
Survey of Overconfidence Bias and Entrepreneurs Decision-Making Process in Maiduguri, Borno State, Nigeria

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Abstract

The objective of this study is to examine the influence of overconfidence bias on entrepreneurs' decision-making process in Maiduguri Metropolitan Council, Borno State, Nigeria. Questionnaires were used to collect primary data from entrepreneurs. The population of the study was 1450, sample sizes of 305 respondents were used and simple linear regression was used with the aid of SPSS version 25 for data analysis. The findings from the regression analysis show that overconfidence bias significantly influences entrepreneurial decision-making process at 0.012 levels of significant. Therefore, this study concludes that most of the entrepreneur's overestimate which make them to think that they better than where they are by trading more in the market because they believe that for sure there will be positive outcome in the near future. This study recommends that entrepreneurs can become aware of their psychological dispositions and set up counter balancing or self-regulatory mechanisms. Such mechanisms could be awareness of decision biases through training that involve selecting staff with different dispositions as a balancing act in order to avoid overestimation, over placement and over precision. The results of the study would also be relevant to policy makers for more effective economic and financial policies; this research provides policymakers with insights into the transmission mechanisms of monetary policy within the state. This knowledge will assist policymakers in taking into account global economic considerations when drafting monetary and fiscal policies, which will be necessary for executing monetary policies that support larger economic goals while limiting unexpected repercussions in financial markets. The research findings can be utilized by policy makers to refine regulatory actions. In order to preserve SMEs owners' protection and market stability, policymakers can foresee potential behavioural biases that cause weaknesses in the market, it can put regulations in place to lessen these biases, systemic risks and stop excessive market volatility.

Key words: Overconfidence bias, Entrepreneurs, Decision making process

1. Introduction

At every step of a company's life cycle, from start-up through maturity and decline or renewal, making decisions is one of the most important entrepreneurial tasks. The choice could be made regarding, among other things, the goals entrepreneur wants to achieve, the

resources needed for the company, who will carry out each activity that has to be done, the risk level of the enterprise, the market strategy, finance, and record-keeping operations (Ardakani & Avorgani, 2021). But there are many judgments that an entrepreneur cannot make by solely relying on normative and rational approaches when deciding to launch a new company or a new product or service.

Due to the fact that SMEs now make up the majority of employment and GDP growth in most nations, they have become an essential component of all economies. Therefore, according to Simpson et al. (2011), these businesses act as catalysts for innovation, economic growth, and the creation of new jobs. As a result, the decision-making processes employed by these enterprises' owners have a significant impact on their success (Gibcus & Van Hoesel, 2008).

Because they direct business owners toward a successful future and lay the foundation for long-term market competition, entrepreneurial decisions have an impact on the survival and nature of businesses (Gibcus et al. 2006; Vermeulen and Curseu, 2010). Entrepreneurs occasionally act irrationally when making business decisions for a variety of reasons these including the business's inconsistencies, unpredictability, fear of the consequences of their action, time limitations, anticipation of positive feelings, data accessibility, experience, and overconfidence bias (Ardakani & Avorgani, 2021). However, this rarely occurs when entrepreneurs are faced with business problems.

According to Fama's (1970) efficient market hypothesis or theory, which assumes that financial markets and information are efficient and that investors in such markets are rational and always force market prices to equal the present value of expected future cash flow because such entrepreneurs are assumed to have access to all the information necessary to make a decision, the market prices are always forced to equal this present value. Therefore, the prospect theory by Kahneman and Tversky, (1979) is in conflict with the efficient market hypothesis because, in the real world, entrepreneurs must deal with a lack of information, irrelevant information, and a lack of time when making business decisions. When faced with uncertainty, entrepreneurs also tend to make irrational decisions because they are unable to perform the best data analysis possible due to a variety of cognitive limitations of the human intellect.

