THE POSITION AND IMPORTANCE OF THE BEHAVIORAL FINANCE TO SOLVE THE FINANCIAL PROBLEMS OF SMEs

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ABSTRACT

Purpose- The behavioral finance searches about how the decision-making mechanisms of financial directors in their mind structure are affected by the social, sensual and mental prejudgments. Since the small and medium-sized enterprises are mostly the family businesses in our country, professional approaches in the financial management of companies are not found.

Methodology- Due to being one or more than one person takes care of the decision mechanisms and the decisions are being taken as a result of the knowledge, abilities, education and experiences of the people; it is observed that the financial management functions of the companies are not used productively.

Findings- The biggest problems of small and medium-sized enterprises are in fields of finance. By this purpose, after being described the concepts in the study, the relations between these terms and literature are tried to be supported by the primary studies to achieve this purpose. The hypothesizes of the study are started to be improved by being generated the theoretic frame.

Conclusion- The research was actualized by a questionnaire form about what the financial problems of the sme are and if these problems could be solved by the behavioral finance or not. The dimensions where the behavioral finance is sufficient for solving the financial problems were determined by the result of the analyses and seen that a significant relation between the financial challenges and the behavioral finance as directly proportional.

Keywords: Behavioral Finance, Financial Management, Financial Problems of SME, SME
JEL Codes: G02; G23

1. INTRODUCTION

(The globalization makes its presence felt notably in economic, political, social and cultural fields at present (Şener, 2009). The competition between the companies increases day by day by the effects of developments in the world. The uncertainty and chaos based on the globalization affect SMEs (small and medium-sized enterprises) more in comparison with big businesses and taking the share of the market gets harder for these SMEs. The SMEs who work in an uncertain environment need to know themselves well and have an analyzing ability for connections also.The SMEs are mostly composed of the family corporations as the establishment structure; this is why they are away from a professional management approach. They can get into new markets by the traditional approaches but fail to subsist their presence in conditions of competition. The SMEs need to develop a strategy by two factors as internal and external against to the market conditions.

The internal label is its sources of finance. These resources are used to be conducted the external activities. The companies have interrelatedness circles consisting of preparation, finance, and marketing. One breakage in this circle effects all other stages. The most famous ring is finance and directly affects all functions. The external effects usually are rooted in the

environment of the corporation. Adverse conditions out of their control such as economic instability, government incentive policies, political instability and being the banking system mostly managed by large enterprises strike the SMEs (Yörük and Ban 2003). There are several studies about the financial problems and the importance of behavioral finance to solve these problems in the literature. The behavioral finance is defined as wandering from the informational market efficiency and non-rational attitudes of market actors (Ülkü, 2001).

The personality characteristics such as active, passive, fast-slow decisioning make sense as behavioral as well as refer to the behavioral dimension of the decision maker (Tufan, 2006). Studies analyzed are the structures and financial problems of SMEs, the effects of the behavioral characteristics of the decision makers on financial decisions. The non-professional management mentality of the SMEs consisting of family corporations directed the investigators to research how effective the behaviors are on the decisions given. When viewed as the conceptual framework, a lot of researches could be seen about the financial and administrative problems of SMEs. On the other hand, there are a limited number of studies on how the behaviors of decision makers are active to solve the problems. The definition of SMEs, their financial problems, behavioral finance, the Position and importance of reactions for these financial problems are analyzed in this research. The models of behavioral finance are developed to explain the market anomalies or investor attitudes when the rational models remain incapable (Glaser, Nöth, Weber, 2003). In this study we will study the literature and conceptual framework, definition of SME, the financial structure of SMEs, the financial prıblems of SMEs, the concept of behavioral finance and fields of behavioral science of behavioral finance. These fields are psychology, sociology, social anthropology and neurology. And then we will study hypotheses theoretic framework of the research and analysıs of research data. Finally we will study the conclusion and the limitatons oft he research.

2. THE LITERATURE AND CONCEPTUAL FRAMEWORK

2.1. Definition of SME

The business distribution of a vast majority of developing countries consists of SMEs, and they are crucial for the economy. For the most of the small and medium-sized enterprises has the characteristics of a family corporation (family business) forms the basis of the national economy of many countries around the world (Craig, et al., 2008). There are spreading to be sustained the presence, and commercial activities of SMEs have a big share in the national economy in both Turkey and the world. The purpose of these efforts is seeking a solution for the problems of SMEs such as production, supply, investment, marketing, education, technology, logistics, personnel and corporate governance. The position and the contribution of SMEs to the total of companies are almost entire of total business volume. It is seen that the share of the SMEs in a whole enterprise network is 99,5%, employment is 63,8%, total investment is 56,5%, consisted added value is 37,7%.

