Forthcoming in Management Science*.

Godwin, D. D., & Koonce, J. C. (1992). Cash flow management of low-income newlyweds. *Financial Counseling and Planning, 3*(1), 17-42.

Gustafsson, C., & Omark, L. (2015). Financial literacy's effect on financial risk tolerance: A quantitative study on whether financial literacy has an increasing or decreasing impact on financial risk tolerance. In.

Hair, J. F. (2009). Multivariate data analysis.

Hansen, S. C., Otley, D. T., & Van der Stede, W. A. (2003). Practice developments in budgeting: an overview and research perspective. *Journal of Management Accounting Research, 15*(1), 95-116.

Hastings, J. S., Madrian, B. C., & Skimmyhorn, W. L. (2013). Financial literacy, financial education, and economic outcomes. *Annu. Rev. Econ., 5*(1), 347–373.

Hayhoe, C. R., Cho, S. H., DeVaney, S. A., Worthy, S. L., Kim, J., & Gorham, E. (2012). How do distrust and anxiety affect saving behavior? *Family and Consumer Sciences Research Journal, 41*(1), 69–85.

Hayhoe, C. R., Leach, L., & Turner, P. R. (1999). Discriminating the number of credit cards held by college students using credit and money attitudes. *Journal of Economic Psychology, 20*(6), 643–656.

Henager, R., & Cude, B. J. (2016). Financial Literacy and Long-and Short-Term Financial Behavior in Different Age Groups. *Journal of Financial Counseling and Planning, 27*(1), 3-19.

Hermansson, C., & Jonsson, S. (2021). The impact of financial literacy and financial interest on risk tolerance. *Journal of Behavioral and Experimental Finance, 29*, 100450.

Ho, C. S. M., & Lee, D. H. L. (2023). Financial literacy: The impact of the foreign-language effect on risk-taking values, financial attitudes, and behavior of Hong Kong secondary students. *The Asia-Pacific Education Researcher, 32*(4), 485–496.

Huston, S. J. (2010). Measuring financial literacy. *Journal of Consumer Affairs, 44*(2), 296-316.

Jamal, A. A. A., Ramlan, W. K., Karim, M., & Osman, Z. (2015). The effects of social influence and financial literacy on savings behavior: A study on students of higher learning institutions in Kota Kinabalu, Sabah. *International Journal of Business and Social Science, 6*(11), 110-119.

Jonsson, S., Söderberg, I.-L., & Wilhelmsson, M. (2017). An investigation of the impact of financial literacy, risk attitude, and saving motives on the attenuation of mutual fund investors' disposition bias. *Managerial Finance, 43*(3), 282-298.

Jorgensen, B. L., & Savla, J. (2010). Financial literacy of young adults: The importance of parental socialization. *Family relations, 59*(4), 465-478.

Llewellyn, T. R. (2012). *Financial literacy of college students and the need for compulsory financial education.* Doctoral Dissertation,

Lusardi, A. (2008). *Household saving behavior: The role of financial literacy, information, and financial education programs*. Retrieved from

Lusardi, A., & Mitchell, O. S. (2011). Financial literacy and retirement planning in the United States. *Journal of pension economics & finance, 10*(4), 509-525.

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *American Economic Journal: Journal of Economic Literature, 52*(1), 5-44.

Lusardi, A., Mitchell, O. S., & Curto, V. (2009). *Financial literacy and financial sophistication among older Americans*. Retrieved from

Lusardi, A., Mitchell, O. S., & Curto, V. (2010). Financial literacy among the young. *Journal of Consumer Affairs, 44*(2), 358-380.

Mudzingiri, C. (2021). The impact of financial literacy on risk seeking and patient attitudes of university students. *Development Southern Africa, 38*(5), 845-861.

Nidar, S. R., & Bestari, S. (2012). Personal financial literacy among university students (case study at Padjadjaran University students, Bandung, Indonesia). *World Journal of Social Sciences, 2*(4), 162-171.

Opletalova, A. (2015). Financial education and financial literacy in the Czech education system. *Procedia-Social and Behavioral Sciences, 171*, 1176-1184.

Park, H., & Martin, W. (2022). Effects of risk tolerance, financial literacy, and financial status on retirement planning. *Journal of Financial Services Marketing*, pp. 1–10.

Rahim, N. M., Ali, N., & Adnan, M. F. (2022). Students' Financial Literacy: Digital Financial Literacy Perspective. GATR Journal of Finance and Banking Review, 6(4), 18–25. http://dx.doi.org/10.35609/jfbr.2022.6.4(2)

Rey-Ares, L., Fernández-López, S., & Rodeiro-Pazos, D. (2021). Impact of working capital management on profitability for Spanish fish canning companies. *Marine Policy, 130*, 104583.

Roll, S. P., Taylor, S. H., & Grinstein-Weiss, M. (2016). Financial anxiety in low-and moderate-income households: Findings from the household financial survey.

Seraj, A. H. A., Alzain, E., & Alshebami, A. S. (2022). The roles of financial literacy and overconfidence in investment decisions in Saudi Arabia. *Frontiers in Psychology, 13*, 1005075.

Sharma, D. R. (2020). Impact of Financial Literacy and Risk Tolerance on Investment Decision. *International Journal of Management and Humanities, 4*(11), 53–56.

Shim, S., Serido, J., Bosch, L., & Tang, C. (2013). Financial identity-processing styles among young adults: A longitudinal study of socialization factors and consequences for financial capabilities. *Journal of Consumer Affairs, 47*(1), 128-152.

Sinclair, R. R., & Cheung, J. H. (2016). Money matters Recommendations for financial stress research in occupational health psychology. *Stress and Health, 32*(3), 181–193.

Steinhart, Y., & Jiang, Y. (2019). Securing the future: Threat to self-image spurs financial saving intentions—*Journal of Personality and Social Psychology, 117*(4), 741.

Sun, H., Ni, W., Teh, P.-L., & Lo, C. (2020). The systematic impact of personal characteristics on entrepreneurial intentions of engineering students. *Frontiers in Psychology, 11*, 1072.

Tavares, F. O., Almeida, L. G., Soares, V. J., & Tavares, V. C. (2022). Financial Literacy: An Exploratory Analysis in Portugal. *Studies in Business & Economics, 17*(2).

Tavares, F. O., & Santos, E. (2020). Financial literacy perception scale for the Portuguese population. *Scientific Annals of Economics and Business, 67*(2), 277-290.

Van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial Economics, 101*(2), 449-472.

Widyastuti, U., Suhud, U., & Sumiati, A. (2016). The impact of financial literacy on student teachers' saving intention and saving behavior. *Mediterranean Journal of Social Sciences, 7*(6), 41.

Xu, L., & Zia, B. (2012). Financial literacy around the world: an overview of the evidence with practical suggestions for the way forward. *World Bank Policy Research Working Paper*(6107).

Yew, S.-Y., Yong, C.-C., Cheong, K.-C., & Tey, N.-P. (2017). Does financial education matter? education literacy among undergraduates in Malaysia. *Institutions and Economies*, 43-60.

پژوهشگاه علوم انسانی و مطالعات فرهنگی
پرتال جامع علوم انسانی

**Bibliographic information of this paper for citing:**

Omidinia, Anita & Ramazani, Abbas (2024). Can Spending Management mediate the relationship between financial literacy, English Teacher's Risk Tolerance, and financial anxiety?. *Iranian Journal of Finance*, 8(3), 73-97.

Copyright © 2024, Anita Omidinia and Abbas Ramazani