Iversen and Jorgensen (2008) suppose that entrepreneurs have no access to past data, and therefore make their decisions while having insufficient information about the market. According to Singh (2020), overconfidence bias is a psychological characteristic shared by the majority of entrepreneurs and is a significant contributor to business failure. Among the psychological characteristics that could ruin a business are overestimating financial performance through unrealistic cash flow estimates, excessively investing in capital assets, using more debt than equity to purchase many assets, being confident in trading more in the market by selling more goods to customers because it believes there will undoubtedly be a positive outcome in the near future, and putting an excessive amount of faith in one's own expertise and abilities.

This study therefore, looks at how overconfidence bias affects entrepreneurial decision-making process in Maiduguri Metropolitan Council, Borno state, Nigeria. Therefore, the main objective of this study is to examine the influence overconfidence bias on entrepreneurial decision-making process in Maiduguri. The study hypothesize that overconfidence bias does not significantly influence entrepreneur decision making process in Maiduguri. This study is significant to entrepreneurs because if they understand the impacts of overconfidence on their decision-making process, they will become aware of their psychological tendencies and put up counterbalancing or self-regulatory systems to manage the irrational act in decision making process for growth and success of their businesses. Szerb and Vörös (2019) opine that the growth and success of the business will

be aided by entrepreneurs managing overconfidence. This study supports the overconfidence bias theory, which was proposed by Odean (1998), this theory state that overconfident entrepreneur's overestimation the preciseness of their knowledge that leads entrepreneurs to become overly optimistic about favourable outcomes.

2. Literature Review

Overconfidence bias (OCB) is a typical human inclination to have a positive outlook on life. Investors sometimes make the judgment error of overestimating their own abilities while simultaneously underestimating the difficulty of a task, potential risk, or other possibilities. Overconfidence in one's own talents to succeed in business is known as entrepreneurial overconfidence (Szerb and Vörös 2021). Overconfidence bias, also known as the tendency of investors, to overestimate the accuracy of their knowledge about the value of a security and returns, or the overestimation of abilities and skills, precision of knowledge and information, and the ability to control future events (Odean, 1998).

According to Davidsson (2003), entrepreneurship can be characterized as actions or results that are entirely focused on producing money, fall under the category of social nonprofit activities, only occur in start-ups or in (small) businesses owned by the manager, or are inherent in large organizations. According to Gartner (1988), entrepreneurship is the founding of new businesses. Entrepreneurship, according to Shane and Venkataraman (2000), is the examination of sources of chances to produce future commodities and services. Entrepreneurship is defined by Davidsson et al. (2003) as an empirical phenomenon for the introduction of new economic activity that results in market change, and the behaviors engaged in during the process of discovering and utilizing ideas for new business ventures are the focus of the entrepreneurship research field.

The entrepreneurial decision-making process is described by Villalonga and McGahan (2005) as voluntary decisions or prompt reactions to problems that essentially impact the existence and character of a business. According to Busenitz and Barney (2009), the process of making entrepreneurial decisions is based on a qualitative descriptive approach. This means that before starting a business, entrepreneurs look for business opportunities. Once they are certain that an opportunity will be profitable, they shift their attention from opportunity identification and evaluation to opportunity exploitation. According to certain theoretical and practical viewpoints, the entrepreneurial process simply entails the investigation, identification, and exploitation of business possibilities (Choi et al., 2008).

Empirically, Ahmad et al. (2020), behavioral biases that impede entrepreneurs from making rational decisions which have a negative impact on the entrepreneurial decision-making process. Cognitive biases are a significant factor that influences entrepreneurs' decisions. When Bastian and Zucchella (2022) looked into how nascent entrepreneurs made decisions, they discovered that they heavily relied on other people's opinions and thought about options outside of their start-up, which supported their decision-making processes. Understanding one's own mental process is referred to as meta cognition (Bastian & Zucchella, 2022).

In this study, five factors that affect an entrepreneur's ability to make strategic decisions were identified, including attention, memory, thinking, emotion, and sentiment (Feng et al., 2022), the ability of entrepreneurs to make strategic decisions has been deemed crucial for the performance of their ventures. The performance of a business endeavor can be improved by comprehending and strengthening these aspects (Feng et al., 2022).

