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The effect of word-of-mouth communication and specialized characteristics on the financial behavior of investors: with the mediating role of demographic factors in emerging markets

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ABSTRACT

Nowadays, investors' awareness of the stock markets has increased compared to the past. They are now in an environment where they have the power to buy and sell shares of many companies. Therefore, investors must choose and trade stocks. They often seek opinions from previous investors and friends, leading to the widespread use of word-of-mouth advertising in stock and financial markets. This research investigates investors' decision-making behavior based on word-of-mouth communication, considering specialized criteria and demographic factors. This study is descriptive and correlational. The statistical population includes individual investors, traders, brokers, and university professors investing in the Iranian capital market. The sample size of 153 people was determined using Cochran's test. The adequacy of the sample was confirmed through the KMO test. Structural equation modeling was used to validate the model, with analysis conducted using SPSS and PLS software. The research hypothesis test results indicate a positive relationship between word-of-mouth communication and investors' decision-making in the Tehran Stock Exchange market. Demographic factors do not mediate this relationship. Additionally, specialized features do not impact investors' decision-making. Demographic factors also do not mediate the relationship between specialized characteristics and investors' decision-making.

Keywords: Investors' financial behavior, Word-of-mouth communication, Specialized characteristics, Demographic factors

1. Introduction

Investing in the stock market is an important part of every country's economy, and without a doubt, the largest amount of capital is exchanged through the stock markets all over the world, and the country's economy is strongly affected by the performance of the stock market. Today, investors consider many factors to choosing an investment. Based on existing approaches, investors' decision-making is not based only on technical and rational analysis (Bhatia et al., 2020). One of the main factors for the growth and development of the capital market is the correct and complete identification of its main elements, and as it is known, investors are one of the main elements of this market. Therefore, gaining knowledge about their behavior, and reactions in the stock market can play an important role in determining the market trend and then it will affect the entire economy (Guillemette et al., 2019). In such a way the correct understanding of the behavioral factors affecting the decision-making of investors is very important both for them and for the main elements of the stock exchange. The correct understanding of these factors is important for investors because it helps them to better understand the behavioral factors affecting their investment decisions and avoid the pitfalls that are rooted in their minds and psyches due to mistakes. Cognitive and emotional will be found in their path so that they don't fall and ultimately help them in improving their reactions to get more favorable results. Also, by identifying the behavioral factors affecting investors' decisions, the Securities and Exchange Organization can establish better and more accurate rules, regulations, procedures, and instructions to make the market more efficient. to perform better in its monitoring activities (Jain et al., 2022).

Today, people pay less attention to commercial advertisements and are more interested in other people's opinions about the products and services we offer them. Informal communication related to products and services has a strong influence on consumer behavior, which is often greater than messages received through advertising. These impersonal relationships are known as word-of-mouth communication and are traditionally shared between acquaintances in a face-to-face manner (Godes et al., 2005). Arendt (1967) is one of the first researchers who studied word-of-mouth communication. He described word-of-mouth communication as oral and face-to-face communication between people about products, services, and companies. It has no commercial nature. Buttle (1998), believes that in the electronic age, due to technological advances, there is no need to consider word-of-mouth communication as face-to-face, oral, or direct (Buttle, 1998). Along with the emergence of new media technologies, the nature and impact of word-of-mouth communication takes place in online environments, which is known as electronic word-of-mouth communication (Chu & Choi, 2011).

The world economy has become so complicated that individuals or institutions must be active in the financial market to manage the increasing costs. Investing in the market enables an individual or organization to earn a good income and resist financial challenges in the economic situation in which it is located (Deb & Singh, 2016). Financial knowledge, due to the capabilities it creates in a person, allows him to have accurate information about calculations related to financial management, including interest rate, interest, inflation, and principles related to risk diversification. When faced with situations that require financial choices, a person can make decisions more efficiently. Without being aware of how the users of financial reports perceive risk, it will be difficult for people to manage and evaluate the perception of risks related to risk. For this reason, people who apply accurate management and evaluation according to their specialized knowledge about financial reports, use the findings related to financial risk judgments to make more effective decisions. The type of people's approach to risk and the priority they give to its types can be effective in predicting their future behavior (Prakash et al., 2022). Several personality traits that can determine a person's specialized knowledge include experience in the stock exchange and investment, field of study, and stock exchange certificates and capital market certificates. Demographic characteristics (personality) are also discussed in behavioral finance. Personality can perhaps be considered the most basic subject of psychology; Because the focus of discussion is in areas such as motivation, perception, thinking, emotions and feelings, etc. According to financial theoretical models, in many cases, the influence of culture, religion, and personality cannot be ignored in the decision-making of investors, because they have a great impact on the market movement. As perception

is an important factor in decision-making, personality is also involved in this matter (Schneider & Kugel, 2023). Among the issues that have a significant impact on the way people invest are demographic characteristics, which can be mentioned as gender, age, education, and risk aversion status. Among many advertising tools. Oral communication is one of these tools. Word-of-mouth communication is an honest and real conversation from people's point of view through which information is exchanged between them for mutual effect. In some cases, the basis of investors' decisions is the opinions of others, if it is not possible to achieve any goal without having proper knowledge and understanding. Investment is not excluded from this and naturally, investors should invest with sufficient knowledge and information about their demographic characteristics and specialized characteristics.

