# RELATIVE FINANCIAL DEPRIVATION AND FINANCIAL SATISFACTION AMONG MINIMUM WAGE EARNERS IN TÜRKİYE: A SERIAL MEDIATION ANALYSIS

Türkiye'deki Asgari Ücretlilerde Göreli Finansal Yoksunluk ve Finansal Memnuniyet İlişkisi: Bir Seri Aracılık Analizi

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# **Keywords:**

Relative Financial Deprivation, Financial Self-Efficacy, Financial Anxiety, Financial Satisfaction, Minimum Wage Workers.

JEL Codes: M48, M54, P34.

## Anahtar Kelimeler:

Göreli Finansal Yoksunluk. Finansal Öz Yeterlilik, Finansal Kaygı, Finansal Memnuniyet, Asgari Ücretliler.

JEL Kodları: M48, M54, P34. The research is a behavioral finance-based study that examines the financial difficulties experienced by minimum wage earners in Turkey from a psychological perspective. In this context, the study explains the financial difficulties experienced by minimum wage earners based on the theory of relative deprivation. The aim of the study is to determine the financial difficulties experienced by minimum wage earners and the psychological effects of this situation. To achieve this goal, the study examines the serial mediator role of financial self-efficacy and financial anxiety in the relationship between relative financial deprivation and financial satisfaction. In this context, a survey was conducted among 633 minimum wage earners in Turkey. The findings of the study indicate that minimum wage earners in Turkey experience relative financial deprivation, which in turn reduces their financial satisfaction. Furthermore, the study revealed that financial self-efficacy and financial anxiety act as mediators in the relationship between relative financial deprivation and financial satisfaction, with each acting independently. However, the study also demonstrated that financial self-efficacy and financial anxiety do not act in a serial mediation role in the relationship between financial deprivation and financial satisfaction.

Abstract

# Öz

Araştırmamız Türkiye'deki asgari ücretlilerin yaşadığı finansal sıkıntıları psikolojik açıdan inceleyen davranışsal finans temelli bir araştırmadır. Bu kapsamda çalışmamız asgari ücretlilerin yaşadığı finansal sıkıntıları göreli yoksunluk teorisine dayandırarak açıklamaktadır. Çalışmanın amacı asgari ücretlilerin yaşadığı finansal sıkıntıların ve bu durumun yarattığı psikolojik etkilerin neler olduğunu belirlemektir. Bu amaca ulaşmak için çalışmada göreli finansal yoksunluk ve finansal memnuniyet arasındaki ilişkide finansal öz yeterlilik ve finansal kaygının seri aracı rolü incelenmektedir. Bu bağlamda Türkiye'de asgari ücretle çalışan 633 kişiye anket yapılmıştır. Araştırmanın sunucunda Türkiye'de çalışan asgari ücretlilerin göreli finansal yoksunluk yasadığı ve göreli finansal yoksunluğun finansal memnuniyeti azalttığı tespit edilmiştir. Ayrıca göreli finansal yoksunluk ve finansal memnuniyet arasındaki ilişkiye finansal öz yeterliliğin ve finansal kaygının ayrı ayrı modellerde aracı rol üstlendiği görülmüştür. Ancak araştırmada, finansal yoksunluk ve finansal memnuniyet arasındaki ilişkide finansal öz yeterlilik ile birlikte finansal kaygının seri aracılık etkisinin bulunmadığı da ulaşılan bir başka sonuçtur.

Received Date (Makale Geliş Tarihi): 01.11.2024 Accepted Date (Makale Kabul Tarihi): 18.12.2024

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#### 1. Introduction

Minimum wage earners represent the lowest-paid labor force in Turkey. This group constitutes approximately 50 percent of the working population (Cımrın et al., 2023). In Turkey, a country that has experienced high inflation in recent years, the government has adopted a policy of not allowing wage earners to be unduly affected by inflation. However, it is considered that wages in general and minimum wage in particular are not satisfactory by employees. As with many wage earners in general, minimum wage workers tend to compare their financial situation with others. This situation may result in financial anxiety (FA) and financial dissatisfaction. In this study, it is evaluated that minimum wage earners in Turkey may face the problem of relative financial deprivation (RFD), financial dissatisfaction, and financial anxiety even if they have financial self-efficiency.

Financial satisfaction (FS) is defined as the subjective evaluation of the satisfaction or dissatisfaction of financial resources (Hira and Mugenda, 1998). Financial satisfaction is an important phenomenon for minimum wage earners as well as for all employees. In the relevant literature, it is suggested that there are many factors that affect financial satisfaction (Asebedo and Payne, 2019). One of these factors is financial deprivation. Financial deprivation is an emotionally distressing state of mind that arises from the perception that one's financial circumstances are unfavorable in comparison to one's past financial situation or that of others (Sharma and Alter, 2012). Indeed, the impact of relative financial deprivation on financial satisfaction has been the subject of investigation in a number of studies in the literature. In these studies, it has been observed that relative financial deprivation negatively affects financial satisfaction (Hastings, 2019; Mahmoud et al., 2022). Conversely, another variable that affects financial satisfaction is financial anxiety, which is defined as an emotional state in which a person feels depressed or worried about their financial situation (Zhang et al., 2023). There is a body of literature that indicates that financial anxiety has a negative effect on financial satisfaction (Archuleta, 2020). Similarly, another concept that is claimed to have an effect on financial satisfaction is financial self-efficacy. In the relevant literature, it has been suggested that there is a positive relationship between financial self-efficacy and financial satisfaction (Payne and Asebedo, 2017).

The study starts from the premise that minimum wage earners in Turkey are dissatisfied with their financial situation compared to other wage earners, likely due to recent issues with purchasing power. It was thought that this dissatisfaction may be linked to relative financial deprivation, financial anxiety, and financial self-efficacy (FSE). Thus, it was decided to prepare this study to scientifically demonstrate the psychological consequences caused by financial difficulties.

