

## DEMOGRAPHIC ASPECTS AND INVESTORS' DECISION MAKING PROCESS: A STUDY



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### ABSTRACT

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By illustrating the demographic composition of individual investors in the DSE of Bangladesh, examining the relationship between demographic factors and investment amount, exploring the relationship between demographic factors and investors' investment periods, highlighting the relationship between demographic factors and investors' emotional state, identifying the relationship between demographic factors and the impact of internal feeling on investors' investment decision and establishing the relationship between demographic factors and investors' correct investment decision-making, the current study seeks to fill the knowledge gap regarding the influence of demographic aspects on investors' decision making process. Primary data are utilized to establish and explain concepts, while secondary data are also employed to support this empirical inquiry. Here, causal-comparative and descriptive study designs have both been applied. The study sample was chosen using the judgmental sampling technique. The characteristics of each investor are described by tabulation and percentage analysis. To depict the connection between demographic factors and individual investors' investment behaviour, various hypotheses are developed. For testing the hypotheses, ANOVA and the Chi-square test are utilized. In the DSE of Bangladesh, investors' decisions about investment quantity, investment time, emotional level, internal feeling, and appropriate investment decisions are strongly correlated with respondents' gender, age, education, occupation, and income.

**Contribution/ Originality:** This is one of the unique studies that has taken investors' investment amounts, investment periods, emotional level, internal feelings, and decision-making rightness as factors for determining its affiliation with demographic variables. This examination of demographic aspects in the process of investment decision-making in the Bangladesh capital market is unparalleled.

## 1. INTRODUCTION

We all know that the stock market is a capital market that assists a country in allocating scarce resources among various sectors in the most efficient manner (Arifuzzaman, Chowdhury, & Abdus, 2012). Companies can collect the funds they need to finance their operations in such markets, and investors can invest their money with the expectation of making a profit in the future by sacrificing their current consumption and backing their investment by selling the holding securities in the secondary market at any time. Because the stock market provides companies with financing, investment, and liquidity opportunities, it is a major concern for both companies and investors. Profits can be made if investors invest their money in the stock market at the right time and in the right place (Sarbabidya & Saha, 2018). A country's economic growth and development are typically dependent on sound

productive investment. However, it would not be possible without the availability of long-term funds and their effective and efficient management (Hossain & Nasrin, 2012). An effective and efficient stock market is required to ensure long-term economic development (Alile, 1984; Hossain & Nasrin, 2012; Mauro, 2012). However, the smooth performance of a stock market is largely dependent on investors' investment behavior in response to new information in the market (Hossain & Nasrin, 2012; Khanam, 2017). Investors' reactions to the stock market in Bangladesh are overwhelming.

Traditional financial theories assume that investors are rational and make investment decisions based on fundamental mathematical and risk-return models. Actually, in conventional finance, investors primarily use mean-variance analysis to make investment decisions. However, these analyses do not take into account the variability of investor decisions because one of their fundamental assumptions is that all information is freely available to all active and potential investors. So investors, as rational human beings, will behave similarly to a specific stock, but in reality, all types of investors do not behave similarly because they have different knowledge, skills, and experience. For these reasons, some researchers concentrated on the psychological aspects of individual investors' behavior. For example, Grinblatt and Keloharju (2000); Baker and Wurgler (2006); Hirshleifer (2001) discovered that characteristics such as investors' attention towards stocks, hold losers and sell winners, low and high sentiment, irrationality, self-deception, and disposition effects were present in investors' investment behavior in their studies. Understanding the investment process of retail investors in terms of investment decision formation, on the other hand, is critical in a stock transaction. Typically, investors' attitudes have shifted as the stock market environment has changed. Investment is the mental process by which investors make decisions based on current economic, political, social, and personal factors. People naturally invest their money in order to profit. Several renowned researchers, including Barberis, Shleifer, and Vishny (1998); De Bondt and Thaler (1985); Coval and Shumway (2005) discovered that irrational investor behavior had a significant impact on stock market price movement. Researchers such as Barber and Odean (2001); Obamuyi (2013); Das and Jain (2014) and others discovered that demographic and psychological factors influenced investment decisions. Investment decisions typically differ due to differences in age, profession, society, educational level, marital status, and gender, among other factors. The current study seeks to identify the relationship between demographic factors and investor trading behavior. In this respect, the current study examines the research problem:

Is there any influence of demographic aspects on individual investors' investment decisions in the capital market of Bangladesh?