2. Literature review and Hypothesis Development

2-1 Literature review

Most financial theories are based on the assumption that investors act in a completely rational way when making decisions, which is completely consistent with the theory of rational economic man. When investing, investors consider all aspects and make the most rational decision. But sometimes factors cause irrational behavior and affect their decision-making, which is the inefficiency of financial markets. Therefore, correct information cannot be obtained in the occurrence of perceptual errors, and it is possible to determine the amount of deviation by identifying the personality characteristics and behavioral deviations of investors and providing programs that reduce these deviations in financial behavior. provides It also reduced long-term decisions and helped investors achieve their long-term financial goals. Financial decision is one of the most important decisions that people make because of cognitive limitations and low level of financial literacy, many people's decisions violate correct financial principles (Frino et al., 2014).

Investor's financial behavior is a functional field that is borrowed from economics, finance, investment, psychology, and other related fields. The goal of investors is to maximize profit and wealth, but studies have shown that their behavior is limited to certain anomalies (Sashikala & Chitramani, 2017). Most investors make their investments based on the yield and risk of assets, but often emotions overcome rationality, and their decisions are influenced by cognitive biases and psychological factors (VanderPal, 2021). According to behavioral finance theory, investors' actions are limited by rationality, and their decisions are influenced by psychological, and emotional factors and word-of-mouth communication. Investor behavior is known as the key element in the capital market, which acts as a determining factor for investment programs with amazing economic benefits (Ahmad, 2020). On the other hand, personality factors are among the psychological factors that affect human behavior. Personal characteristics often play an important role in the investor's decision-making process, they overcome logic and cause the investor's decisions to deviate from the existing reality, including psychological factors and personality characteristics that influence the investor's behavior. It affects excessive self-confidence and risk-taking. Al-Qur'an Al-Qaisi, and Al-Shorfa (2016) by examining the influence of behavioral factors on the decision-making process showed that excessive self-confidence, loss aversion, and risk perception are important issues that affect investment decisions (VanderPal, 2021).

2-2 Hypothesis Development

Word of mouth (WOM) refers to interpersonal communication between people that is informal, not commercially motivated, and may take many forms (Sun et al., 2021). It is clear that many researchers, researchers, specialists and others in the field of marketing and communication paid attention to the study of the concept of word-of-mouth communication and its effect in many fields and dimensions. Aslam et al. (2011), state that word-of-mouth communication is an honest and real conversation from the point of view of people through which information is exchanged between them for mutual influence. Many times, it is too difficult for a consumer to evaluate a product, service or resource to get their information from because there may not be enough credibility for it, so they look for information that others prefer. And according to the information of others, they decide to buy (Aslam et al., 2011).

Many researchers, researchers, specialists, and others in the informal communication channel of companies use verbal communication. Verbal

communication in the stock market affects participation in investment by using observational learning. Investors learn from each other about stocks with high income, stock price changes and how to deal with them, the status of active companies, or how to trade in the market. Establishing communication in the market helps to collect information from the participants in the market. Investors get their information about stocks from those who are closer and more accessible to them. Shiller and Pound (1989) In research conducted on 131 investors, they were asked what made them buy certain stocks recently. Most of them took the name of the person they were in contact with in that relationship, which included their family, friends, etc. In confirming the power of verbal communication, Shiller (2002) by proposing "feedback models" states that verbal communication can create a price bubble or lower prices to the floor (Kubik et al., 2003; Shiller & Pound, 1989). Social interaction may exhibit two effects in influencing household financial decisions: the informational effect and the social multiplier effect. It is well accepted that social interaction may act as a mechanism for exchanging information through word-of-mouth communication or "observational learning", specifically word-of-mouth, learning about opening an account, making transactions, etc. It makes it easy and convenient for potential investors to get relevant information by talking to experienced friends and neighbors. This is known as the informational effect of social interaction on participation in the stock market, which indicates an individual's active use of information. On the other hand, if an individual's behavior is influenced by the behavior of others, a more social person is more influenced by peers. As a result, a social person in a society with high participation in the stock market is more likely to participate in the stock market. In other words, social interaction increases the correlation between the participation rate in the stock market at the community level and individual participation. which is called social interaction, which shows that people are passively influenced by the average behavior (characteristics) of the society in which they live (Liang & Guo, 2015). Word-of-mouth communication is an important information channel that influences customers' decisions regarding purchase behavior, purchase intention, or usage intention. However, there are still many conflicting opinions about the impact of word of mouth on investment decision-making. Hwang(۲۰۲۳) suggests that word of mouth does not seem to help investors make better investment decisions. Meanwhile, The study by Argan et al. (2014) It showed that there is a positive relationship between satisfaction, investment intention, and word-of-mouth information. Brown et al. (2008) show that many people tend to invest in the stock market when their social groups have high participation rates in the stock market and conclude that WOM interaction may be a possible relationship between individual and social group investment behavior creating. Ellison and Fudenberg (1995), show that WOM is an important phenomenon that affects satisfaction and investment. In other words, empirical findings show that there is a strong relationship between investor satisfaction and intention and WOM communication. Ivković and Weisbenner (2007) argued that word-of-mouth communication is a widespread phenomenon that may affect the financial decisions of individual investors because they tend to reduce information-seeking costs by relying on social interaction. Hong et al. (2005) showed that social interaction partially increases stock market participation among individual investors. Kaustia and Knüpfer (2012) found that positive neighborhood returns increase the entry of new people into the stock market who live in the same geographic area. On the other hand, Abreu and Mendes (2012) showed that negative peer returns reduce participation in the stock market. Li (2014) investigated that if parents or their children made their first entry into the stock market in the past five years, household entry into the stock market will increase in the next five years. In contrast, Feng and Seasholes (2004) argued that individual investors make similar decisions due to a common response to public information rather than word-of-mouth effects. Al-Samydai et al. (2020) analyzed the effect of word-of-mouth advertising on stock purchase behavior in the Oman Stock Exchange, and evidence showed that word-of-mouth advertising has a significant effect on investors' stock purchase behavior. Hwang (2023) descriptively investigated the effect of word-of-mouth communication on investors' decisions and asset prices and stated that word-of-mouth advertising cannot help investors' decisions and increase asset prices. Ahmad et al. (2021) studied investors' motivation and word-of-mouth communication in decision-making, which showed that the social and personal motivations of investors