A multi-period market model is developed by Gervais et al. (2011) to calculate overconfidence bias. They contend that investors who have received great returns are more prone to overconfidence bias, which causes them to trade more frequently. Barber and Odean (2001), conducted an empirical test of the overconfidence bias theory. They provide

evidence that the overconfidence bias boosts trading activity in financial markets. Using information from individual investor accounts held with a prominent U.S. brokerage firm, they argue that more trading ultimately leads to decreased expected utility or inferior portfolio performance. Studies on investor overconfidence bias are described above, and it is shown that this bias encourages investors to trade more often because they get confident in the likely outcome without considering the risk and cost associated with their investment. However, this study takes into account entrepreneurs' decision-making processes and overconfidence bias in Maiduguri, Borno state, Nigeria.

2.1 Theoretical Review

Overconfidence hence causes a rise in trading activity as was empirically tested by Odean (1998) and Barber and Odean (2011). They offer proof that excessive confidence increases trade activity in the financial markets. They make the case that increased trading ultimately results in reduced expected utility or subpar portfolio performance using data from individual investor accounts kept with a major U.S. brokerage firm, it further reveal that overconfidence is an false impression of superior knowledge in investors, which is strengthened by their past successes. This tendency makes them trade more as they become sure of the positive outcome. However, increase in trading volume comes with higher trading cost which proves to be unfavourable to the portfolio performance. When examining three types of overconfidences, Hilton et al. (2011) takes into account overconfidence. Over precision, overestimation, and over placement are terms used to describe overestimating one's knowledge, performance quality, and place in higher rank within a group, respectively. The "better than average effect" or over placement is a term that is frequently used (Hilton et al., 2011). Overconfident investors "overweight their own private information at the expense of ignoring publicly available information" (Chuang & Lee, 2006), overconfident investors mistakenly attribute market gains to their own ability to pick winning stocks. Since overconfidence bias causes entrepreneurs to make poor judgements that can lead to overestimating their own talents while simultaneously underestimating a task's difficulty, potential risks, or other alternatives, this study supports the overconfidence theory of Odean (1998). It also caused business owners to overestimate their own entrepreneurial ability. Szerb and Vörös (2021). The most prevalent and constant psychological trait among investors is this overconfidence bias (Chuang & Lee, 2006).

Researcher Framework

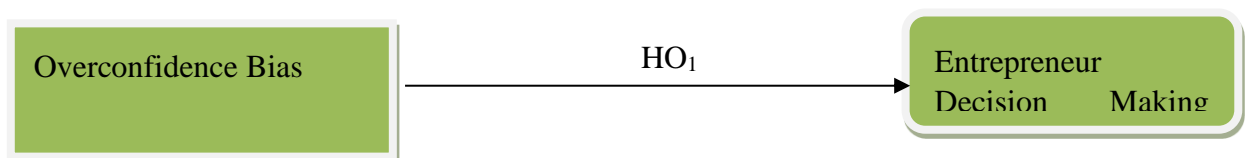


Figure 1: Showing a diagrammatic presentation of the influence of overconfidence bias on entrepreneurial decision-making process.

3. Research Methodology

This study adopted descriptive and survey research design, SMEs owners (entrepreneurs) in Maiduguri were the sources of data. The populations for this study were 1450 entrepreneurs that own SMEs in Maiduguri Metropolis and were registered with Corporate Affairs Commission in Borno State, a sample size of 305 was drawn from the population using Dillman's (2007) formula and 304 questionnaires were properly filled and return. A simple random sampling technique was used to give equal chance to all the members of the population to be selected. Data for this study was obtained through structured

questionnaire which were distributed to entrepreneurs in Maiduguri. 5 – point Likert scale (Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree) were used to measure the responses collected. Data gathered was analyzed using both descriptive statistics through frequency distribution to determine mean, median and standard deviation and inferential statistics of simple linear regressions was used to test the formulated hypotheses with the aid of SPSS Version 25.