In light of the economic challenges faced by minimum wage earners during the global and Turkish economic crisis, it is important to understand how they cope with financial deprivation and anxiety. International literature has examined the connections between financial self-efficacy and financial anxiety (Kim et al., 2020), as well as the association between relative financial deprivation, financial anxiety, and financial satisfaction (Mahmoud et al., 2022). However, no study has yet examined the relationship between these four variables in the context of the psychological effects of the financial situation of minimum wage earners in Turkey. Therefore, this study is significant in revealing the psychological consequences of the financial difficulties experienced by minimum wage earners. This study hypothesizes that the financial

satisfaction of minimum wage earners in Turkey will be reduced due to relative financial deprivation and financial anxiety. Additionally, financial self-efficacy is expected to play a significant role in this relationship. However, this study is also significant in highlighting the adverse psychological impact of financial hardship on minimum wage earners in Turkey. The study's findings can inform policymakers in developing solutions to address this issue.

Based on the conceptual relationships emphasized above and the importance of the subject, the aim of this study is to examine the effect of relative financial deprivation on the financial satisfaction of minimum wage earners in Turkey and the serial mediating role of financial anxiety and financial self-efficacy in this effect. For this purpose, firstly a literature review was conducted in the study, and concepts were introduced and conceptual relationships were written. Then, the data obtained from minimum wage workers were analyzed with Amos 22, SPSS 26, and Process Macro 2.16 programs and the hypotheses were tested.

## 2. Literature Review

The current research is informed by the theoretical framework of Relative Deprivation Theory. In accordance with the theory developed by Runciman (1966) and Crosby (1976), the individual subjectively assesses their disadvantaged circumstances by comparing them with those of others. This situation gives rise to a cognitive awareness of the disadvantaged position of the individual. Crosby (1976) identified five distinct preconditions that contribute to the emergence of relative deprivation. These are (I) the individual's awareness that others possess the desired outcome, (II) the individual's desire to possess the desired outcome, and (III) the individual's belief that they are entitled to possess the desired outcome. (IV) the individual's perception that he/she can attain the desired outcome, and (V) the individual's belief that the reason for not attaining the desired outcome is not due to the individual but to other people or the existing system. As can be discerned from the five prerequisites, relative deprivation encompasses cognitive and justice-based emotional dimensions shaped by perceptual processes and subjective evaluations. It has been frequently observed that perceived deprivation reduces people's satisfaction with their life circumstances and causes depressive feelings (Lyubomirsky, 2001). A decline in satisfaction with life circumstances may lead to a decline in financial satisfaction by taking the form of relative financial deprivation arising from financial situations.

Relative financial deprivation is related to how individuals perceive their financial situation compared to others (Mahmoud et al., 2022). According to Sharma and Alter (2012), relative financial deprivation is a state of feeling psychologically unwell due to the belief that one's financial situation is bad by comparing one's financial situation with one's past financial situation or with others. On the other hand, financial satisfaction is a subjective measure of financial well-being (Xiao and Porto, 2017) and involves subjective assessments of whether financial resources are sufficient or insufficient, or whether they satisfy or dissatisfy the individual (Hira and Mugenda, 1998). Individuals experiencing relative financial deprivation perceive their financial resources as relatively insufficient and believe that they are financially deprived. In this study, it is predicted that minimum wage earners in Turkey will tend to compare themselves to people with higher incomes and this will negatively affect their financial satisfaction. Previous empirical studies support that relative financial deprivation negatively affects financial satisfaction. For example, Mahmoud et al. (2022) found that the relationship between financial deprivation and financial satisfaction is negatively significant. Hastings

(2019) also found that an increase in income inequality significantly reduces financial satisfaction due to feelings of relative deprivation. Hira and Mugenda (1998) confirmed that financial satisfaction decreases as relative deprivation increases for both retirees and non-retirees. In addition, an individual's sense of having fewer financial resources than others and experiencing relative financial deprivation may have a negative impact on their financial self-efficacy. The individual's inability to achieve his/her financial goals will lead to feelings of financial inadequacy. Because having fewer financial resources affects the individual negatively, this situation may also lead to a decrease in financial self-efficacy. Consequently, it is anticipated that relative financial deprivation will have a detrimental effect on financial self-efficacy.

As evidenced by the studies referenced above, relative financial deprivation is associated with diminished financial satisfaction and self-efficacy. Furthermore, relative financial deprivation is a significant predictor of financial anxiety. According to Marx (1902), a house can be small or big. What matters here is the size of the neighbor's house. If the neighbor's house is like a palace, the small house is perceived as a hut (Hastings, 2019). Duesenberry (1949) posited that income is inherently unstable, whereas consumption is relatively stable. Put differently, even if a family's income declines, they will not choose to live a life below their established standard of living. Consequently, individuals experiencing financial deprivation will strive to maintain a standard of living that aligns with their aspirations and may resort to borrowing if necessary. This can give rise to feelings of financial anxiety. These ideas suggest that individuals will experience relative financial deprivation by comparing themselves with others. Consequently, as financial deprivation increases, financial anxiety will also increase.

Financial anxiety is a concept that essence of financial stress (Adinda et al., 2023). Research suggests that financial stress and financial anxiety have an impact on financial satisfaction. Joo and Grable (2004) found an adverse correlation between financial stress and financial satisfaction. In their study of university students Archuleta et al. (2013) found a negative correlation between financial anxiety and financial satisfaction. However, Mahmoud et al. (2022) did not reveal a meaningful relationship between financial anxiety and financial satisfaction in their research. Based on the literature, it is expected that a negative correlation exists between financial anxiety and financial satisfaction.

Another variable of the study is financial self-efficacy, which refers to an individual's confidence in their ability and knowledge of financial management (Farrell et al., 2016; Ismail et al., 2017). Individuals who possess financial self-efficacy are better equipped to handle stress and anxiety caused by negative financial events (Asebedo and Payne, 2019). For instance, Kim et al. (2020) discovered a significant negative correlation between financial self-efficacy and financial anxiety in their study of African refugees. Similarly, Lee et al. (2023) also observed a negative correlation between financial self-efficacy and financial anxiety. Therefore, based on this study, we expect a significant negative correlation between financial self-efficacy and financial anxiety.