have a positive relationship with word-of-mouth communication and investors' decision-making. According to the presented materials, the first hypothesis of the current research is formulated as follows:

The first hypothesis: word-of-mouth communication affects investors' decision-making.

Currently, financial markets have certain complexities and people face a wide range of items based on their financial needs. The approach that people choose to interact with the markets depends on their financial knowledge and skills to evaluate the market (Hassan Al-Tamimi & Anood Bin Kalli, 2009). Researchers believe that knowledge and cognitive ability are likely to influence investors' decisions (Bayar et al., 2020). Specialized features are necessary for the effective management of personal resources through short-term decision-making(Hastings et al., 2013). This is true and worrying especially for those who are unaware of it. On the one hand, they have more financial education and on the other hand, they are under constant and accumulated financial pressure, as a result, they lack the necessary skills and capacities to manage their limited resources to achieve their basic needs. Commonly, they do not have financial education and many people are not even aware of basic economic measurements. Christelis et al. and Mcardle et al. admit that having more wealth as well as the ease of investing in the market and having more chances for profit is possible only because of valuable financial knowledge about the markets (Boisclair et al., 2017). Economic growth and development are practically impossible without the participation of community members in economic activities. Financial markets such as capital markets and money markets provide financial participation of people. People's investments in financial markets lead to the transfer of their small capitals to productive and productive activities and their participation in these affairs. In the meantime, the higher the level of specialized characteristics of the members of the society, the financial resources will be directed effectively and the members of the society will benefit from it. According to the presented materials, the second hypothesis of the current research is formulated as follows:

Second hypothesis: specialized features affect investors' decision-making.

Based on the theory of planned behavior, gender can be considered as one of the background factors affecting the beliefs and ultimately the behavior of risky investors (Ajzen & Fishbein, 2005). For example, Lawrenson and Dickason-Koekemoer (2020) in the investigation of the personality characteristics of investors considered men to be more risk-taking and obtained their financial risk tolerance index greater than women. In addition, talking about gender equality in the field of investment causes the activation of gender stereotypes (Luo & Salterio, 2022). Bose et al. (2020) conducted research titled the role of gender in financial markets. In this research, the effect of gender-related factors on financial market stability and traders' performance was investigated, and finally, the effect of gender on financial market stability and traders' performance was confirmed.

Different people in their daily lives are making decisions to increase their expected utility at a certain level of risk. As a part of the decision-making process, the decision-maker wants to allocate his wealth in such a way that the maximum expected return is assigned to his asset portfolio. Economists and financial mathematicians have taken into account the effective variables in the decision-making process of people on the one hand and how to introduce uncertainty in the real world to model the decision-making process regarding the selection of the optimal portfolio (Zahera & Bansal, 2018). Until the seventies in the financial field, a study related to the identification of the decision-making process of investors and the design and explanation of their decision-making patterns in the capital market under conditions of uncertainty had not been done. The first study in this field is the article by Cohn et al. (1975) and his colleagues provided experimental evidence of the reduction of risk-aversion of individuals when their wealth increases in the world's reputable stock markets. Riley Jr and Chow (1992) found that there is a significant relationship between people's risk aversion and people's age, income, wealth, and education. With the increase in people's income, wealth, and education, their level of risk-taking will also increase. However, there is an inverse relationship between people's age and risk-taking. The studies of LeBron, Farley, and Ghola proved that the level of risk aversion of people depends on the internal factors of the person and is not related to external considerations of the market. The findings of Lewellen et al.'s studies show that there is a significant relationship between people's investment preferences and people's age, gender, and education.