3.1 Model specification

$$DMPE = \alpha + \beta OCB + \epsilon \text{-----}$$

- (1)

Where;

Y = dependent variable (Decision Making process of Entrepreneurs (DMPE))

α = intercept i.e., the coefficient of independent variable to be estimated

β = slope, i.e., constant

X = is the independent variable, Overconfidence bias (OCB)

ϵ = is the error term

4. Empirical Result

4.1 Descriptive statistics

Table 4.1 Survey of Overconfidence bias and Decision-Making Process of Entrepreneurs

| S/N | Statement | SA | AG | UD | DA | SD | TOTAL |
|-----|--|--------------|--------------|------------|-------------|-------------|---------------|
| 1. | I understand market better than other people understood it | 98 (32%) | 133 (44%) | 10 (3%) | 37 (12%) | 26 (9%) | 304 (100%) |
| 2. | I read business and market regularly as well as know the time of economy boom | 106 (35%) | 126 (41%) | 8 (3%) | 42 (13%) | 22 (7%) | 304 (100%) |
| 3. | I can curtail the investment risk in the business because I can forecast market better than others | 101 (33%) | 122 (40%) | 11 (4%) | 40 (13%) | 30 (10%) | 304 (100%) |
| 4. | My financial knowledge, experience and predictive ability is remarkable to make my business grow | 89 (29%) | 136 (45%) | 9 (3%) | 36 (11%) | 34 (10%) | 304 (100%) |
| 5. | I am more confidence to succeed in business than other business owners | 98 (32%) | 132 (43%) | 9 (3%) | 36 (11%) | 29 (10%) | 304 (100%) |
| 6. | I will continue to manage my business even though I was asked to stop since I am confidence that the business will revive in the future | 100 (32%) | 136 (45%) | 8 (3%) | 34 (11%) | 26 (9%) | 304 (100%) |
| 7. | I am confidence of trading more in the market by selling more products to customers because for sure there will be positive outcome in the near future | 99 (33%) | 142 (48%) | 10 (3%) | 31 (10%) | 22 (7%) | 304 (100%) |
| 8. | I convince customers of my products in the competitive market and sell more than other business owners | 107 (35%) | 126 (41%) | 9 (3%) | 34 (11%) | 27 (9%) | 304 (100%) |
| 9. | I have decided to expand my business by introducing new product because I am sure of getting more customer patronage | 110 (36%) | 120 (39%) | 8 (3%) | 43 (14%) | 33 (11%) | 304 (100%) |

| | | | | | | | |
|----|--|--------------|--------------|-----------|-------------|------------|---------------|
| 10 | Trading volume of my business will increase when I introduce new product in the market | 104 (34%) | 134 (44%) | 9 (3%) | 31 (11%) | 25 (8%) | 304 (100%) |
|----|--|--------------|--------------|-----------|-------------|------------|---------------|

Source: Field Survey, (2022)

Table 4.1 revealed that 98(32%) of the respondents strongly agreed that they understand market better than other people understood it, 133(44%) of the respondents agreed that they understand market better than other people understood it, 10(3%) of the respondents are undecided as to whether or not they understand market better than other people understood it, 37(12%) of the respondents disagreed that they understand market better than other people understood it, 26(9%) of the respondents strongly disagreed that they understand market better than other people understood it. The inference from the table revealed that majority of the respondents agreed that they understand market better than other people understood it.

It further revealed that 106(35%) of the respondents strongly agreed that they read business and market regularly as well as know the time of economy boom, 126(41%) of the respondents agreed that they read business and market regularly as well as know the time of economy boom, 8(3%) of the respondents are undecided as to whether or not they read business and market regularly as well as know the time of economy boom, 42(13%) of the respondents disagreed that they read business and market regularly as well as know the time of economy boom, 22(7%) of the respondents strongly disagreed they read business and market regularly as well as know the time of economy boom. The inference from the table revealed that majority of the respondents agreed that in they read business and market regularly as well as know the time of economy boom.