## 2. REVIEW OF LITERATURE

Barber and Odean (2001) discovered that gender plays a significant role in making an investment decision and they also found that women were less confident than men. Chitra and Jayashree (2014) found that demographic variables named gender, age, experience, and education have an association with the behavioral issues in investment choices. Fares and Khamis (2011) identified that investors' education, age, and internet accessibility had a noteworthy impact on stock trading. Sadiq and Ishaq (2014) in their survey explored that investors' academic background, investment knowledge, income level, age, and experience in investment have a vital influence on the investors' behavior. Patidar (2010); Kabra, Mishra, and Dash (2010) proven that the age and gender of investors pre-dominantly determine the investors' risk-bearing capacity. Lewellen, Lease, and Schlarbaum (1977) concluded that investors' gender, age, education, and income have a significant influence on their investing attitudes and preferences. Geetha and Ramesh (2012) in their study revealed that demographic influences have an important effect on numerous investment choice elements. Das and Jain (2014) survey discovered that the demographical factors named gender, age, occupation, and education had an association with the purposes of investment. Khanam (2017) performed a survey on 300 investors of DSE to detect the demographic influence on the investment decision making during the period of dividend declaration and the major finding of the study is that there was an affiliation

between demographic variables (age, occupation, experience, educational level and income level of general investors) and their investment decision. Kengatharan (2019) study revealed that the investors' socio-economic features i.e., age, marital status, gender, monthly income, and educational qualifications had a statistically substantial effect on the investment decisions making of retail investors. Chavali and Mohanraj (2016) studied to scrutinize the influence of demographic issues and risk forbearance on the decisions of investment and found out that age had a profound influence on the pattern of investment and investors' decision making. Perera (2016) in his research found that gender differences influenced significantly emotional factors, cognitive factors, and herding issues and there was a high relationship among the demographic variables of investors, risk-taking ability, lifestyle characteristics, market issues, and behavior in Colombo, Sri Lanka. Obamuyi (2013) found that the age, gender, marital status, and educational qualifications of investors significantly influenced the investors' investment decisions in Nigeria. Kaleem, Wajid, and Hussain (2009) found that income, age, education, and language have a noteworthy role in determining the investor's investment style in Pakistan. Geetha and Vimala (2014) found that demographic aspects like occupation, age, and education affect the individual investors' investment choices. Shaikh and Kalkundrikar (2011) identified that demographic factors such as like level of income, educational qualifications, level of market knowledge, gender, marital status, age, and the number of dependents influence investors' investment decisions. Subramariam and Athiyaman (2016) found that demographic factors such as age, investment experience, income, and education of the investors are interrelated with the risk tolerance level but civil status, gender, and occupation are not associated with the risk tolerance level. Daneshvary and Schwer (2000); Summers, Belleau, and Xu (2006) and Mo and Wong (2012) argued that age affects the consumers' buying intention. Asnaque, Tsega, and Gedifew (2015) performed research on the effect of demographic factors on high school teachers' savings and investment decisions in Ethiopia and explored that gender and age significantly influenced the teachers' savings as well as investment decisions. Parashar (2010) identified that investors' demographic factors like age, gender, education, income, occupation, and personality qualities impact outlay choice. Alquraan, Alqisie, and Al Shorafa (2016) examined the influence of demographic issues on the investment decisions in the Saudi Stock Market and showed that apart from education, other variables such as gender, education, age, income, and experience didn't create any influence on the investment choices. Moreover, Katper, Azam, Karim, and Zia (2019) found that socio-demographic factors (education, marital status, and occupation) moderate the association between emotional prejudices and the decision-making of investors. Kahneman (1979) assumed in the new theory that there are separations from the utility theory driven by emotional (affective) issues as well as cognitive influences (mental procedures) that affect an investor's selection under definite situations. Devi (2014) stated in his conference paper that Emotions display a noteworthy role while generating investment decisions like other business choices. Kaufman (1999) argued that tremendously high or low emotional stimulation initiates gradually constrained rationality as emotions veil the judgments of decision-maker. Simon (1983) contended that understanding the role of emotions plays to develop a complete human rationality theory. Hanoch (2002) and Etzioni (1988) claimed that emotions are significant as a directing contrivance in economic decision-making. Damasio (1994) suggested that emotions aid us to focus on convincing information. Luce, Payne, and Bettman (1999) found that the investor's tendency to evade negative emotions has a profound consequence on their purchase choice.