Individuals who possess high levels of financial self-efficacy tend to demonstrate superior financial performance, as they exhibit greater confidence in attaining their financial objectives (Farrell et al., 2016). Consequently, this circumstance enhances the financial satisfaction of individuals. Individuals with high financial self-efficacy demonstrate enhanced resilience in the face of stress and depression, along with greater job satisfaction (Mubarik et al., 2020). Prior

empirical research has also indicated that financial self-efficacy exerts an influence on financial satisfaction (Lee and Dustin, 2021; Kumar et al., 2023). Asebedo and Payne (2019) posited that there is a positive correlation between financial self-efficacy and financial satisfaction. Consequently, it is anticipated that an increase in financial self-efficacy will result in an enhancement of financial satisfaction.

The present study posits that relative financial deprivation will have a negative impact on financial satisfaction. In addition, firstly, it is hypothesized that financial self-efficacy will mediate the relationship between relative financial deprivation and financial satisfaction. Secondly, it is hypothesized that financial anxiety will mediate the relationship between financial deprivation and financial satisfaction. Finally, it is claimed that financial self-efficacy and financial anxiety will have a serial mediation effect on the effect of relative financial deprivation on financial satisfaction. Based on this information, the following hypotheses were developed.

Hypothesis 1 (H1): Financial self-efficacy mediates the relationship between relative financial deprivation and financial satisfaction (mediation model 1). Specifically, relative financial deprivation is negatively related to financial self-efficacy (H1a), while financial self-efficacy is positively related to financial satisfaction (H1b). Additionally, there is a negative correlation between relative financial deprivation and financial satisfaction (H1c).

Hypothesis 2 (H2): Financial anxiety mediates the relationship between relative financial deprivation and financial satisfaction (mediation model 2). Specifically, relative financial deprivation is positively related to financial anxiety (H2a), while financial anxiety is negatively related to financial satisfaction (H2b). Additionally, there is a negative correlation between relative financial deprivation and financial satisfaction (H2c).

Hypothesis 3 (H3): Financial self-efficacy and financial anxiety will serially mediate the relationship between relative financial deprivation and financial satisfaction (serial mediation model 3). Financial anxiety will have a negative relationship with financial self-efficacy (H3a).

#### 3. Methods

# 3.1. Research Sample and Data Collection

This cross-sectional study examines the psychological aspects of financial difficulties faced by minimum wage earners in Turkey. The study collected data from 633 participants through a questionnaire to gain insight into the views of a large segment of employees over a certain period of time. Approval was acquired from the ethics committee commission authorized by the institution before collecting the data for this study. Participants were selected using the snowball sampling method. The study includes individuals who are 18 years of age or older and work for minimum wage in any workplace. As of July 2023, the minimum wage in Turkey was 11,402,32 TL net, which is approximately 423 USD.

The study found that 57.8% of the participants were male and 42.2% were female. In terms of marital status, 44.4% of the respondents were married and 55.6% were single. The age distribution of the respondents was as follows: 35.4% were under the age of 25, 29.9% were between the ages of 26-35, 23.5% were between the ages of 36-45, 8.1% were between the ages of 46-55, and 3.2% were aged 56 and over. With regard to education level, 31.6% of the

employees were high school graduates and 30.8% were bachelor's degree graduates. Additionally, 50.7% of the employees have less than 5 years of experience in the sector.

The surveys underwent a series of stages prior to administration to the participants. Initially, data collectors were instructed on the survey questions and the data collection procedure. Furthermore, a conceptual understanding of each question was ensured to ensure consistency and equivalence between different language versions of the survey. The original English scales were translated into Turkish with the assistance of experts in the field. Finally, before answering the questions, participants were informed about the concepts included in the survey. It was ensured that the questions included in the survey were understood by the respondents.

#### 3.2. Measures

The study employed generalized scales that have been used in numerous previous studies across various groups. To ensure accuracy and validity, the scales underwent rigorous testing for both reliability and validity. The research scale is comprised of five distinct sections. The initial section comprises five inquiries pertaining to demographic characteristics, including gender, educational attainment, age, marital status, and occupational hours. In the second part of the scale, six items were employed to assess financial satisfaction, which serves as the dependent variable in the research (1. Regular monetary savings. 2. Current debt level, etc.) (Hira and Mugenda, 1998). The financial satisfaction scale was subjected to two distinct analytical techniques: exploratory factor analysis and confirmatory factor analysis. The results of the analysis indicated that the factor loadings of all items were above 0.60. The fit indexes of the scale were found to be within acceptable limits, with values for CMIN/DF (3.771), GFI (0.985), CFI (0.987), RMSEA (0.066), and SRMR (0.023) falling within the recommended range. In the third section, the financial self-efficacy scale, which is the first mediator variable of the research, is included. The financial self-efficacy scale comprises a total of five items (1. I am fully capable of making personal financial decisions, 2. I am confident in my ability to make personal financial decisions, etc.) (Dare et al., 2023). The factor analysis conducted on the financial self-efficiency scale revealed that the factor loading of the third item (FSE3) was below 0.50. Consequently, item FSE3 was removed from the scale. Analyses for financial selfefficiency continued with four items. The fit indexes of the scale (CMIN/DF= 4.147; GFI= 0.997; CFI= 0.997; RMSEA= 0.071; SRMR= 0.009) are within acceptable limits. The fourth section of the study comprises the financial anxiety scale, which represents the second mediator variable. The financial anxiety levels of minimum wage earners were gauged through responses to seven items (1. I feel anxious about my financial situation. 2. I have difficulty sleeping because of my financial situation, etc.) (Archuleta et al., 2013). The results of the analyses indicated that the fit indexes of the scale (CMIN/DF= 3.964; GFI= 0.979; CFI= 0.990; RMSEA= 0.068; SRMR= 0.016) were within the acceptable limits.