It also revealed that 101(33%) of the respondents strongly agreed that they can curtail the investment risk in the business because they can forecast market better than others, 122(40%) of the respondents agreed that they can curtail the investment risk in the business because they can forecast market better than others, 11(4%) of the respondents are undecided as to whether or not they can curtail the investment risk in the business because they can forecast market better than others, 40(13%) of the respondents disagreed that they can curtail the investment risk in the business because they can forecast market better than others, 30(10%) of the respondents strongly disagreed that they can curtail the investment risk in the business because they can forecast market better than others. The inference from the table revealed that majority of the respondents agreed that they can curtail the investment risk in the business because they can forecast market better than others.

It further revealed that 89(29%) of the respondents strongly agreed that their financial knowledge, experience and predictive ability is remarkable to make their business grow, 136(45%) of the respondents agreed their financial knowledge, experience and predictive ability is remarkable to make their business grow, 9(3%) of the respondents are undecided as to whether or not their financial knowledge, experience and predictive ability is remarkable to make their business grow, 36(11%) of the respondents disagreed that their financial knowledge, experience and predictive ability is remarkable to make their business grow, 34(10%) of the respondents strongly disagreed that their financial knowledge, experience and predictive ability is remarkable to make their business grow. The inference from the table revealed that majority of the respondents agreed that their financial knowledge, experience and predictive ability is remarkable to make their business grow.

It further revealed that 98(32%) of the respondents strongly agreed that they are more confidence to succeed in business than other business owners, 132(43%) of the respondents agreed that they are more confidence to succeed in business than other business owners, 9(3%) of the respondents are undecided as to whether or not they are more confidence to succeed in business than other business owners, 36(11%) of the respondents disagreed that

they are more confidence to succeed in business than other business owners, 29(10%) of the respondents strongly disagreed that they are more confidence to succeed in business than other business owners. The inference from the table revealed that majority of the respondents agreed that they are more confidence to succeed in business than other business owners.

It also revealed that 100(32%) of the respondents strongly agreed that they will continue to manage their business even though they were asked to stop since they are confidence that the business will revive in the future, 136(45%) of the respondents agreed that they will continue to manage their business even though they were asked to stop since they are confidence that the business will revive in the future, 8(3%) of the respondents are undecided as to whether or not they will continue to manage their business even though they were asked to stop since they are confidence that the business will revive in the future, 34(11%) of the respondents disagreed that they will continue to manage their business even though they were asked to stop since they are confidence that the business will revive in the future, 26(9%) of the respondents strongly they will continue to manage their business even though they were asked to stop since they are confidence that the business will revive in the future. The inference from the table revealed that majority of the respondents agreed that they will continue to manage their business even though they were asked to stop since they are confidence that the business will revive in the future.

It further revealed that 99(33%) of the respondents strongly agreed that they are confidence of trading more in the market by selling more products to customers because for sure there will be positive outcome in the near future, 142(48%) of the respondents agreed that they are confidence of trading more in the market by selling more products to customers because for sure there will be positive outcome in the near future, 10(3%) of the respondents are undecided as to whether or not they are confidence of trading more in the market by selling more products to customers because for sure there will be positive outcome in the near future, 31(10%) of the respondents disagreed that they are confidence of trading more in the market by selling more products to customers because for sure there will be positive outcome in the near future, 22(7%) of the respondents strongly disagreed that they are confidence of trading more in the market by selling more products to customers because for sure there will be positive outcome in the near future. The inference from the table revealed that majority of the respondents agreed that they are confidence of trading more in the market by selling more products to customers because for sure there will be positive outcome in the near future.