People are different in terms of demographic characteristics, in addition, people are unique in terms of psychological characteristics such as personality, optimism, intuition, etc. In the field of financial behavior, the ability of people to make quality decisions is important. This is directly influenced by the aforementioned psychological characteristics, but also by individual self-control (Strömbäck et al., 2017). People are different in their habits and behaviors. While some people show good and disciplined financial behavior, other people make poor financial decisions, which leads them to less financial security. Their behavior depends on various factors, including psychological characteristics, and literacy. It depends on finances, demographics, and self-control (Ottaviani & Vandone, 2011). If the psychological factors, characteristics, and personality type of the investor that are effective on the investor's decision-making process are identified, then the investor will identify his unique irrational behavior and master this behavior during the decision-making process. finally, by making correct and rational decisions, it achieves its desired financial goals, and by identifying the potential and actual behavior of investors, it provides the possibility to modify and adjust them to improve the beneficial economic consequences in the stock exchange. According to the presented materials, the third and fourth hypotheses of the present research are formulated as follows:

Third hypothesis: Demographic factors have a mediating effect on the relationship between word-of-mouth communication and investors' decision-making.

Fourth hypothesis: Demographic factors have a mediating effect on the relationship between specialized characteristics and investors' decision-making.

The above hypotheses can be illustrated as follows (see Figure 1):

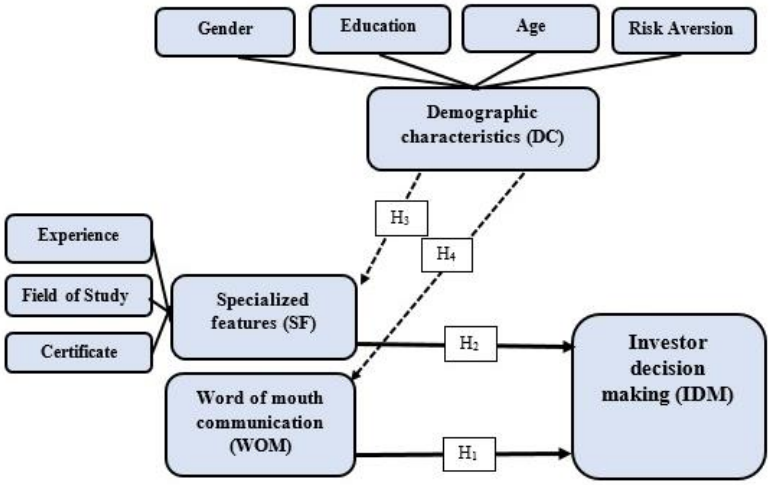

Figure 1. Conceptual model.

3. Research methodology

The current research is descriptive of the correlation type. The community of this research is the investors of the Tehran Stock Exchange who are directly active in the market. These investors have different characteristics and are examined. All investors of Iranian citizens, including individual investors, investors, brokers, and professors of universities, are investors in the capital market of Iran, and their interests in obtaining benefits and profits from their investments can be seen. This survey was conducted in 2023 September among the investors of the Tehran Stock Exchange. In this research, the sample size was calculated using Cochran's relationship, and the number of samples was determined based on this relationship. The number of samples based on Cochran's formula is as follows.

$$n = \frac{\frac{Z^2 p(1-p)}{d^2}}{1 + \frac{1}{N}(\frac{Z^2 p(1-p)}{d^2} - 1)}$$

$$= \frac{\frac{1.96^2 0.5(1-0.5)}{0.05^2}}{1 + \frac{1}{256}(\frac{1.96^2 0.5(1-0.5)}{0.05^2} - 1)} = 153$$

n = Sample volume
N = Statistical Society
Z = Standard variable of normal distribution
P = Than the expected p ratio
d = Estimation error

Investors in the Tehran Stock Exchange market were determined as the statistical population of the study. The statistical population of the current research is 256 investors in the Tehran Stock Exchange market, and finally, based on the Cochran formula, the number of statistical samples was determined to be 153. In this study, 192 questionnaires were distributed, of which 153 questionnaires were received as a healthy and complete statistical sample, and the return rate of the questionnaire was equal to %79.

Sample Adequacy Analysis Test (KMO)

Factor analysis is a statistical method for determining the role of unseen factors in explaining relationships between correlated and measurable variables. The Kaiser-Meyer-Olkin (KMO) test is used to assess the size of a sample and get insight into the factors that contribute to the observed variance. Results from a KMO factor study must be in the range of %5 and 1. To put it another way, the KMO value is more than %5. Since KMO indicates sample appropriateness (Matila & Shahzad, 2022). The results of Bartlett's test of sphericity are less than %05 by 0.000, suggesting a statistically significant correlation between the variables.