### 2.1. Research Gap

Most of the literature discussed above on related topic have shown the impact of demographic variables or factors on investment choices, decision making of investors, risk tolerance level, the pattern of investment, stock trading and investor behavior whereas the present research is one of the unique studies and has taken investors' investment amount, investment periods, emotional level, internal feeling and rightness of decision making as the factors for finding its affiliation with demographic variables. It is also a more comprehensive study because the sample size of most of the study conducted in Bangladesh and other countries on the relevant topics is equal to or

less than 300 (Khanam, 2017; Sadiq & Ishaq, 2014) etc. and whereas in the present study sample size is more than 400 respondents. The key intent of the research is to capture the implication of demographic variables while making investment decisions in the capital market of Bangladesh. Also, in this study Investors' behavior will be analyzed based on their demographic as well as psychographic aspects such as gender, age, occupation, income level, and education. This will be supportive to the stock dealers or brokers and the managers of a portfolio so that they can provide superior portfolio choices to their investors.

## 2.2. Overview of Dhaka Stock Exchange

The Bangladesh stock market started its journey as East Pakistan Stock Exchange Association Ltd on April 28th, 1954. After the trading activities of the Dhaka Stock Exchange were deferred from 1971 to 1976 due to the freedom war and its weak post-independence economic condition, the exchange was again restarted on 16 August 1976 when the total number of listed securities was 9 and their total paid capital was Taka 137.52 million (Hassan, Islam, & Basher, 2000). The Dhaka Stock Exchange first started all share price index calculation on 16th September 1986. The total number of recorded companies in DSE augmented up to 92 by 1987. But the growth of the market is apparent high in the 1990s compare to any other period since its formation because of the opening up of the economy in the 90s and the first time Tk.1crore daily transaction was documented in April 1992. Now in Bangladesh, there are two stock exchanges. One is the Dhaka Stock Exchange (DSE), located in Motijheel, Dhaka and another one is the Chittagong Stock Exchange. The Dhaka Stock Exchange (DSE) is registered as a Public Limited Company and its activities are controlled by the rules & regulations of its Articles of Association and by-laws along with the Securities and Exchange Ordinance - 1969, Companies Act - 1994, and Securities & Exchange Commission Act - 1993. Online trading facilities have started in both the stock exchanges since 1998 (Ullah, Kabir, & Ahmmmed, 2012). Present-day, DSE has major three indices, i.e., DSE Broad Index (DSEX), DSE 30 Index (DS30), and DSEX Shariah Index (DSES). These indices are designed plus advanced by the world's prominent breadwinner S&P Dow Jones Indices (SPDJI). DSE Broad Index is the yardstick index that replicates about 97% capitalization of the whole equity market. DSEX Shariah Index (DSES) delivers comprehensive market handling of Shariah-compliant stocks. The Authorized Capital of DSE is \$320.512 (in million) and the Paid-up Capital of DSE is \$231.253 (in millions). On 5th December 2010 total number of securities trades was 389310 and the traded value is Tk. 32495.756 million which is the highest trading in the history of Dhaka stock exchange, total maximum trade volume in DSE was 703425123 on 23 January 2017, total largest market capitalization happened on 3rd January 2018 which value is Tk. 4285095.5, the DSEX index was the extent to top-level on 26 November 2017 which is 6336.8845, the DSES index and DS30 index also reached to the highest level on 23rd January 2018 & 25th January 2015 which was 1433.1652 & 2304.6909 respectively and the DGEN index was in peak position on 5th December 2010 which is 8918.5135. Now, 556 securities are enlisted with DSE included 284 companies, 41 mutual funds, 221 Government Treasury Bonds, 8 Debenture besides 2 corporate bonds. From these 556 unlisted securities, 284 companies' shares, 41 mutual funds as well as 2 corporate bonds are exchangeable. Among 284 firms, 13 are international companies, 08 are joint venture concerns and the rest 263 firms are indigenous firms. In 2020, the total market capitalization of all the listed companies on the Dhaka bourse mounted at above \$46 billion (Source: www.dsebd.org, dated: Wednesday, Apr 9, 2020).