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It further revealed that 110(36%) of the respondents strongly agreed that they have decided to expand their business by introducing new product because they are sure of getting more customer patronage, 120(39%) of the respondents agreed that they have decided to expand their business by introducing new product because they are sure of

getting more customer patronage, 8(3%) of the respondents are undecided as to whether or not they have decided to expand their business by introducing new product because they are sure of getting more customer patronage, 43(14%)of the respondents disagreed that they have decided to expand their business by introducing new product because they are sure of getting more customer patronage, 33(11%) of the respondents strongly disagreed that they have decided to expand their business by introducing new product because they are sure of getting more customer patronage. The inference from the table revealed that majority of the respondents agreed that they have decided to expand their business by introducing new product because they are sure of getting more customer patronage.

It also revealed that 104(34%) of the respondents strongly agreed that trading volume of their business will increase when they introduce new product in the market, 134(44%) of the respondents agreed that trading volume of their business will increase when they introduce new product in the market, 9(3%) of the respondents are undecided as to whether or not trading volume of their business will increase when they introduce new product in the market, 31(11%)of the respondents disagreed that trading volume of their business will increase when they introduce new product in the market, 25(8%) of the respondents strongly disagreed that trading volume of their business will increase when they introduce new product in the market. The inference from the table revealed that majority of the respondents agreed that trading volume of their business will increase when they introduce new product in the market.

Table 4.2 Entrepreneurs Decision-Making Process

| S/N | Statement | SA | AG | UD | DA | SD | TOTAL |
|-----|--|--------------|--------------|------------|-------------|------------|---------------|
| 1. | I remain confident to make sound judgement and right choice | 111 (37%) | 121 (39%) | 10 (3%) | 38 (13%) | 24 (8%) | 304 (100%) |
| 2. | I trust my own judgement and express my view firmly in decision making process | 110 (36%) | 122 (40%) | 8 (3%) | 40 (13%) | 24 (8%) | 304 (100%) |
| 3. | I weigh positive and negative consequences of each alternative option before selecting the best option | 106 (35%) | 119 (39%) | 11 (4%) | 40 (13%) | 28 (9%) | 304 (100%) |
| 4. | I search for new information and alternative when making decision | 109 (36%) | 135 (44%) | 9 (3%) | 30 (10%) | 21 (7%) | 304 (100%) |
| 5. | I think clearly and keep all relevant factors in mind and choose the best alternative for my business to excel | 106 (35%) | 140 (46%) | 7 (2%) | 31 (10%) | 20 (7%) | 304 (100%) |

Source: Field Survey, (2022)

Table 4.2 revealed that 111(37%) of the respondents strongly agreed that they remain confident to make sound judgement and right choice, 121(39%) of the respondents agreed that they remain confident to make sound judgement and right choice, 10(3%) of the respondents are undecided as to whether or not they remain confident to make sound judgement and right choice, 38(13%)of the respondents disagreed that they remain confident to make sound judgement and right choice, 24(8%) of the respondents strongly disagreed that they remain confident to make sound judgement and right choice. The inference from the table revealed that majority of the respondents agreed that they remain confident to make sound judgement and right choice.

It further revealed that 110(36%) of the respondents strongly agreed that they trust their own judgement and express their view firmly in decision making process, 122(40%) of the respondents agreed that they trust their own judgement and express their view firmly in

decision making process, 8(3%) of the respondents are undecided as to whether or not they trust their own judgement and express their view firmly in decision making process, 40(13%) of the respondents disagreed they trust their own judgement and express their view firmly in decision making process, 24(8%) of the respondents strongly disagreed that they trust their own judgement and express their view firmly in decision making process. The inference from the table revealed that majority of the respondents agreed that they trust their own judgement and express their view firmly in decision making process.

It also revealed that 106(35%) of the respondents strongly agreed that they weigh positive and negative consequences of each alternative option before selecting the best option, 119(39%) of the respondents agreed that they weigh positive and negative consequences of each alternative option before selecting the best option, 11(4%) of the respondents are undecided as to whether or not they weigh positive and negative consequences of each alternative option before selecting the best option, 40(13%) of the respondents disagreed that they weigh positive and negative consequences of each alternative option before selecting the best option, 28(9%) of the respondents strongly disagreed that they weigh positive and negative consequences of each alternative option before selecting the best option. The inference from the table revealed that majority of the respondents agreed that they weigh positive and negative consequences of each alternative option before selecting the best option.