The SMEs have a significant place concerning being developed and protected the national economy in competition environment based on the globalization. Imported features of SMSs are reducing unemployment, offsetting for economic and social development and complying with the rapid market changing. There are usually expressed the economic meanings of the definitions SMEs due to being used the numeric measures and the economic sizes of countries. SMEs have basic functions like marketing, finance, personnel, and management. Their social contributions are also goodish due to their features of strengthening the middle class and being local.

2.2. The Financial Structure of SMEs

The leading factor is the finance for SMEs to sustain their presence in spite of economic fluctuations and grow as well. The financial structure of small and medium-sized enterprises forms from internal and external dynamics. The internal dynamics originate in the equity capital and personal sources of an employer. At this stage, being the equity capital insufficient constitutes an impediment for the entrepreneurs and cause the failure of the corporations in the upcoming years (Aras, Müslümov, 2001). The companies make benefit of the external dynamics in cases where the internal financing sources fail to satisfy. The government promotions, various finance houses can be cited. One other significant difference of SMEs from big businesses is the lack of finance departments. Financial structures of the SMEs are completely created by the decisions of the employers.

2.3. The Financial Problems of SMEs

The source of financing is the primary problem of SMEs in Turkey. The applied researches also support this result. This is also related with the government size and trade openness which effect financial situation of small and medium sized enterprizes (Şener *et al*. 2015). Deficiencies of equity capital start at establishment phase continue during its presence. The financing problems at this stage effect the continuity of the company as well as the activities may come to an end if a solution cannot be found. Small and medium-sized enterprises are established by the equity capital as structural while the financial problems manifest themselves in the establishment phase. But being the equity capital short at this stage obstructs for the entrepreneurs and causes to fail in the forthcoming years (Aras, Müslümov, 2001). The studies conducted also show that the SMEs have the problem of equity capital close down in first five years.

The SMEs face difficulties in continuing their growth and activities. Decision makers may be obliged to make benefit of external sources due to the lack of equity capital. It is not always possible to use the external sources within the economic conditions even several sources of finance are available. It is clearly seen that the share of small and medium-sized enterprises received from the real sector credits of banks is 10% (it is more than 20% according to some references) (Alptürk, 2008). The bank loans used for solving the financial problems bring high costs for the enterprises because of obligations such as high interest and collateral. The difficulty of the formalities to get credit, high interest and settlement date ratios, the severity of repayment conditions and the compelling circumstances in components of collateral becloud to take advantage of capital markets of SMEs. The other reason for the financial problems of SMEs is not to being composed of the management by professionals. They are mostly established as family companies, and the people who are the expert on finance decide on financial issues as it always has been in every stage of the business. This situation poses a problem to be understood the developments in the economy and improved new strategies. Due to the owners of the SMEs generally have technical competence, they have not enough knowledge on issues need conceptual skills like financing-accounting, personnel, and education, technology, production raw material and marketing (Müftüoğlu, 2007).

Economic instabilities, poorness of incentive policies of government and harness of reaching these sources, challenges in getting into new markets and the political uncertainties can be accepted as the main reasons for being incapable of solving the financial problems. Financial problems occurred in SMEs affect all the functions of the business. The other problems besides above are; issues to take credits, inability to use incentives, an effect of economic policy and inflation on the companies, a limited possibility of utilization of capital markets (İraz, 2005).

2.4. The Concept of Behavioral Finance

SMEs generally think that decision makers always behave rationalist and impartial. The recent searches indicate that these decision makers of SMEs who are unprofessional cannot make coherent choices and their feelings are active on these choices as well. Traditionalism and the effect of the society play a crucial role to make financial decisions. The behavioral finance is emerged by being considered several anomalies in markets stem from the human psychology or added the psychological factors to decision-making process (Tufan, 2006)

SMEs usually have the intention of the managers decide on the financial issues get real by making economic assessments and behave for the welfare of the company. But the finance economists ignored the economic losses that people have given to themselves (Bernstein, 2005).