## 2.3. Research Objectives

The major objective of this study is to exemplify the demographic characteristics of individual investors in the DSE of Bangladesh. The other objectives are:

- i) To detect the association between the demographic factors and investors' investment amount.
- ii) To explore the association between the demographic factors and investors' investment periods.
- iii) To highlight the connection between the demographic factors and investors' emotional level.

- iv) To determine the affiliation between the demographic factors and the impact of internal feeling on investors' investment decision.
- v) To exemplify the relationship between the demographic factors and investors' correct investment decision-making.

#### *2.4. Significance of the Study*

This work is executed to recognize the demographic aspects affecting the investment decision of individual investors in the Bangladesh stock market. The prominent traditional financial theories demonstrate the significance of financial knowledge and information for making efficient investment decisions but different scholars by their scholarly study found the role of behavioral factors in the path of investment decision making. Conventional theories cogitate that investors are logical and coherent representatives who make judgments accurately and judicially to capture the opportunities available in the market. But in reality, it has been identified by the different researchers that when they derive to financing, their emotive feelings, in-built believed patterns, and emotional partialities influence how they observe the world and how they create their decisions. So the key intention of the research is to apprehend the implication of behavioral influences while making investment decisions in the capital market of Bangladesh. This study will be supportive to recognize the demographic factors which trace the decision creation of investors. The main implications of the research are:

1. The research aids to clarify the demographic structures of individual investors in the DSE of Bangladesh.
2. The research can be cooperative to categorize the major demographic aspects that influence an investment decision.
3. The conclusions can be beneficial for the analogous research workings in the future.

### **3. RESEARCH METHODOLOGY**

#### *3.1. Research Design*

In this study, the researcher used both descriptive as well as causal-comparative research designs. Descriptive research embraces inspections and information-gathering investigations of diverse things. The main tenacity of descriptive investigation is the portrayal of the state of relationships as it survives at existing. It is used to ascertain and be competent to portray the individualities of the variables of concern. The descriptive inquiry policy is certain for the work to acquire the knowledge regarding the respondents' profile, demonstration, and depiction of the data gathering, and to elucidate the faces of the investors' behavior in the Bangladesh capital market.

Alternatively, a causal-comparative study strategy is nominated for the research to scrutinize the association between the dependent and independent variables under this work. The causal-comparative investigation examines the conceivable reasons affecting a specific condition by perceiving present consequences and searching for the likely issues leading to the outcomes. In other sense, the causal-comparative study is that examination where the independent factor or factors have previously befallen and where the researcher begins with the dependent variable or variables observation. After that, evaluate the influences of independent variables on the dependent variable or variables. This research strategy is designated for the work to scrutinize the association between the dependent variable as well as the independent variables.