It further revealed that 109(36%) of the respondents strongly agreed that they search for new information and alternative when making decision, 135(44%) of the respondents agreed that they search for new information and alternative when making decision, 9(3%) of the respondents are undecided as to whether or not they search for new information and alternative when making decision, 30(10%) of the respondents disagreed that they search for new information and alternative when making decision, 21(7%) of the respondents strongly disagreed that they search for new information and alternative when making decision. The inference from the table revealed that majority of the respondents agreed that they search for new information and alternative when making decision.

It further revealed that 106(35%) of the respondents strongly agreed that they think clearly and keep all relevant factors in mind and choose the best alternative for their business to excel, 140(46%) of the respondents agreed that they think clearly and keep all relevant factors in mind and choose the best alternative for their business to excel, 7(2%) of the respondents are undecided as to whether or not they think clearly and keep all relevant factors in mind and choose the best alternative for their business to excel, 31(10%) of the respondents disagreed that they think clearly and keep all relevant factors in mind and choose the best alternative for their business to excel, 20(7%) of the respondents strongly disagreed that they think clearly and keep all relevant factors in mind and choose the best alternative for their business to excel. The inference from the table revealed that majority of the respondents agreed that they think clearly and keep all relevant factors in mind and choose the best alternative for their business to excel.

Table 4.3: Overconfidence and Decision-Making Process

| | n | Minimum | Maximum | Mean | Std. Deviation |
|------|----------|----------------|----------------|-------------|-----------------------|
| DMPE | 304 | 0.06 | 0.95 | 0.3704 | 0.10699 |
| OCB | 304 | 0.9 | 1.13 | 0.4401 | 0.37459 |

Source: SPSS output, version 25

Table 4.3 shows that DMPE recorded mean value of 0.3704, standard deviation of 0.10699, minimum value of 0.06 and maximum value of 0.9 whereas OCB recorded mean value of 0.4401, standard deviation of 0.37459, minimum value of 0.9 and maximum value

of 1.13 respectively. This indicates that OCB have significantly influence entrepreneur decision making process in Maiduguri. This is because OCB recorded high mean (0.4401) than DMPE within the study period.

Test of Hypothesis (H₀₁): Overconfidence bias has no significant effect on decision-making process of entrepreneurs in Maiduguri Metropolitan Council.

Table 4.4: Overconfidence bias and Decision-Making Process of Entrepreneurs

| Variables | B | Standard Error | t-value | p-value | Result |
|---------------------------|---------|----------------|---------|---------|--------|
| Overconfidence Bias (OCB) | -10.806 | 1.306 | -2.361* | 0.012 | S |
| Constant | 4.821 | 2.026 | 1.415 | 0.020 | |
| R ² | 0.803 | | | | |

Source: SPSS Computed data *Significant at 5% level, S= Significant

Linear model: $EDMP = \beta_0 + \beta_1 OCB + e$

Dependent variable: EDMP

Independent variable: OCB

Table 4.4 revealed a significant effect of overconfidence bias on decision-making process of entrepreneurs in Maiduguri Metropolitan Council. This is because the probability values (P = 0.012) is less than alpha ($\alpha = 0.05$) levels of significance. Hence, the null hypothesis which states that (H₀₁: overconfidence bias has no significant effect on decision-making process of entrepreneurs in Maiduguri Metropolitan Council) is hereby rejected at 0.05 level of significance. This means that OCB has significant effect on decision-making process of entrepreneurs in Maiduguri Metropolitan Council (P < 0.05). The R-Squared statistic indicates that the model as fitted which explains 80.3% of the variability in decision-making process of entrepreneurs in Maiduguri Metropolitan Council. It also shows that the model was suitable for explaining the effect of OCB on decision-making process of entrepreneurs in Maiduguri Metropolitan Council. The equation of the fitted model is defined as; $DMPE = 4.821 + 10.806OCB$.