It is seen in the researches worked that the decisions are always not real and the learned behaviors are also active. You can easily realize when you try to solve who is successful or not by what reason that the dominant factor lies behind all monies earned or lost is the course of action of investors, not luck, intelligence, high technical or fundamental analysis knowledge or extensive experience (Perşembe, 2001).

2.5. Fields of Behavioral Science of Behavioral Finance

The behavioral finance is a structure interacts with other disciplines of science. The Behavioral Finance is a new approach model supports the interdisciplinary interaction and has a larger field of study contrary to traditional methods use psychology, sociology, social anthropology and neurology besides the disciplines of an economy, finance and mathematics. Behavioral finance creates a different perspective to solve the financial problems by analyzing the individual attitudes. Within this scope, the behavioral finance tries to understand the views of financial markets by using the theories based on human behaviors derived from the sciences of psychology, sociology, and anthropology (Cornicello, 2004).

2.5.1. Psychology

The human factor is the basis of the behavioral finance. Especially the mental state of managers in SMEs are effective on their decisions. The first and modern paradigms of the psychology can be observed, controlled, tested due to being them mostly behaviorism; the internal life called inner life is a topic of psychoanalysis (Güleç, 2004).

2.5.2. Sociology

The primary goal of this discipline extends back a long time is examine the social structure, and the factors keep the person in the group and determine the changes in social life (Erdoğan, 1997). Modern sociology also investigates how the rules valid in social structure can be transferred into the economic, political and daily life. The reasons and variety of the decisions of company owners of SMEs can be specified by reviewing the sociological cases. In brief, it will be true to mention that each economic, political and social decision based on the information about sociologic surveys (Erdoğan, 1997). Moreover, the following topics are analyzed by sociology as well; how to use the results obtained by reviewing the economic and social cases in business and political life; what kind of developments happen in social structure and individual behaviors after being used these results (Erdoğan, 1997).

2.5.3. Social Anthropology

Social anthropology analyzes the social practices and cultures. It has become a science examines every kind of environment and cases have the human fact at present. Therefore, the economic events and the science of anthropology are in the investigation area of the behavioral finance. The concept of 'economic anthropology' means analyzing the economy and social life together. It studies the development in terms of economically by prioritizing the economic events when reviewing everything concerning the human. Much as the modern anthropology studies about simple societies at present, the anthropologists have started to work on industry, manufacturing firm and the relation of it with the community (Drake, Peter, Smith, 1990).

2.5.4. Neurology

The science of neurology deals with to review the sense and behavior disorders by working together with psychology. Especially the decisions of the person after a neurologic disorder affect his/her reactions.

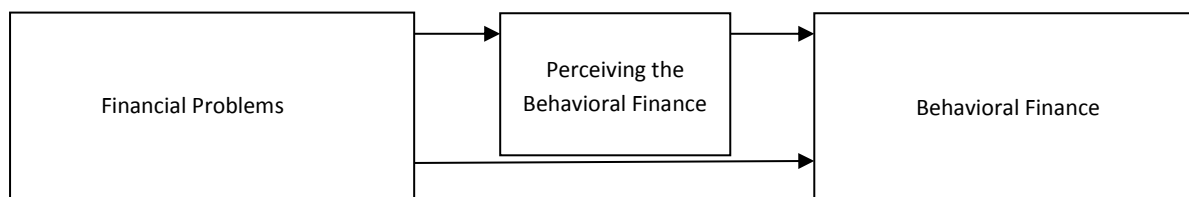### 2.6. Hypotheses Theoretic Framework of the Research

The hypotheses developed in the study are proposed as follows;

H_1: There is a significant and positive relation between financial problems of SME and behavioral finance.

H_2: There is the significant and positive relationship between the solution of financial problems of SME and the behavioral finance.

H_3: There is an important mediator variable role of perceiving behavioral finance between financial problems and behavioral finance.

Figure 1: Theoretic Framework of the Research

Variables in Study

• Dependent Variable: Behavioral Finance

• Independent Variable: Financial Problems

• Mediator Variable: Perceiving the Behavioral Finance

3. METHODOLOGY OF RESEARCH

The universe of this study consists of the SMEs in organized industrial zones in Istanbul. Data of this study was collected by the survey method. Gathered information in the survey by the questions prepared by Five Points Likert Scale besides open and close ended questions.

Purpose of the research: The financial problems of SMEs in organized industrial zones in Istanbul are placed on the top. Planned to measure the effects of behavioral finance for the solution process of financial problems of SMEs. The field survey was conducted by using survey method to that end. The survey is actualized on totally 1383 SMEs by 95% of confidence and 5% sampling error.