# 3.3. Scale Validity and Reliability Analysis Results

As one of the prerequisites for determining the statistical analyses to be used, it is important to know whether or not the data are normally distributed. In this sense, in order to apply parametric analysis techniques, the data must be normally distributed or have a

distribution close to normal (Geisser and Johnson, 2006). In this sense, missing data that disrupt the general order of the scales used in the research were first checked, and then the kurtosis and skewness scores were used to assess whether the data set met the normal distribution condition. For exploratory and confirmatory factor analyses, skewness and kurtosis values between -3 and +3 are considered acceptable for normal distribution (Shao, 2002). On the other hand, the fact that the absolute value of the skewness is below 3 and the absolute value of the kurtosis is below 10 reveals that there is a distribution close to the normal distribution (Kline, 2016). The financial anxiety scale has a skewness value of (0.50) and a kurtosis value of (0.67), while the financial satisfaction scale has a skewness value of (0.33) and a kurtosis value of (0.44). The financial self-efficacy scale has a skewness value of (0.09) and a kurtosis value of (0.44). The relative financial deprivation scale has a skewness value of (0.09) and a kurtosis value of (0.44). The data met the normal distribution condition as the kurtosis and skewness values of the scales were within the specified ranges. Therefore, the appropriate conditions for parametric analyses were met.

Table 1. Scale Validity and Reliability Analysis Results

Variables	α	CR	AVE	MSV	ASV	√AVE		
Relative financial deprivation	0.81	0.87	0.56	0.35	0.20	0.75		
Financial self-efficacy	0.84	0.90	0.64	0.17	0.18	0.80		
Financial anxiety	0.94	0.95	0.74	0.35	0.22	0.86		
Financial satisfaction	0.87	0.90	0.61	0.30	0.24	0.78		

The reliability of the financial anxiety, financial satisfaction, financial self-efficacy, and relative financial deprivation scales was analyzed using Cronbach's alpha and CR values. Alpha values and CR values are required to be above 0.70. When the alpha and CR values of the scales related to the variables are examined, it is seen that all values are above 0.70. Therefore, looking at the results in Table 1, we can say that the scales are reliable. To determine convergent and discriminant validity, the AVE, MSV, and ASV values of the variables were calculated. To maintain discriminant validity, MSV and ASV should be smaller than AVE, and the inter-factor correlation should be less than the square root of AVE. In order to demonstrate convergent validity, the AVE must be greater than 0.50, while the CR must be greater than 0.70 and the CR must be greater than the AVE. In order to demonstrate discriminant validity, the MSV must be less than the AVE, the ASV must be less than the AVE, and the √AVE must be less than the correlation between factors (Hair et al., 2021). When we look at Table 1, it is seen that the AVE values are lower than the CR values and the AVE values are above 0.50. According to these results, the variables have convergent validity. On the other hand, the fact that the AVE values of the variables are higher than the MSV and ASV values shows that the variables also have discriminant validity. In addition, the fact that the  $\sqrt{AVE}$  scores of the variables are higher than the correlations between the factors is another indicator that the scales have discriminant validity.

# 3.4. Data Analysis

This study examined whether there is a serial mediation effect of financial self-efficacy and financial anxiety on the effect of relative financial deprivation experienced by minimum wage earners on financial satisfaction. The independent variable of the study is relative financial

deprivation (X), the dependent variable is financial satisfaction (Y), and the mediator variables are financial self-efficacy (M1) and financial anxiety (M2). Amos 22, SPSS 26 and Process Macro 2.16 programs were used in the analysis of the data. Descriptive statistics, correlation and multivariate relationships related to the study were evaluated using SPSS 26 (IBM Corp. Released, 2016). Amos 22 program was used to ensure the reliability and validity of the scales. The mediation effects of the variables in the model were analyzed using Process Macro 2.16, created by Hayes (2013). This tool is particularly beneficial for mediation analysis as it allows for a single-test approach to assess the significance of mediation effects (Hayes, 2013). Specifically, Process Macro evaluates the direct impact of X (relative financial deprivation) on Y (financial satisfaction) and the indirect impact of X on Y through M (financial anxiety or financial self-efficacy). To estimate the mediating effects of financial anxiety and financial self-efficacy on the link between relative financial deprivation and financial satisfaction, 5,000 bootstrap samples were utilized, and 95% confidence intervals (CI) were calculated.

In the study, firstly, the mediating effect of financial self-efficacy on the effect of relative financial deprivation on financial satisfaction (Model 1) was examined. Then, the mediating effect of financial anxiety on the effect of relative financial deprivation on financial satisfaction (Model 2) was examined. Finally, the serial mediating effect of financial self-efficacy and financial anxiety on the effect of relative financial deprivation on financial satisfaction (Serial Mediation Model 3) was analyzed.

## 4. Findings of the Research

# 4.1. Correlation Results

Table 2 presents the means (M), standard deviations (SD), and correlation r-values for the variables. Upon analysis of the mean values presented in Table 2, it becomes evident that the financial anxiety of minimum wage earners (3.46) is above the average. This outcome is consistent with expectations, indicating that minimum wage earners experience financial anxiety due to their low income. The average of financial satisfaction, another variable presented in Table 2, is (2.42). This value demonstrates that the financial satisfaction of minimum wage employees is below the average. In other words, this result indicates that employees are not financially satisfied. When the means of both financial self-efficacy (3.09) and relative financial deprivation (3.25) were examined, it was understood that both were at a moderate level. This suggests that the financial self-efficacy level of minimum wage employees is not as low as anticipated, and they experience relative financial deprivation to a limited extent.

**Table 2. Descriptive Statistics and Correlations** 

Variables	M	SD	1	2	3	4
Relative financial deprivation	3.25	0.91	-			
Financial self-efficacy	3.09	0.91	-0.15**	-		
Financial anxiety	3.46	1.09	0.59**	-0.07	-	
Financial satisfaction	2.42	0.93	-0.48**	0.42**	-0.55**	-

**Note:** N= 633, \*p<.05, \*\*p<.01.

When the correlation relations for the variables of the study were examined, it was determined that relative financial deprivation had a moderate negative significant relationship with financial satisfaction (r = -0.48, p < .01) and a weak negative significant relationship with financial self-efficacy (r = -0.15, p < .01). However, it was observed that there was a moderate positive significant relationship between relative financial deprivation and financial anxiety (r = 0.59, p < .01). In other words, as expected, while the financial anxiety of those experiencing relative financial deprivation increased, their financial self-efficacy and financial satisfaction decreased. In addition, while there was a moderate positive significant relationship between financial satisfaction (r = 0.42, p < .01), there was a moderate negative significant relationship between financial anxiety and financial satisfaction (r = -0.55, p < .01). In other words, while financial self-efficacy positively affected financial satisfaction, financial anxiety negatively affected financial satisfaction.