#### *3.2. Population and Sample of the Study*

All individual investors in the Bangladesh capital market are used as the study's population. Although, the researcher has chosen the samples from the diverse securities firms of Bangladesh. The researcher used judgment sampling for this aim. The judgmental sampling technique was used for selecting the sample. Though, the sample of the study doesn't comprise the investors who finance in other investment areas like a bond, real estate, bank, etc. Convenience sampling was also used along with judgmental sampling for picking the investors who participate in

DSE. The sample inclines to oversimplify the whole population. Questionnaires were disseminated to the 550 respondents out of which 477 questionnaires were selected for the research purpose. The sample was selected from the brokerage houses and investment bankers like Investment Corporation of Bangladesh, BRB securities limited, IFIC bank securities limited, etc.

### 3.3. Nature and Sources of Data

This study is mainly based upon the primary facts but secondary data are also used to develop and clarify the concepts. Here the researchers used the schedule method for collecting primary data. The primary data has been used to define the demographic aspects persuading the Bangladeshi investors' investment assessment in the capital market. The inquiry form was established founded on the discoveries from preceding writings.

### 3.4. Method of Analysis

The survey has been passed on the structured questionnaire and the study is restricted to the individual investors of the Dhaka, Rajshahi, and Khulna divisions of Bangladesh. In this survey, the researcher has been drawn up statistical inferences using statistical software package SPSS-16. Tabulation and percentage analysis are used to describe the profile of individual investors. Different hypotheses are developed to represent the association between demographic aspects and individual investors. ANOVA and Chi-square test is used to test the association among the demographic aspects and investors' investment behaviors.

Research Hypothesis:

*H1: There is no statistically significant relationship between demographic characteristics and the quantity of investment made by individual investors.*

*H2: There is no noteworthy association between the demographic factors and investors' investment periods.*

*H3: There is no important connection between the demographic factors and investors' emotional levels.*

*H4: There is no vital affiliation between the demographic factors and the impact of internal feelings on individual investors' investment decisions.*

*H5: There is no statistically significant link between demographic characteristics and individual investors' correct investing decisions.*

### 3.5. Overview of Some Key Items

Throughout the present study, different key items have been used. Table 1 represents the details of those key items.

**Table 1.** Shows key items, their abbreviations and description.

| Items                                       | Abbreviations          | Demarcation   |
|---|------------------------|---|
| Analysis of Variance                        | ANOVA                  | It is a statistical method for comparing variances between means (or averages) of distinct groups.  |
| Dhaka Stock Exchange Broad Index            | DSEX                   | It is the benchmark for the performance of all companies listed on the Dhaka Stock Exchange.  |
| Standard and Poor                           | S&P                    | It is one of the renowned credit rating agencies.   |
| S&P Dow Jones Indices                       | SPDJI                  | It is the leading provider of investable indices and benchmarks.  |
| DSE General Index                           | DGEN                   | It is a significant Dhaka stock exchange market-tracking index.   |
| BRB Securities Limited                      | BRB Securities Limited | It is a subsidiary of the BRB Group, a well-known securities firm registered with the Bangladesh Securities and Exchange Commission.                                |
| IFIC Securities Limited                     | IFICSL                 | It is an IFIC Bank subsidiary dedicated to improving the country's capital market by providing world-class brokerage services to both individuals and institutions. |
| Statistical Package for the Social Sciences | SPSS                   | It is a software suite used for analyzing statistical data.   |

#### 4. FINDINGS AND DISCUSSIONS

The percentage analysis of demographic influences on the investors' amount of investment, investment periods, emotional level, internal feeling, and investment decision making is given:

**Table 2.** Percentage analysis of demographic influences.

| Category       | Particulars             | Frequency | Percentage |
|----------------|-------------------------|-----------|------------|
| Gender         | Male                    | 443       | 92.9 %     |
|                | Female                  | 34        | 7.1%       |
| Age            | 20-40 years             | 227       | 47.6%      |
|                | 40-60 years             | 243       | 50.9%      |
|                | Above 60 years          | 07        | 1.5%       |
| Marital status | Married                 | 400       | 83.9%      |
|                | Unmarried               | 65        | 13.6%      |
|                | Widowed                 | 12        | 2.5%       |
| Education      | School level            | 17        | 3.6%       |
|                | Graduate                | 84        | 17.6%      |
|                | Post Graduate and above | 376       | 78.8%      |
| Occupation     | Employed                | 353       | 74.0%      |
|                | Self-employed           | 116       | 24.3%      |
|                | Retired                 | 8         | 1.7%       |
| Income level   | Below 25000             | 13        | 2.7%       |
|                | 25000-50000             | 317       | 66.5%      |
|                | 50000-75000             | 143       | 30.0%      |
|                | 75000 and above         | 4         | 0.8%       |