Scopeof the research: There are not the sufficient number of studies about the effects of behavioral finance on solving the financial problems of SMEs, this is because this research is actualized. A survey study is done to determine to what extent of the behavioral finance is effective in solving the financial problems of SMEs. This study involves 1383 SMEs in organized industrial zones in Istanbul. There is not discriminated between sector distribution of SMEs and their legal status.

The sample of the research 1383 of totally 2986 SMEs made a comeback for the survey forms sent (the ratio of comeback for the surveys is 46%).

Data collection method of the research is that the survey method is used in this study. The data obtained is analyzed by using SPSS 22.0 program. The statistical methods such as Cronbach's Alpha (reliability), Chi-Square Test and frequency distribution are used as well. Totally 41 questions were asked the answers were evaluated in five points Likert scale to measure the effects of behavioral finance on solution process of the financial problems of SMEs.

4. ANALYSIS OF RESEARCH DATA

The hypotheses of the article are accepted by chi-square test by being considered if there is a relation between reliability analysis, frequency, and two categorical variables. The results are below.

Table 1: Reliability Test of Behavioral Finance Questions

Cronbach's Alpha	N of Items
,805	17

The result of the reliability test of the survey involves 17 questions and prepared by the Likert scale is 0,805. This result is accepted as 'good' based on the measurement criteria of Cronbach's Alpha test ($0.7 \leq a < 0.9$).

Table 2: Frequency - Who Takes the Financial Decisions of the Company?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Company Owner	1250	90,4	90,4	90,4
	Accounting	42	3,0	3,0	93,4
Valid	Administrative District	43	3,1	3,1	96,5
	Financing Department	48	3,5	3,5	100,0
	Total	1383	100,0	100,0	

Table 2 - It is observed when the frequency values are analyzed that the financial decisions are mostly taken by the company owner the SME and this decision making ration is so high (90,4%). The thought of can not be passed to modern company management from classical management is dominant while they show a tendency to the approach of 'behavioral finance' by effecting from the external factors for their decisions

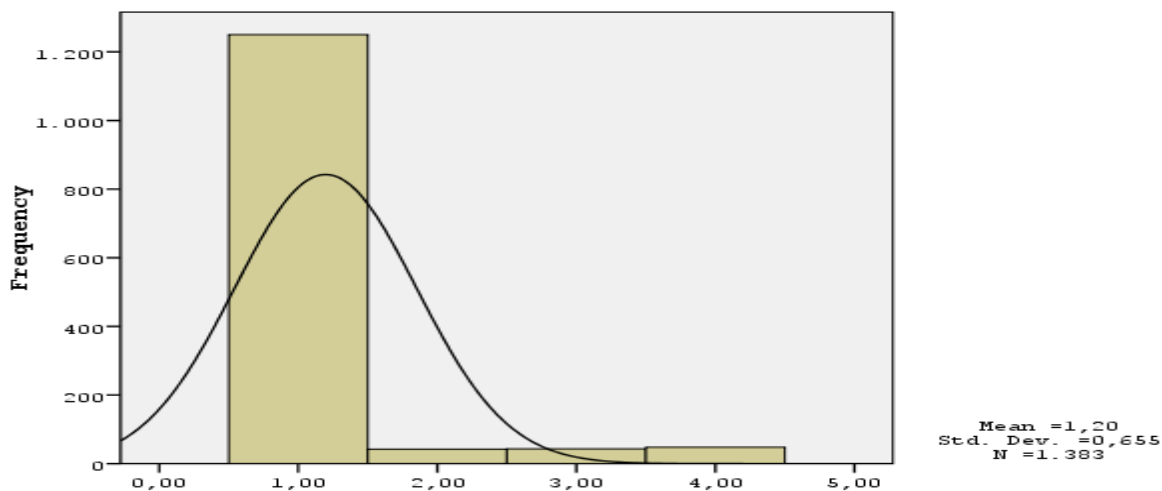**Graphic 1: Who Takes the Financial Decisions of the Company?**

Table 3: Chi-Square Tests-Who Takes the Financial Decisions of the Company?
   * There is the effect of behavioral finance on the financial problems

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24,596(a)	9	,003
Likelihood Ratio	30,775	9	,000
Linear-by-Linear Association	16,624	1	,000
N of Valid Cases	1383		

a 6 cells (37,5%) have expected count less than 5. The minimum expected count is ,30.