4.3 Discussion of Findings

Evidence from the primary data collected and analyze revealed that planning fallacy bias has significant influence on SMEs entrepreneurial decision making in Maiduguri. The hypotheses tested on the basis of the discussion in this study and the observed regression values have shown that there is a positive significant influence between the dependent and independent variable. The analysis of hypothesis revealed that planning fallacy bias has significant and positive influence on SMEs entrepreneurial decision making in Maiduguri. This finding is in line with the study Ahmad et al. (2020), found cognitive biases are an important factor that influences entrepreneurs' decisions, it also found the presence of overconfidence bias that prevent entrepreneurs from making rational decisions thus can impact the entrepreneurial decision-making process in a negative way. The finding of this study is also in line with the study.

5. Conclusions and Implications

The finding documented in this study reveals that overconfidence bias biases to a greater extent influences entrepreneurial decision-making process in Maiduguri. The study tested the hypothesis and the result shows that the independent variables overconfidence bias has a significant positive and strong relationship with entrepreneurs' decision-making process in Maiduguri. Therefore, this study concludes that overconfidence bias to have positive significant influence on entrepreneurial decision making process in Maiduguri, this is

because entrepreneurs' are confidence of trading more in the market by selling more products to customers because it believe that for sure there will be positive outcome in the near future, entrepreneurs' also place an excessive amount of faith on one's own expertise and abilities and exaggerated belief that they are better than others and as such are confidence to succeed in business than other business owners and entrepreneurs' have excessive faith that they know the truth. This implied that the survival, expansion, and profitability of entrepreneurial businesses may be directly related to minimizing the negative consequences of this bias and maximizing its beneficial aspects.

The likelihood that entrepreneurial enterprises will survive and compete will increase by recognizing and improving the positive consequences of this bias (for instance, increasing the speed and tempo of decision-making under uncertain conditions). On the other hand, it is crucial to recognize and minimize the negative impacts of this bias that could result in mistakes in entrepreneurs' judgments and consequent business failure. Although it will still be quite challenging for entrepreneurs to reduce biases in their decision-making processes despite the aforementioned ideas. In reality, business owners frequently aren't aware that they have prejudices. The solution to dealing with individual-level biases may therefore lie in altering group decision-making processes.

Similar to this, business owners would need to ask for and heed outsiders' advice. Entrepreneurs need to take action to reduce any bad effects resulting from their prejudices even if they do not control their biases. For instance, if they put in place procedures to improve learning, the enterprise will be able to adapt to developing realities and minimize damage brought on by initial misconceptions. Training of unrealistic optimists should stimulate the motivation to manage finances, to take advice, not to leave matters up to chance, and to understand the value of healthy distrust in oneself and others in non-routine situations. Training of distrusting entrepreneurs should aim at building trust in others in routine situations. The results of the study would also be relevant to providers of finance, venture capitalists, business agents and banks might find it useful to include the psychological characteristics of the business owners not only in their risk assessments but also when developing support services for entrepreneurs.

The results of the study would also be relevant to policy makers for more effective economic and financial policies; this research provides policymakers with insights into the transmission mechanisms of monetary policy within the state. This knowledge will assist policymakers in taking into account global economic considerations when drafting monetary and fiscal policies, which will be necessary for executing monetary policies that support larger economic goals while limiting unexpected repercussions in financial markets. The research findings can be utilized by policy makers to refine regulatory actions. In order to preserve SMEs owners' protection and market stability, policymakers can foresee potential behavioural biases that cause weaknesses in the market, it can put regulations in place to lessen these biases, systemic risks and stop excessive market volatility. This study contributes to the literature through adding knowledge to the existing literature by providing more insight on overconfidence bias theory that emphasize the vital role this theory plays in explaining overconfidence bias and entrepreneur decision making process that is to understand the dynamics in businesses.

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