Source: Primary data.

The percentage analysis of demographic influences displays that, majority of 92.9% of the individual investors are Male. 50.9% belong to the 40-60 years age group. A majority (83.9 %) of the respondents are married. Approximately (78.8%) have finished their Post-Graduation. Nearly 74.0% of the investors are engaged in different job sectors and 66.5% of the respondents belong to the income level of TK.25, 000 to 50,000.

##### 4.1. Hypothesis 1

*H1: There is no statistically significant relationship between demographic characteristics and the quantity of investment made by individual investors.*

Table 3 Exhibits associations among demographic factors and the amount of investment of individual investors.

**Table 3.** Associations among demographic factors and the amount of investment of individual investors.

| ANOVA        |                |                |     |             |        |       |
|--------------|----------------|----------------|-----|-------------|--------|-------|
|              |                | Sum of Squares | df  | Mean Square | F      | Sig.  |
| Gender       | Between Groups | 1.614          | 3   | 0.538       | 8.495  | 0.000 |
|              | Within Groups  | 29.962         | 473 | 0.063       |        |       |
|              | Total          | 31.577         | 476 |             |        |       |
| Age          | Between Groups | 0.653          | 3   | 0.218       | 0.780  | 0.505 |
|              | Within Groups  | 131.880        | 473 | 0.279       |        |       |
|              | Total          | 132.532        | 476 |             |        |       |
| Education    | Between Groups | 25.652         | 3   | 8.551       | 39.784 | 0.000 |
|              | Within Groups  | 101.660        | 473 | 0.215       |        |       |
|              | Total          | 127.312        | 476 |             |        |       |
| Occupation   | Between Groups | 9.263          | 3   | 3.088       | 14.289 | 0.000 |
|              | Within Groups  | 102.209        | 473 | 0.216       |        |       |
|              | Total          | 111.472        | 476 |             |        |       |
| Income level | Between Groups | 4.159          | 3   | 1.386       | 5.127  | 0.002 |
|              | Within Groups  | 127.916        | 473 | 0.270       |        |       |
|              | Total          | 132.075        | 476 |             |        |       |

Based on Table 3 the researcher should reject the null hypothesis at a 5% significance level in the case of gender, education, occupation income level where P-value is significant (0.000) that is; there is a significant association among gender, education, occupation, the income of the respondents and the investors' investment amount but in case of age it is not possible to reject the null hypothesis at 5% significance level that is; age is not significantly associated with the investors' investment amount.

#### 4.2. Hypothesis 2

*H<sub>0</sub>: There is no noteworthy association between the demographic factors and the investment period of individual investors.*

Table 4 shows relationships among the demographic factors and investment period.

**Table 4. Relationships among the demographic factors and investment period.**

| Factors      | Value  | Df | Sig. value | Sig. or Not sig. |
|--------------|--------|----|------------|------------------|
| Gender       | 15.375 | 2  | 0.000      | Significant      |
| Age          | 10.260 | 4  | 0.036      | Significant      |
| Education    | 23.859 | 6  | 0.001      | Significant      |
| Occupation   | 16.648 | 4  | 0.002      | Significant      |
| Income level | 16.258 | 6  | 0.012      | Significant      |

Based on the above calculation the researcher should reject the null hypothesis at a 5% level of significance in each factor. So, it has been concluded that there is a noteworthy association between the demographic factors and investors' investment period.