Table 3-According to chi-square analysis, the significance value is found as smaller than 0,003<0,005 when looking if there is a relation between variables or not in distribution in the hypothesis called 'there is the effect of behavioral finance on financial problems' and the question of 'who takes the financial decisions of the company'. In this case, the hypothesis called 'H1: There is the significant and positive relation between financial problems of SME and behavioral finance' is accepted.

Table 4: Frequency - The Effect of Behavioral Finance on Financial Problems

		Frequency	Percent	Valid Percent	Cumulative Percent
	Absolutely Agree	705	51,0	51,0	51,0
	Agree	586	42,4	42,4	93,3
Valid	I'm o the fence	82	5,9	5,9	99,3
	Disagree	10	,7	,7	100,0
	Total	1383	100,0	100,0	

Table 4-According to the hypothesis accepted (H1: There is a significant and positive relation between financial problems of SME and behavioral finance), 705 (51,0%) of the totally 1383 participators answered as ' agree,' 586 of them responded as 'agree' (42,4%). This result means the survey participants support the H1 hypothesis by 93,4% ratio.

Graphic 2: Behavioral Financing has an impact on Financial Problems
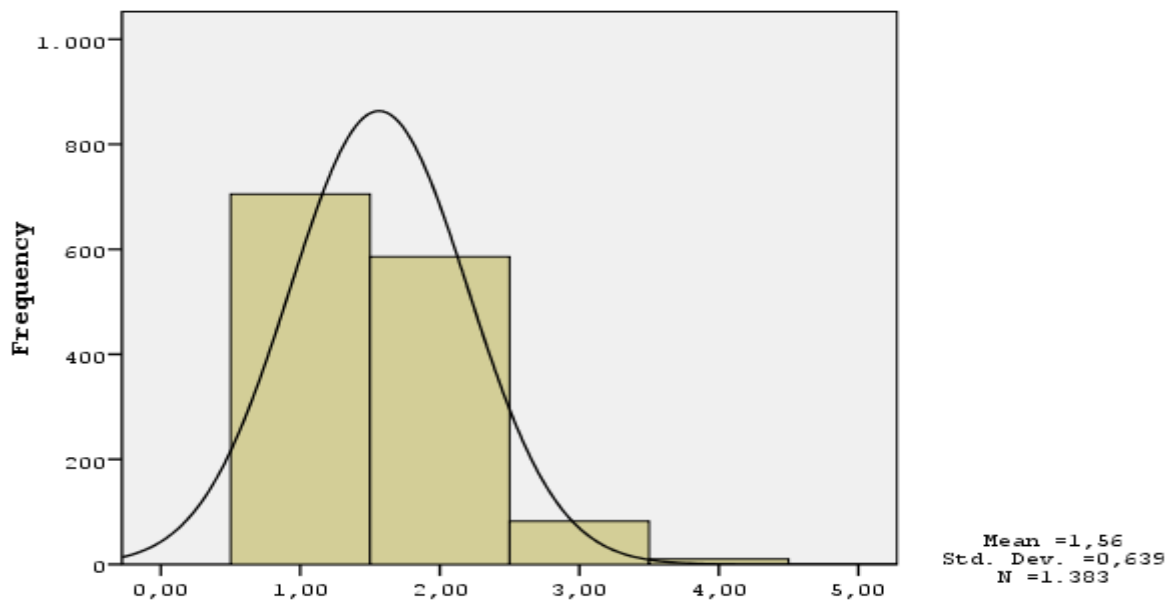

Mean =1,56
Std. Dev. =0,639
N =1.383

Table 5: Chi-Square Tests-Who Takes The Financial Decisions of the Company
    * The Behavioral Finance is Effective in Solving the Financial Problems.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	43,231(a)	9	,000
Likelihood Ratio	24,776	9	,003
Linear-by-Linear Association	9,351	1	,002
N of Valid Cases	1383		

a 4 cells (25,0%) have expected count less than 5. The minimum expected count is ,39.

Table 5-The significance value is found as 0,003<0,005 when looking if there is a relation between variables in the distribution of the questions of 'who takes the financial decisions of the company' and 'the behavioral finance is effective in solving the financial problems.' In this case, the hypothesis called 'H2: There is the significant and positive relation between the solution of financial problems of SME and the behavioral finance' is accepted.