Table ١: Factor Analysis

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	٪٦٦
Bartlett's Test of Approx. Chi-Square Sphericity	172/69
df	6
Sig	%000

Researcher's findings

4. Research findings

4-1 Descriptive research findings

Describing the demographic and specialized characteristics of investors

Usually, to know the statistical population and participants in the research, demographic variables and specialized characteristics are examined. Therefore, in this part of the statistical analysis, the distribution of the statistical population is considered in terms of variables such as gender, age, education, and risk aversion status as demographic indicators. The experience of working in the stock exchange, the field of study, and stock exchange certificates and capital market certificates are considered as indicators of specialized characteristics (see Table 2).

Table 2: Demographic and specialized characteristics of investors

		Frequency	Percent
Gender	Male	94	61/4
	Female	59	38/6
	Total	153	100
Age	Under 30 old years	45	29/4
	Between 31- to 40-year-old	80	52/3
	More than 40-year-old	28	18/3
	Total	153	100
Education	Diploma	7	4/6
	Masters	38	24/8
	Master's degree	57	37/3

	PH. D	51	33/3
	Total	153	100
Aversion Risk	low	21	13/7
	Medium	91	59/5
	High	41	26/8
	Total	153	100
Experience	Under 5 years	92	60/1
	Between 5 to 10 years	40	26/1
	More than 10 years	21	13/7
	Total	153	100
Field of Study	Accounting & Finance	64	41/8
	Management	19	12/4
	Economy	18	11/8
	Other	52	34
	Total	153	100
Certificate	yes	107	69/9
	no	46	30/1
	Total	153	100

Researcher's findings

Description of research variables:

Before conducting the main analysis, some preliminary analyses were conducted to gain preliminary insights related to the data. Descriptive findings related to the average standard deviation and the distribution of the data of the research variables were calculated with the coefficient of skewness and kurtosis and the normality test of the data (Kolmogorov–Smirnov). The data distribution of all variables is normal because the values of skewness and elongation of the variables are in the range of (-2, +2) and the significance level of the Kolmogorov–Smirnov test is higher than the error level of the test (α = %05). However, considering that the sample size of the research is small, it is less than 200 cases, the approach of modeling structural equations using the partial least squares method should be chosen as the approach of structural equations of the research. To understand the status of each variable, a one-sample t-test was used (see Tables 3 and 4).

Table 3: Descriptive statistics of research variables

		EI	CS	FTA	IDM
N	Valid	153	153	153	153
	Missing	0	0	0	0
Mean		2/705	2/154	3/15	3/21
Median		2/5	2/142	3	3/25
Std. Deviation		%890	%537	1/096	%813
Skewness		%80	%351	%265	%370
Kurtosis		%142	%244	-%889	-%582

Researcher's findings

Table 4: Normality test of research data

	EI	CS	FTA	IDM	Gender	Age	Education	Risk Aversion	Experience	Field of Study	Certificate
N	153	153	153	153	153	153	153	153	153	153	153
Mean	2/7	2/15	3/15	3/21	1/38	%88	2/99	1/13	%53	1/37	%30
Test Statistic	%186	%123	%143	%108	%40	%270	%209	%315	%371	%269	%443
P-Value	%89	%54	1/09	%83	%48	%68	%87	%62	%72	1/30	%46

Researcher's findings

Checking the validity and reliability of the questionnaire

Since all constructs are reflective, the measurement model is assessed in four steps: individual item reliability, construct reliability, convergent validity, and discriminant validity (see Table ٥). Individual item reliability is considered adequate when the item loading exceeds %70. There were a number of items (PO4, SLOW4-7, CLOS5, NAR2) with indicator loadings below 0.7. Even though this result is not desirable, the decision was made not to remove any indicators to ensure the content validity of the construct. Weaker loadings are often obtained in exploratory research with newly developed scales. Internal consistency reliability is evaluated by Cronbach's α and the composite reliability. All Cronbach's α and composite reliability were between the specified threshold of %70 and %90, thereby supporting the reliability of the constructs. Convergent validity is assessed using the average variance extracted (AVE) measure (Kühl et al., 2022). All AVE values exceeded the minimum threshold of %50.

Table٥: Confirmatory Factor Analysis Results.