#### 4.3. Hypothesis 3

*H<sub>0</sub>: There is no important connection between the demographic factors and the emotional level of individual investors.*

Table 5 displays connections among the demographic factors and emotional level of individual investors.

**Table 5. Connections among the demographic factors and emotional level of individual investors.**

| ANOVA                |                |                |     |             |        |       |
|----------------------|----------------|----------------|-----|-------------|--------|-------|
|                      |                | Sum of Squares | df  | Mean Square | F      | Sig.  |
| Gender status        | Between Groups | 1.608          | 4   | 0.402       | 6.333  | 0.000 |
|                      | Within Groups  | 29.968         | 472 | 0.063       |        |       |
|                      | Total          | 31.577         | 476 |             |        |       |
| Age                  | Between Groups | 1.704          | 4   | 0.426       | 1.537  | 0.190 |
|                      | Within Groups  | 130.828        | 472 | 0.277       |        |       |
|                      | Total          | 132.532        | 476 |             |        |       |
| Level of Educational | Between Groups | 18.199         | 4   | 4.550       | 19.681 | 0.000 |
|                      | Within Groups  | 109.114        | 472 | 0.231       |        |       |
|                      | Total          | 127.312        | 476 |             |        |       |
| Occupation           | Between Groups | 3.475          | 4   | 0.869       | 3.797  | 0.005 |
|                      | Within Groups  | 107.997        | 472 | 0.229       |        |       |
|                      | Total          | 111.472        | 476 |             |        |       |
| Income level         | Between Groups | 1.602          | 4   | 0.400       | 1.449  | 0.217 |
|                      | Within Groups  | 130.474        | 472 | 0.276       |        |       |
|                      | Total          | 132.075        | 476 |             |        |       |

Based on the ANOVA table calculated with the help of SPSS, in the case of gender, education, occupation the researcher should reject the null hypothesis at a 95% confidence level where the P-value is significant that is there is an important connection between gender, education, occupation of the respondents and the emotional level of



individual investors but in case of age, marital status and income level the researcher cannot reject the null hypothesis at 5% significance level that is; age and income level of the respondents are no important connection with the emotional level of individual investors of DSE in Bangladesh.

#### 4.4. Hypothesis 4

*H<sub>0</sub>: There is no vital affiliation between the demographic factors and the impact of internal feelings on individual investors' investment decisions.*

Table 6 exhibits affiliations among demographic factors and the impact of internal feelings on individual investors' investment decisions.

**Table 6.** Affiliations among demographic factors and the impact of internal feelings on individual investors' investment decisions.

| Factors      | Value  | df | Sig. value | Sig. or Not sig. |
|--------------|--------|----|------------|------------------|
| Gender       | 6.543  | 2  | 0.038      | Significant      |
| Age          | 12.066 | 4  | 0.017      | Significant      |
| Education    | 1.417  | 6  | 0.000      | Significant      |
| Occupation   | 29.321 | 4  | 0.000      | Significant      |
| Income level | 18.497 | 6  | 0.000      | Significant      |

Based on the above calculation it is possible to reject the null hypothesis at a 5% level of significance in case of gender, age, education, occupation, and income level that is; there is a vital affiliation between demographic factors and the impact of internal feeling on individual investors' investment decision in DSE of Bangladesh.

#### 4.5. Hypothesis 5

*H<sub>0</sub>: There is no statistically significant link between demographic characteristics and individual investors' correct investing decisions.*

Table 7 shows relationships among the demographic factors and individual investors' correct investment decision making.

**Table 7.** Relationships among the demographic factors and individual investors' correct investment decision making.

| Factors      | Value  | df | Sig. value | Sig or Not sig  |
|--------------|--------|----|------------|-----------------|
| Gender       | 7.488  | 2  | 0.024      | Significant     |
| Age          | 2.420  | 4  | 0.659      | Not significant |
| Education    | 18.764 | 6  | 0.005      | Significant     |
| Occupation   | 16.360 | 4  | 0.003      | Significant     |
| Income level | 12.831 | 6  | 0.046      | Significant     |

Based on the above results the researcher should reject the null hypothesis at a 95% confidence level in the case of gender, education, occupation, and income level that is; there is a significant relationship between demographic factors and individual investors' correct investment decision making in DSE of Bangladesh. But from the viewpoint of age, there is no significant relationship between demographic factors and individual investors' correct investment decision making.