Table 6: Frequency - The Behavioral Finance Is Effective In Solving the Financial Problems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Absolutely Agree	163	11,8	11,8	11,8
	Agree	1040	75,2	75,2	87,0
	I'm o the fence	167	12,1	12,1	99,1
	Disagree	13	,9	,9	100,0
	Total	1383	100,0	100,0	

Table 6-It is observed when being analyzed the answers of the question of 'the behavioral is effective in a solution of the financial problems' that, 1040 of the participators explained as 'agree' (11.89%) and 163 of them answered as 'absolutely agree' (75,2%). This result means that a rate of 87.0% of survey participators support H_2 hypothesis

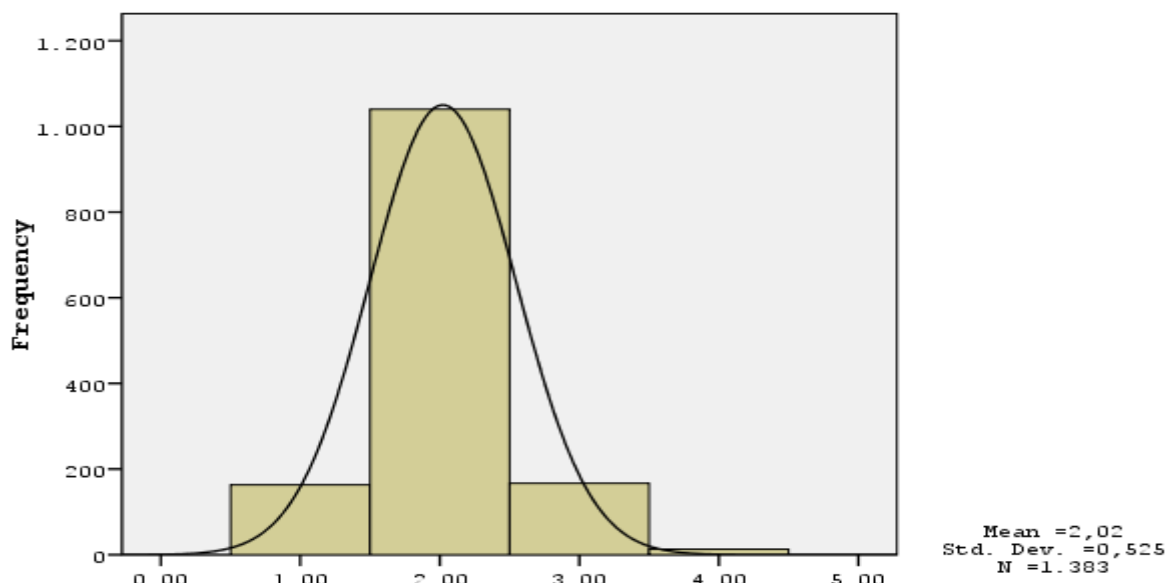**Graphic:3 Bar Chart-The Behavioral Finance is Effective in Solving the Financial Problems**

Table 7: Chi-Square Tests-Who takes the financial decisions of the company?

* There is a positive relation between solution of the financial problems and perceiving the behavioral finance.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	28,363(a)	9	,001
Likelihood Ratio	30,616	9	,000
Linear-by-Linear Association	24,545	1	,000
N of Valid Cases	1383		