Variable	Items	Item Weight	SD	AVE	Cronbach's Alpha
Empirical information (Tauni et al., 2017).	EI1: Experience in investing in the stock market EI2: The level of investor information about the stock market EI3: Successful experience of investors in the stock market EI4: Investors' information about the stock market is Update	2/70	%89	٧٣%	%90
Communication skills and resources (Al-Samydai et al., 2020; Argan et al., 2014; Tauni et al., 2017).	CS1: Recommending stocks to others CS2: Ways to communicate with people CS3: Having friendly communication CS4: Communicate easily with others CS5: Seeking advice from others about economic activities CS6: The role of communication tools in investment activities CS7: The role of the media in the development of the stock market	2/15	%53	٧٣%	%72
Technical and fundamental analysis (Argan et al., 2014).	TFA1: Stock technical analysis skills TFA2: Using computer software for technical stock analysis TFA3: Fundamental stock analysis skills	3/15	1/09	٧٣%	%92
Investors' decision making (Argan et al., 2014).	IDM1: Being satisfied with the advice of others about buying or selling stocks IDM2: Fulfilling your expectations about the value of stocks through the recommendations of others IDM3: Interested in accepting investment recommendations on stocks IDM4: Successful performance of the Iranian stock market	3/21	%81	%589	%851
Demographic characteristics	DC1: Gender of investors DC2: Age of investors DC3: Education of investors DC4: Investors' risk aversion	11/5	19/8	٦٦%	-
Specialized features	SF1: Experience in the stock exchange SF2: Field of study of investors SF3: Having stock exchange documents and capital market certificates	22/17	18/2	٦٩%	-

Researcher's findings

The reliability of the questionnaire was tested by Liu and Chang 2017 using Cronbach's alpha coefficient and considering that Cronbach's alpha coefficient of all changes was more than 70%, the reliability of the questionnaire was evaluated. Convergent validity was extracted using the variance measurement method and

was checked using the partial least squares method. Convergent validity indicates the extent to which the indicators of one dimension are questioned in the explanation of that dimension, and for acceptable divergent validity, it is the constructs of the research model. They should have more correlation with their questions than with other constructs. The value of the variance extracted for the changes of the research has been determined, considering how much variance has been considered for all machines, the validity of the questionnaire was checked.

Structural model

After checking the fit of measurement models, which is done using SPSS software. It is time to fit the structural model of the research. The structural part of the model deals only with hidden variables and examines the relationships between them. Determining the structural model is through the analysis of the fitness index and the coefficients of the determination and analysis of the path, which has been used using Smart PLS (Partial Least Squares) software.

Structural equation modeling is one of the types of statistical methods that provides a tool in the hands of researchers to investigate the relationship between several variables in a model. The reason why this method is called SEM is for two reasons:

1) The relationships between variables in this method are analyzed using a series of structured equations.
2) These structured equations are drawn in the form of models that allow researchers to conceptualize research theories using data.

One of the most important stages of data analysis in SEM is building a model. Modeling is a suitable method for investigating the relationships between existing variables that are measured by observed variables. The main advantage of modeling is that it examines structured equations between variables in the form of models. When the model is built by the researcher, he examines its fit based on the data provided by the statistical sample in response to the questions of the measurement tool. The first task of the researcher in this process is to determine the fit between the model derived from the previous theories and the data collected from the statistical samples of the research. Since it is hardly possible to obtain a perfect fit between theory and data, there is always some difference between the two. This amount of difference is shown in SEM with lag.

Significant coefficients

According to figure (2), the research model is in a significant state, the results show that the drawn research model is standard and desirable. This means that the independent variables include word-of-mouth communication and specialized characteristics. Demographic characteristics have been considered as mediating variables and investors' decision-making variables have been included as dependent variables.

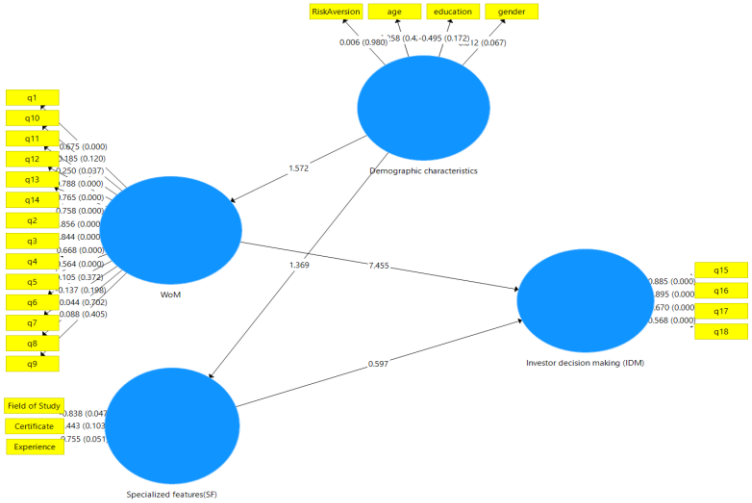

Figure 2. The research model in the state of significance (t value)

R^2 criterion

The second criterion for checking the fit of the structural model is the R^2 coefficients related to the dependent variables of the model. R^2 is a measure that shows the effect of an exogenous variable on an endogenous variable. Chen and Volpe (1998) introduced three values of %19, %33, and %67 as the criteria for weak, medium, and strong values for R^2. Slow (Dar & Hakeem, 2015). Figure 3 shows the main research model in the mode of path coefficients. The numbers written on the paths that connect the main variables of the research are the path coefficients of the structural model (β) and indicate the degree of influence that an endogenous variable has on the exogenous variable. The values inside each circle show the R^2 values, which show how many percent of the changes in the dependent variable are explained by the independent variables.