## 5. FINDINGS

- i) Majority of the investors are male, a bulk number of investors belong to the 40-60 years of age, maximum investors are married, engaged in different job sectors, and completed their post-graduation but their income level belongs to Take 25000 to 50000.
- ii) There is a strong association among gender, education, occupation, the income of the respondents, and investors' investment amount.

- iii) There is a noteworthy association between the demographic factors and investors' investment period in the DSE of Bangladesh.
- iv) There is an important connection between gender, education, occupation of the respondents, and investors' emotional level.
- v) Gender, age, education, occupation, income level, and the impact of personal feelings on individual investors' investing decisions are all important demographic aspects in the DSE of Bangladesh.
- vi) In the DSE of Bangladesh, there is a substantial association between demographic parameters such as gender, education, employment, income level, and individual investors' correct investment decision making.

## 6. CONCLUSION

For determining the demographic influences on investors' decision making, emotional level, internal feeling, and others, the study reveals the mixed reply from the survey directed in three different divisions of Bangladesh. The analysis performed on the findings of the survey showed that there is a strong association among gender, education, occupation and the amount of investment, investment period, emotional level, the impact of internal feeling on investors' investment decision, investors' correct investment decision making in DSE of Bangladesh. However in the case of association among the demographic factors and investment amount, age and marital status are not significantly associated with investors' investment amount of DSE in Bangladesh. Furthermore, in case of recognizing the important connection between the demographic factors and investors' emotional level; it is identified that a few demographic variables such as age, marital status, and income level of the respondents are no important connection with the emotional level of individual investors of DSE in Bangladesh. In case of detecting vital affiliation between the demographic factors and impact of internal feeling on investors' investment decision, marital status has no vital affiliation, and finally, age and marital status have no significant association in terms of finding a meaningful relationship between demographic characteristics and individual investors' right investment choice making.

## 7. MANAGERIAL IMPLICATIONS

The probable managerial implications of this study are as follows:

- From the managerial point of view, the findings of this study are very vital to identify as well as avoid the reporting common demographic mistakes made by fund managers for adopting the appropriate investment strategy in a complex and dynamic market environment where investors' emotion plays a very noteworthy role.
- One of the findings of this study is that the active participation of female investors in the Dhaka Stock Exchange is very low compared to male investors. Therefore the regulatory authority can formulate or take the necessary policies or steps to motivate the female investors to participate actively in the stock market transactions that will enhance the efficiency level of the market.
- Another finding of this investigation is that the bulk amount of investors' age is between 40-60 years, so the managerial authorities of the relevant sector should initiate to cope with more update strategies so that investors of other ages will encourage to participate in the stock market.
- Since there is a strong association among the demographic variables of gender, education, occupation, the amount of investment, investment period, emotional level, internal feeling of individual investors, and investment decision-making process of individual investors in DSE of Bangladesh. The managerial bodies can develop the fitting procedures to make the market more effective as well as efficient through adjusting the demographic influences in the stock market.
- The results of this research will provide the other researchers with a more accurate indication for inferences.

## 8. LIMITATIONS OF THE STUDY

- i) This investigation is only based on individual investors. So the research will be prolonged to the institutional investors.
- ii) This study is just on the Dhaka Stock Exchange only. It is possible to conduct a similar study in different markets nationally or internationally.
- iii) The research is implemented on three divisions only in Bangladesh. The research will be furthered to other divisions to portrait the more precise outcomes.
- iv) It is required to take advanced research studies to endorse the outcomes of this inquiry through gathering more information with larger sample size.
- v) It is also conceivable to augment the study by integrating behavioral aspects in the stock market.

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