# 4.2. Testing Research Hypotheses

## 4.2.1. Model 1 Results (RFD→FSE→FS)

In Model 1, it was examined whether there was a mediating effect of financial self-efficacy on the effect of relative financial deprivation and financial satisfaction. Process Macro Model 4 was used to test the mediation relationship shown in Figure 1. As a result of the analyses, it was found that financial self-efficacy had a mediating effect on the relationship between relative financial deprivation and financial satisfaction.

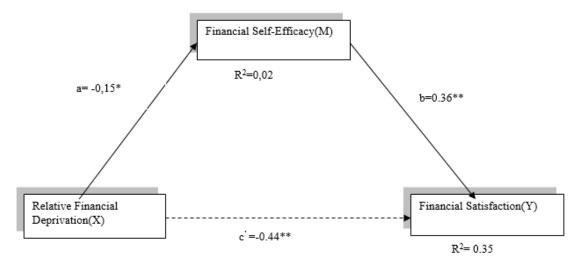


Figure 1. The Relationship Between Relative Financial Deprivation with Financial Satisfaction, and the Mediating Role of Financial Self-Efficacy (Model 1)

Figure 1 shows that (c') the direct effect of relative financial deprivation on financial satisfaction is negative and significant ( $\beta$  = -0.44, p<.001). Secondly, the (a) path was examined and it was found that the direct effect of relative financial deprivation on financial self-efficacy was negative and significant ( $\beta$  = -0.15, p<.001). Then, the (b) path was examined and it was understood that the direct effect of financial self-efficacy on financial satisfaction was also positive and significant ( $\beta$  = 0.36, p<.001). After the significant results obtained, regression

analysis was conducted with the Bootstrapping method to understand whether there was a mediation effect. The results obtained from the bootstrapping analysis (Table 3) showed that the indirect effect of relative financial deprivation on financial satisfaction was significant since the 95% confidence intervals (CI) did not include zero (0) ( $\beta$  = -0.054, 95% CI [-0.09, - 0.02]). According to this result, the relationship between relative financial deprivation and financial satisfaction is mediated by financial self-efficacy. Accordingly, the hypothesis (H1) that financial self-efficacy will mediate the relationship between relative financial deprivation and financial satisfaction (Model 1) was accepted. In addition, the hypotheses (H1a) relative financial deprivation will be negatively related to financial satisfaction; and (H1c) relative financial deprivation will be negatively related to financial satisfaction were also accepted.

# 4.2.2. Model 2 Results (RFD $\rightarrow$ FA $\rightarrow$ FS)

Model 2 aimed to test whether financial anxiety mediates the effect of relative financial deprivation on financial satisfaction. As shown in Figure 2, financial anxiety has a significant mediating effect on the relationship between relative financial deprivation and financial satisfaction.

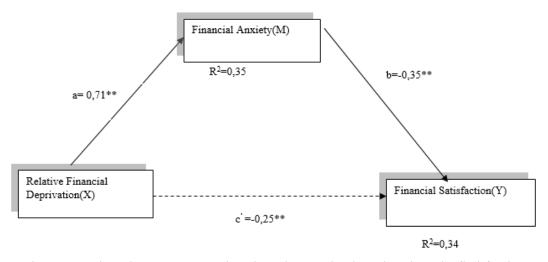


Figure 2. The Relationship Between Relative Financial Deprivation with Financial Satisfaction, and the Mediation Role of Financial Anxiety (Model 2)

When the relationship between the variables is examined in detail, it is seen that (c') the direct effect of relative financial deprivation on financial satisfaction is significant ( $\beta$  = -0.25, p<0.001). However, it is found that (a) the direct effect of relative financial deprivation on financial anxiety is positive ( $\beta$  = 0.71, p<0.001) and (b) the direct effect of financial anxiety on financial satisfaction is negative ( $\beta$  = -0.35, p<0.001). After these results are obtained, the mediation test is performed by selecting 5000 resample options and Model 4 with the Bootstrap technique. Since the results obtained from the bootstrapping analysis (Table 3) do not include zero (0) in the 95% confidence interval (CI), it was understood that the indirect effect of relative financial deprivation on financial satisfaction was also significant ( $\beta$  = -0.25, 95% CI [-0.30, -0.19]). Based on these results, it can be said that financial anxiety mediates the relationship

between relative financial deprivation and financial satisfaction. Accordingly, hypothesis H2: financial anxiety will mediate the relationship between relative financial deprivation and financial satisfaction (Model 2) was accepted. However, the hypotheses (H2a) relative financial deprivation will be positively related to financial anxiety; (H2b) financial anxiety will be negatively related to financial satisfaction; and (H2c) relative financial deprivation will be negatively related to financial satisfaction; were also accepted.

# 4.2.3. Model 3 Results (RFD $\rightarrow$ FSE $\rightarrow$ FA $\rightarrow$ FS)

Model 3 tests whether financial self-efficacy and financial anxiety have a serial mediating role in the relationship between relative financial deprivation and financial satisfaction.