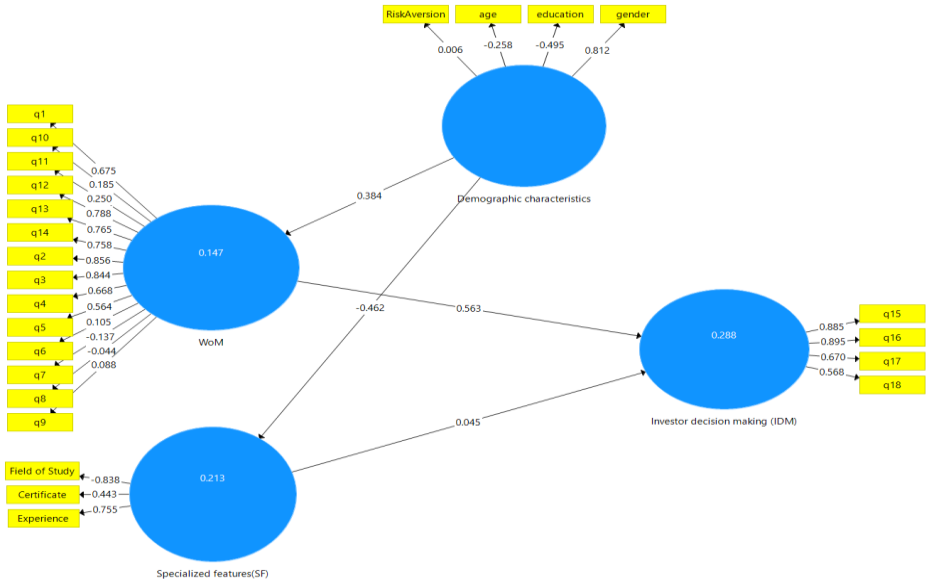

Figure 3. Determination coefficient of independent variables

Model relations table

In Table 6, the results of the relationship test of the research model are reported. In the mean table, the value of the standardized path coefficient, the t-value, and the significance level (p-value) obtained are reported.

As can be seen in Table 6, the significance level of the independent variable of the first hypothesis of the research is 0/000 and it is less than the determined level of %05, considering that the intensity of the effect of this variable is 455. is 7 and is a positive number, as a result, it can be concluded that the first hypothesis of the research is confirmed with a confidence level of %95, that is word-of-mouth communication has a positive relationship with investors' decision-making. The significance level of the independent variable of the second hypothesis of the research is equal to %552 and is more than the determined level of %05. As a result, it can be concluded that the second hypothesis of the research is rejected with a %95 confidence level. That means specialized features do not affect investors' decisions. On the other hand, the significance level of the independent variable of the third hypothesis of the research is equal to %118 and is more than the determined level of %05, as a result, it can be concluded that the third hypothesis of the research with a confidence level of %95 It is rejected. That is, demographic factors do not have a mediating effect on the relationship between word-of-mouth communication and investors' decision-making. In addition, the analysis of the research data indicates that

the significance level of the independent variable of the third hypothesis of the research, which is equal to %173, is more than the determined level of %05. As a result, it can be concluded that the fourth hypothesis of the research is rejected with a %95 confidence level. That is, demographic factors do not have a mediating effect on the relationship between specialized characteristics and investors' decision-making.

Table 6: Model relationships

Hypothesis	Sample Mean (M)	Standard Deviation (STDEV)	T- Statistics (|O/STDEV|)	P-Values
H_1	0/577	0/075	7/455	۰/۰۰۰
H_2	0/05	0/075	0/597	**0/552**
H_3	0/335	0/244	1/572	**0/118**
H_4	-0/342	0/337	1/369	**0/173**

The shape of model relationships

The results of research hypotheses can be deduced using the form of model relationships. In the form of model relations, we reached the same results as in the table of model relations, because the confidence level of the first hypothesis is 0/000, which is more than the determined level, i.e., %05. As a result, it can be concluded that the first hypothesis of the research is confirmed with a confidence level of %95. The significance level of the second hypothesis is %552, the third hypothesis is %118, and the fourth hypothesis is %173, each of which is more than the determined level of %05. As a result, it can be concluded that the second hypotheses, third and fourth are rejected with a %95 confidence level. (See Figure 4).