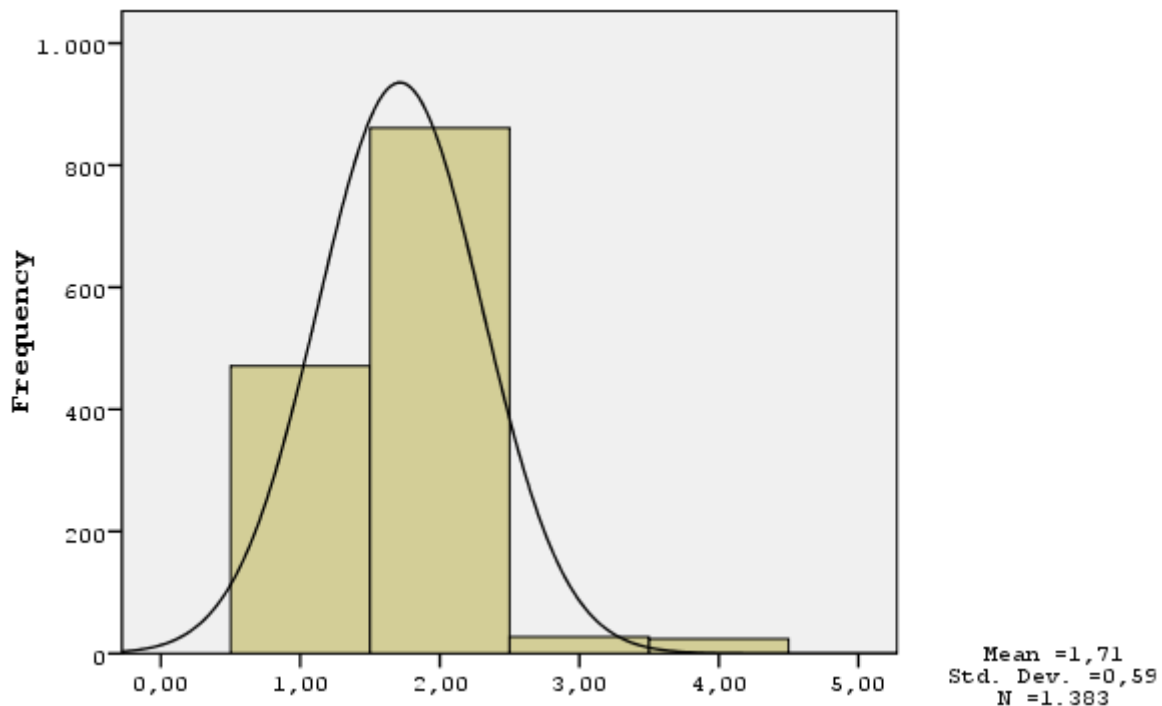a 6 cells (37,5%) have expected count less than 5. The minimum expected count is ,73.

Table 7-The significance value is found as less than 0,001<0,005 when looking if there is a relation between variables in the distribution of the questions of 'who takes the financial decisions of the company' and 'There is a positive relationship between the solution of the financial problems and perceiving the behavioral finance.' In this case, the hypothesis called 'H3: There is a meaningful mediator variable role of recognizing behavioral finance between financial problems and behavioral finance' is accepted.

Table 8: Frequency - There is a meaningful mediator variable role of perceiving behavioral finance between financial problems and behavioral finance

		Frequency	Percent	Valid Percent	Cumulative Percent
	Absolutely Agree	471	34,1	34,1	34,1
	Agree	861	62,3	62,3	96,3
Valid	I'm o the fence	27	2,0	2,0	27
	Disagree	24	1,7	1,7	24
	Total	1383	100,0	100,0	1383

Table 8-It is observed when being analyzed the answers of question of 'There is a meaningful mediator variable role of perceiving behavioral finance between financial problems and behavioral finance' that, 861 of the participators answered as 'agree' (34,1%) and 471 of them responded as 'absolutely agree' (62,3%). This result means that a rate of 96,4% of survey participators support H_3 hypothesis

Graphic 4: Bar Chart-* The Perception of Behavioral Finance is a mediating variable between Financial Problems and Behavioral Finance

5. CONCLUSION

A survey includes the questions on financial decision makers, financial problems and behavioral finance was conducted in 2986 companies in organized industrial zone in İstanbul to learn the position and importance of the behavioral finance for solving the financial problems of SMEs. It is received feedback from 1383 SMEs. With reference to the analyzed in our survey that the company owners make the financial decisions and generally there are not finance departments in the companies as well. The SMEs mostly work with the banks as the financial institutions and prefer to use credit for the financial problems. The SMEs who used credit to solve the financial problems mentioned that they have difficulties about high loan rates and to find collateral. Insufficient incentives, the severity of the legislation and lack of knowledge to take advantage of grant programs can be expressed as the challenges to find resources. In the next parts of the research, questions on the financial structures of SMEs and behavioral finance are asked.

6. LIMITATIONS OF THE RESEARCH

Our research is limited to determining the position and importance of behavioral finance for solving the financial problems of SMEs in organized industrial zone in İstanbul. Due to this survey was conducted for a part of SMEs in organized industrial zone in İstanbul, the similar surveys need to be carried out for SMEs in organized industrial zones in other countries as well.

The qualification of the statistical methods used to process the data is limited to the answers of the participants. Findings obtained are stated by perception, attitude and personal characteristics of the participants in the sample group. It is thought when viewed from this aspect that more significant findings can be obtained in the case of being done the study for larger sample groups with various processes.

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