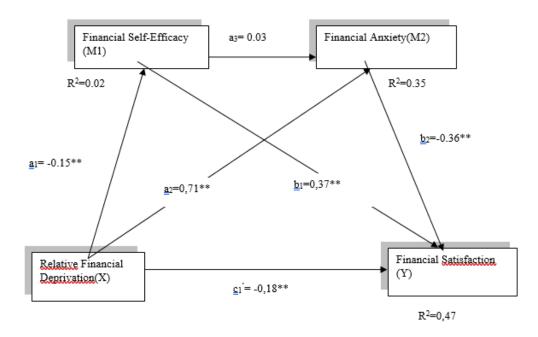


Figure 3. The Serial Mediating Role of Financial Self-Efficacy and Financial Anxiety in the Connection Between Relative Financial Deprivation with Financial Satisfaction (Model 3)

Process Macro Model 6 was used to test whether there is a serial mediation effect of financial self-efficacy and financial anxiety in the relationship between relative financial deprivation and financial satisfaction shown in Figure 3. The results of the serial mediation effect analysis indicated that the path estimates provided partial support for our hypotheses. As seen in Figure 3, the direct effect of  $(c_1)$  relative financial deprivation on financial satisfaction ( $\beta$  = -0.18, p<.001), ( $\alpha$ <sub>1</sub>) relative financial deprivation on financial self-efficacy ( $\beta$  = -0.15, p<.001) and ( $\alpha$ <sub>2</sub>) relative financial deprivation on financial anxiety ( $\beta$  = 0.71, p<.001) is significant. However, ( $\alpha$ <sub>1</sub>) financial self-efficacy on financial satisfaction ( $\alpha$  = -0.36, p<.001) was found to be significant. However, ( $\alpha$ <sub>3</sub>) the direct effect of financial self-efficacy on financial anxiety ( $\alpha$  = 0.03, p>.05) was not significant. In addition, the results obtained from the Bootstrapping analysis (Table 3) showed that the indirect effect of relative financial deprivation on financial

satisfaction was not significant because the 95% confidence intervals (CI) included zero (0) ( $\beta$  = -0.01, 95% CI [-0.01, 0.01]). According to this result, (H3): both financial self-efficacy and financial anxiety will serially mediate the relationship between relative financial deprivation and financial satisfaction (Model 3) was rejected. In addition, (H3a) was rejected because the relationship between financial self-efficacy and financial anxiety was not significant.

Table 3. Direct and Indirect Effects of X on Y

Table 3. Direct and matreet Effects of A on 1							
	Effect	SE	T	LLCI	ULCI		
Direct Effect of X on Y					_		
(Model 1) RFD $\rightarrow$ FS	-0.44	0.03	-13.22	-0.51	-0.38		
(Model 2) RFD $\rightarrow$ FS	-0.24	0.04	-5.94	-0.33	-0.16		
(Model 3) RFD $\rightarrow$ FS	-0.18	0.04	-4.88	-0.26	-0.11		
	Effect	BootSE		BootLLCI	BootULCI		
Indirect Effect of X on Y					_		
(Model 1) RFD $\rightarrow$ FSE $\rightarrow$ FS	-0.05	0.02		-0.09	0.01		
(Model 2) RFD $\rightarrow$ FA $\rightarrow$ FS	-0.25	0.03		-0.30	-0.20		
(Model 3) RFD $\rightarrow$ FSE $\rightarrow$ FS	-0.06	0.02		-0.09	0.02		
(Model 3) RFD $\rightarrow$ FA $\rightarrow$ FS	-0.26	0.03		-0.31	-0.21		
(Model 3) RFD $\rightarrow$ FSE $\rightarrow$ FA $\rightarrow$ FS	-0.01	0.01		-0.01	0.01		

**Note:** RFD: Relative financial deprivation, FS: Financial satisfaction, FSE: Financial self-efficacy, FA: Financial anxiety.

# 5. Discussion and Implications

This study explains the issue within the framework of relative deprivation theory by selecting variables proposed by previous research (Mathur and Kasper, 2019; Kim, 2020; Mahmoud et al., 2022). The present study aims to explain the financial behavior of minimum wage earners within the relative deprivation theory. To demonstrate the application of the relative deprivation theory, a limited number of variables were derived from each component of the conceptual model. Based on the model, hypotheses related to relative financial deprivation, financial anxiety, financial satisfaction, and financial self-efficacy were developed and tested using data obtained from minimum wage earners working in Turkey.

The aim of this article is to enhance the existing literature by examining the impact of relative financial deprivation on financial anxiety, financial self-efficacy, and financial satisfaction among minimum-wage workers in Turkey. The study analyzed the direct relationships between relative financial deprivation, financial satisfaction, financial anxiety, and financial self-efficacy. The study tested separately the mediating effects of financial anxiety and financial self-efficacy on the relationship between relative financial deprivation and financial satisfaction. Additionally, the serial mediation effect of financial self-efficacy and financial anxiety on the relationship between relative financial deprivation and financial satisfaction was analyzed.

In general, the analysis of the research findings suggests that minimum wage earners in Turkey experience relative financial deprivation. This is expected in countries with high-income inequality. Additionally, minimum wage earners in Turkey report low financial satisfaction and experience financial anxiety. However, contrary to expectations, the research concludes that their financial self-efficacy is not low. The results of our research partly confirmed our hypotheses. We found that relative financial deprivation has a significant negative impact on

financial satisfaction and financial self-efficacy, but a significant positive impact on financial anxiety. However, the relationship between financial self-efficacy and financial anxiety is statistically insignificant.

When the mediation relationships are examined, the mediation effect of financial self-efficacy in the relationship between relative financial deprivation and financial satisfaction is found to be significant. Although theories and general expectations show that the financial self-efficacy of minimum wage earners will be low, statistical results show that minimum wage earners in Turkey have financial self-efficacy despite everything. This situation has affected the mediation role of financial self-efficacy in the relationship between relative financial deprivation and financial satisfaction. This finding is one of the most striking results of the study. Because minimum wage earners feel financially self-efficacy despite everything. The fact that some of the minimum wage earners have a high level of education has been effective in the emergence of this result. Because a large number of university graduates in Turkey have started working for minimum wage. Another reason why minimum wage earners have financial self-efficacy is that they do not have to live only on minimum wage and may have other side incomes.