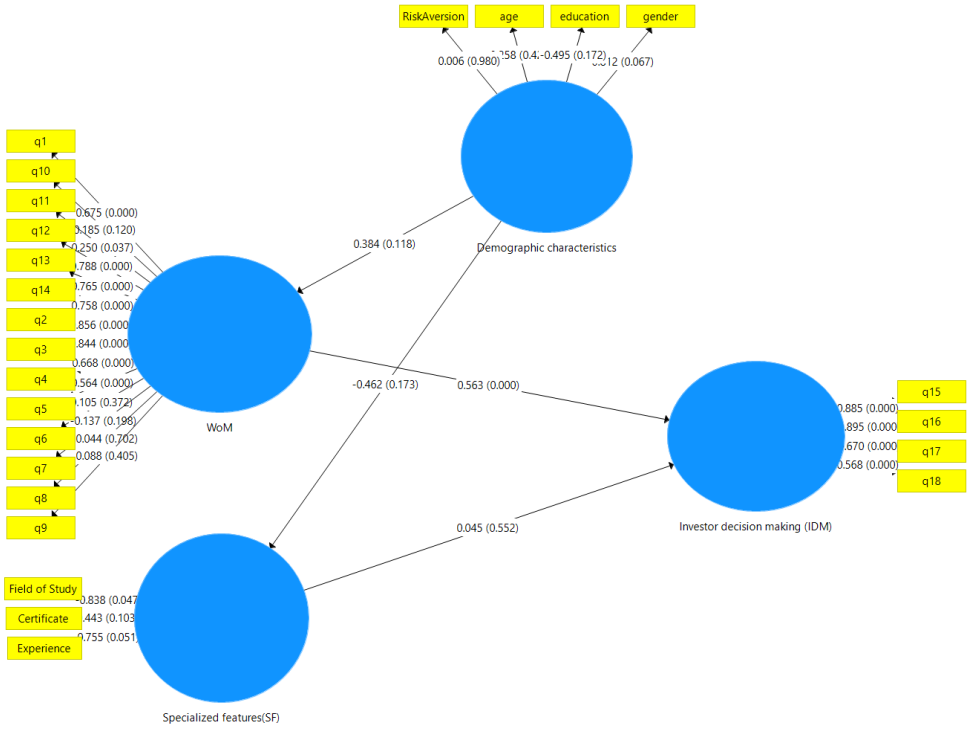

Figure 4. The shape of model relationships

5. Conclusion

To choose investment, according to the level of knowledge, interests, thoughts, opinions, mentalities, and experiences that they have in their decisions, under the influence of internal factors and external factors, investors invest their money in places. that the expected return is high, they should consider the risk in this choice, which is an integral part of the activity in the financial market. In fact, in the decisions of

investors, it is assumed that decision-making is rational. However, according to the analysis of research data, it showed that word-of-mouth communication has a positive relationship with investors' decision-making. Also, demographic factors do not have a mediating effect on the relationship between word-of-mouth communication and investors' decision-making. which can be concluded that the personal decision-making behavior of investors is not very logical, because investors may even have specialized knowledge in the field of investment, but at the time of decision-making, more according to the recommendations Others buy and sell shares. The results of the research hypotheses test showed that the specialized features do not affect the investors' decision-making. It can be concluded that many investors make mistakes in their financial affairs and face problems in the stock market because they do not have basic knowledge about the stock market and accordingly It will be difficult for them to enter the discussion of investing in the stock market. Boisclair et al. (2017), Christelis et al. and Mcardle et al. admit that having more wealth as well as the ease of investing in the market and having more chances for profitability is possible only because of valuable financial knowledge about the markets. Also, the analysis of research data showed that demographic factors do not have a mediating effect on the relationship between specialized characteristics and investors' decision-making. As a result, it can be concluded that many investors have entered the stock market based on the recommendations of others. However, since it is not possible to achieve any goal without having proper knowledge and understanding. Investment is also not excluded from this life and naturally, investors should have sufficient knowledge and information to invest. However, according to the results of the research hypothesis test, it can be argued that investors prioritize the suggestions of others to make investment decisions and are influenced by word-of-mouth communication. and make decisions regardless of their demographic characteristics and financial knowledge. As a result, people are sometimes denied the possibility of rational behavior in decision-making under different conditions.

Making effective financial decisions and knowing how to manage money is a vital skill to enjoy a secure financial future. However, many people lack the necessary knowledge to choose and understand market signs such as falling savings rates, settling consumer debts, and growing dependence on investment centers, safe alternatives to risky investments. These indicators show that access to financial knowledge programs, especially providing key principles and sources of funding for investment design using financial knowledge programs for investor groups is an urgent need in every society. The possibilities of this transformation should be provided by the leaders of society, policymakers, and developers of financial programs. The result of conscious investment with financial information and knowledge is the creation of a type of economy known as a self-sufficient economy in which even low-income families with proper money management can join the flow of the economy and create a secure financial future for themselves. Therefore, some people currently have extra money to save or invest and are looking for investment opportunities. In addition, with the existence of a very competitive banking industry in Iran, obtaining credit has become relatively easy. All the above factors have made the provision of financial literacy training an urgent need. Investors are suggested to seek to strengthen and increase their financial knowledge by taking advantage of financial education courses, on the one hand, they can improve their knowledge and financial literacy, and on the other hand, by knowing the tools and financial products to increase their financial inclusion. It is also suggested that stock exchange managers improve the amount and level of financial knowledge and literacy among investors by holding financial training courses. The managers and officials of education and higher education of the country are recommended to include courses related to financial knowledge in their training courses so that the ground for raising a generation aware of financial affairs will be provided.

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