The study found that financial anxiety mediates the relationship between relative financial deprivation and financial satisfaction. This suggests that relative financial deprivation decreases financial satisfaction while increasing financial anxiety. Therefore, these findings demonstrate that the financial satisfaction of minimum wage earners in Turkey is reduced due to relative financial deprivation, which in turn increases financial anxiety and negatively impacts their mental health. These results are particularly noteworthy given that approximately 50% of the working population in Turkey are minimum wage earners. The continuous and high rate of price increases may contribute to the emergence of financial anxiety. The recent high inflation rate and the resulting decrease in purchasing power may contribute to financial anxiety among minimum wage earners.

Finally, the study found that the serial mediating role of financial self-efficacy and financial anxiety in the relationship between relative financial deprivation and financial satisfaction was insignificant. These results suggest that while relative financial deprivation negatively affects financial satisfaction, the introduction of financial anxiety as another negative factor further reduces financial satisfaction. Financial satisfaction is negatively affected by relative financial deprivation. However, high levels of financial self-efficacy also reduce financial satisfaction, and therefore the expected mediation effect does not emerge.

The findings of this study are consistent with the findings of previous research. Mahmoud et al. (2022), Hastings (2019), and Hira and Mugenda (1998) reported a negative correlation between relative financial deprivation and financial satisfaction. Kumar et al. (2023) and Asebedo and Payne (2019) found that self-efficacy has an impact on financial satisfaction. Kim et al. (2020) and Lee et al. (2023) found a negative relationship between financial self-efficacy and financial anxiety. Additionally, Joo and Grable (2004) demonstrated that financial stress can reduce financial satisfaction.

Our study makes several contributions to the literature. This article has drawn attention to the psychological effects of income inequality by focusing on feelings of relative financial deprivation and financial satisfaction. Thus, the results of this study have brought to light the psychological consequences of the economic hardship experienced by minimum wage earners in Turkey, such as financial anxiety. The existing literature has often implied that income inequality, experienced by minimum wage earners who experience a feeling of relative financial deprivation, may also cause various social problems. In addition, this study has enabled the modeling of complex relationships that have not been modeled in the literature before, with the advanced statistical methods used.

In conclusion, financial deprivation has a negative impact on financial satisfaction and self-efficacy, while increasing financial anxiety. It is evident that minimum wage earners in Turkey experience financial deprivation, which in turn decreases their financial satisfaction and increases their financial anxiety. The current situation indicates that there are economic and psychological challenges being faced. Urgent action is required to address this issue. The government should first increase the salaries of minimum wage earners at the rate of inflation. Secondly, the state can provide social assistance to minimum wage earners, including heating, shelter, clothing, and food aid. Additionally, free financial education opportunities can be offered to minimum-wage earners. Providing credit and debt management training to minimum wage earners can alleviate their financial distress. The Minimum Wage Determination Commission has recently been considering implementing different minimum wage practices based on provinces such as Istanbul, Ankara, and Izmir in Turkey. This is thought to help employees overcome psychological difficulties they may experience due to the minimum wage. However, it is important to ensure that any such practices are objective and free from bias.

The study has limitations as it did not include a clear question about the income level of minimum wage earners in the sample, nor did it inquire about the income status of other family members in questions directed to employees. It is important to note that the self-efficacy perception of a married family member with one or both spouses earning minimum wage may differ from that of a single minimum wage earner. Future studies should take into account the household income of the minimum wage earner and whether they have additional sources of income when collecting data. Different methodological approaches, such as qualitative methodology, can be used to collect and interpret data. Longitudinal studies can be conducted over a period of years to examine whether the results obtained at different minimum wage levels are consistent with each other. These approaches can contribute to the depth and richness of the relevant literature.

#### **Declaration of Research and Publication Ethics**

This study complied with research and publication ethics. Ethic permission for the study was obtained from the Scientific Research and Publication Ethics Committee of Nevşehir Hacı Bektaş Veli University with the decision dated 26.12.2022, 13 meeting and numbered 2022.13.415.

#### Researcher's Contribution Rate Statement

The authors declare that they have contributed equally to the article.

#### **Declaration of Researcher's Conflict of Interest**

There is no potential conflicts of interest in this study.

#### References

- Adinda, C., Salim, U. and Juwita, H.A.J. (2023). Why does the level of financial satisfaction high during the Covid-19 pandemic? The role of income, financial knowledge, financial stress, Covid-19 omicron awareness, and financial behavior on the financial satisfaction of master of management students. *International Journal of Research in Business and Social Science*, 12(4), 202-216. https://doi.org/10.20525/ijrbs.v12i4.2636
- Archuleta, K.L., Dale, A. and Spann, S.M. (2013). College students and financial distress: Exploring debt, financial satisfaction, and financial anxiety. *Journal of Financial Counseling and Planning*, 24(2), 50-62. Retrieved from https://krex.k-state.edu/
- Archuleta, K.L., Mielitz, K.S., Jayne, D. and Le, V. (2020). Financial goal setting, financial anxiety, and solution-focused financial therapy (SFFT): A quasi-experimental outcome study. *Contemporary Family Therapy*, 42(1), 68-76. doi:10.1007/s10591-019-09501-0
- Asebedo, S. and Payne, P. (2019). Market volatility and financial satisfaction: The role of financial self-efficacy. *Journal of Behavioral Finance*, 20(1), 42-52. https://doi.org/10.1080/15427560.2018.1434655
- Cımrın, A.H., Bahadır, H. and Ibrahim, K. (2023). Türkiye'de çalışan olarak vasıfsızlık; Meslek hastalığı bağlamında iş, işyeri ve toplumsal yaşama ait kavrayışlar. *Çalışma ve Toplum*, 1(76), 183-210. Erişim adresi: https://www.calismatoplum.org/
- Crosby, F. (1976). A model of egoistic relative deprivation. *Psychological Review*, 83, 85-113. https://doi.org/10.1037/0033-295X.83.2.85
- Dare, S.E., van Dijk, W.W., van Dijk, E., van Dillen, L.F., Gallucci, M. and Simonse, O. (2023). How executive functioning and financial self-efficacy predict subjective financial well-being via positive financial behaviors. *Journal of Family and Economic Issues*, 44(2), 232-248. doi:10.1007/s10834-022-09845-0
- Duesenberry, J.S. (1949). Income, saving, and the theory of consumer behavior. *The Review of Economics and Statistics*, 33(3), 255-257. https://doi.org/10.2307/1926590
- Farrell, L., Fry, T.R. and Risse, L. (2016). The significance of financial self-efficacy in explaining women's personal finance behaviour. *Journal of Economic Psychology*, 54, 85-99. https://doi.org/10.1016/j.joep.2015.07.001
- Geisser, S. and Johnson, W. (2006). *Modes of parametric statistical inferences*. New Jersey: John Wiley and Sons Inc.
- Hair, J., Hult, G., Ringle, C. and Sarstedt, M. (2014). A Primer on partial least squares structural equation modeling (PLS-SEM). Los Angeles: Sage.
- Hastings, O.P. (2019). Who feels it? Income inequality, relative deprivation, and financial satisfaction in US states, 1973-2012. *Research in Social Stratification and Mobility*, 60, 1-15. https://doi.org/10.1016/j.rssm.2019.01.004
- Hayes, A.F. (2013). *Introduction to mediation, moderation, and conditional process analysis first edition: A regression-based approach*. New York: The Guilford Press.
- Hira, T.K. and Mugenda, O.M. (1998). Predictors of financial satisfaction: Differences between retirees and non-retirees. *Journal of Financial Counseling and Planning*, 9(2), 75-84. Retrieved from https://www.afcpe.org/news-and-publications/journal-of-financial-counseling-and-planning/
- Ismail, S., Faique, F. A., Bakri, M. H., Zain, Z. M., Idris, N. H., Yazid, Z. A. and Taib, N. M. (2017). The role of financial self-efficacy scale in predicting financial behavior. *Advanced Science Letters*, 23(5), 4635-4639. doi:10.1166/asl.2017.8992
- Joo, S.H. and Grable, J.E. (2004). An exploratory framework of the determinants of financial satisfaction. *Journal of Family and Economic Issues*, 25(1), 25-50. https://doi.org/10.1023/B:JEEI.0000016722.37994.9f
- Kim, Y.K., Lim, Y., Maleku, A., Kagotho, N. and Yang, M. (2020). Financial stress and depression among African refugees in the southern United States: A serial multiple mediation analysis of

- G. Ersarı Taşkesen & K. Karacaoğlu, "Relative Financial Deprivation and Financial Satisfaction among Minimum Wage Earners in Türkiye: A Serial Mediation Analysis"
  - financial self-efficacy and financial anxiety. *Journal of Immigrant and Refugee Studies*, 18(2), 151-171. https://doi.org/10.1080/15562948.2019.1593571
- Kline, R.B. (2016). *Principles and Practice of Structural Equation Modeling* (4th ed.). New York. NY: The Guilford Press.
- Kumar, J., Rani, M., Rani, G. and Rani, V. (2023). What do individuals know, feel and do from a financial perspective? An empirical study on financial satisfaction. *International Journal of Social Economics*, 51(6), 771-785. https://doi.org/10.1108/IJSE-03-2023-0239
- Lee, J.M., Rabbani, A. and Heo, W. (2023). Examining financial anxiety focusing on interactions between financial knowledge and financial self-efficacy. *Journal of Financial Therapy*, 14(1), 2. https://doi.org/10.4148/1944-9771.1279
- Lee, Y.G. and Dustin, L. (2021). Explaining financial satisfaction in marriage: The role of financial stress, financial knowledge, and financial behavior. *Marriage and Family Review*, 57(5), 397-421. https://doi.org/10.1080/01494929.2020.1865229
- Lyubomirsky, S. (2001). Why are some people happier than others? The role of cognitive and motivational processes in well-being. *American Psychologist*, 56(3), 239–249. https://doi.org/10.1037/0003-066X.56.3.239
- Mahmoud, M.A., Umar, U.H., Baita, A.J. and Ado, M.B. (2022). Relative financial deprivation, financial anxiety and financial satisfaction: The role of access to Islamic financing among MSME owners amidst COVID-19. *Journal of Islamic Accounting and Business Research*, 14(4), 595-609. https://doi.org/10.1108/JIABR-03-2022-0061
- Marx, K. (1902). *Wage-labor and capital*. New York Labor News Company. https://stars.library.ucf.edu/cgi/viewcontent.cgi?article=1162&context=prism
- Mathur, A. and Kasper, H. (2019). Application of the life course paradigm to the study of financial solvency and financial satisfaction in later life: A comparative study of American and Dutch elderly consumers. *Journal of Global Scholars of Marketing Science*, 29(4), 409-422. https://doi.org/10.1080/21639159.2019.1613903
- Mubarik, F., Rehman, M.Z.U., Baig, S.A., Hashim, M. and Shafaqat, S. (2020). Financial inclusion and financial satisfaction: Moderating role of the financial self-efficacy. *RADS Journal of Business Management*, 2(2), 111-123. Retrieved from http://www.jbm.juw.edu.pk/
- Payne, P. and Asebedo, S. (2017). Financial self-efficacy and the financial satisfaction of credit-card users (SSRN Electronic Journal No. 3042570). https://doi.org/10.2139/ssrn.3042570
- Runciman, W.G. (1966). Relative deprivation and social justice. London: Routledge.
- Shao, A.T. (2002). *Marketing research: An aid to decision making*. Cincinnati, Ohio: South-Western/Thomson Learning.
- Sharma, E. and Alter, A.L. (2012). Financial deprivation prompts consumers to seek scarce goods. *Journal of Consumer Research*, 39(3), 545-560. https://doi.org/10.1086/664038
- Xiao, J.J. and Porto, N. (2017). Financial education and financial satisfaction: Financial literacy, behavior, and capability as mediators. *International Journal of Bank Marketing*, 35(5), 805-817. https://doi.org/10.1108/IJBM-01-2016-0009
- Zhang, R., Ma, Q. and Guan, D. (2023). The impact of financial scarcity on green consumption: Sequential mediating effects of anxiety and self-efficacy. *Psychology and Marketing*, 40(6), 1162-1178. https://doi.org/10.1002/mar.21801