

MODERATION EFFECTS OF ENTREPRENEURIAL SELF-EFFICACY IN
RELATION BETWEEN ENTREPRENEURIAL ALERTNESS AND
ENTREPRENEURIAL COMMITMENT



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I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

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ABSTRACT

Entrepreneurship has been a driving force for the economy of countries, especially developing countries. Today, there are many studies in the field of entrepreneurship. While some of the research is on startups, most research is on entrepreneurs. When the studies on entrepreneurs are examined, the personality and motivation factors of entrepreneurship and the state of entrepreneurship areas are in the interest of many researchers. The concepts of entrepreneurial self-efficacy, entrepreneurial alertness, and entrepreneurial commitment are areas that need further research. In this study, the relationship between entrepreneurial alertness and entrepreneurial commitment was investigated and the moderator effect of entrepreneurial self-efficacy on this relationship was evaluated. 229 entrepreneurs who have an account in StartupMarket, StartupWatch, and StartupCentrum and who have a startup in one of the 22 selected Techno parks in Turkey were included in the research. Demographic Information Form, General Self-efficacy Scale, Entrepreneurial Alertness Scale, and Entrepreneurial Commitment Scale were administered to the participants. According to the findings obtained from the research, entrepreneurial alertness has a positive effect on entrepreneurial commitment, but self-efficacy has no moderator role.

Keywords: Entrepreneurial Self-Efficacy, Entrepreneurial Alertness, Entrepreneurial Commitment

ÖZET

Girişimcilik bir ülkenin özellikle de geliştirmekte olan ülkelerin ekonomisi için itici bir güç olmuştur. Günümüzde girişimcilik alanında yapılan birçok çalışma vardır. Araştırmaların bir kısmı girişimler üzerine olsa da çoğu araştırma girişimciler üzerinedir. Girişimciler üzerinde yapılan çalışmalar incelendiğinde, girişimciliğin kişiliği ve motivasyon faktörü ile girişimcilik alanlarının durumu bir çok araştırmacının ilgi alanıdır. Girişimsel öz yeterlilik, girişimsel uyanıklık ve girişimsel bağlılık kavramları daha fazla araştırmaya ihtiyaç duyulan alanlardandır. Bu açıdan hazırlanan çalışmada girişimsel uyanıklık ile girişimsel bağlılık arasındaki ilişki araştırılmış ve bu ilişkide girişimsel öz yeterliliğin düzenleyici etkisi değerlendirilmiştir. Araştırmaya; StartupMarket, StartupWatch ve StartupCentrum'da hesabı bulunan, Türkiye'de seçilmiş 22 Teknopark'tan birinde girişimi bulunan 229 girişimci dâhil edilmiştir. Katılımcılara; Demografik Bilgi Formu, Genel Öz-yeterlilik Ölçeği, Girişimsel Uyanıklık Ölçeği ve Girişimsel Bağlılık Ölçeği uygulanmıştır. Araştırmadan elde edilen bulgulara göre girişimsel uyanıklığın girişimsel bağlılığı üzerinde pozitif etkisi bulunmaktadır fakat öz yeterliliğin düzenleyici rolü bulunmamaktadır.

Anahtar Kelimeler: Girişimsel Öz-Yeterlilik, Girişimsel Uyanıklık, Girişimsel Bağlılık

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TABLE OF CONTENTS

	Page
ABSTRACT.....	ii
ÖZET	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS.....	v
LIST OF TABLES.....	viii
LIST OF FIGURES	ix
1. INTRODUCTION	1
1.1. Purpose of the Study	2
1.2. Importance of the Study	3
2. LITERATURE REVIEW	4
2.1. Concepts of Entrepreneurship	4
2.1.1. Entrepreneurship	4
2.1.2 Entrepreneur.....	6
2.2. Self-Efficacy.....	7
2.2.1. Definition of Self-Efficacy	7
2.2.2. The Sources of Self-Efficacy	10
2.2.3. The Effect of Self-Efficacy on the Individual.....	16
2.2.4. Entrepreneurial Self-Efficacy	19
2.3. Entrepreneurial Opportunity	21
2.3.1. Definition of Entrepreneurial Opportunity	21

2.3.2. Entrepreneurial Opportunity Recognition.....	24
2.3.3. Entrepreneurial Alertness.....	26
2.3.4. Dimension of Entrepreneurial Alertness.....	28
2.4. Entrepreneurial Commitment.....	29
2.4.1. Definition of Entrepreneurial Commitment.....	30
2.4.2. Dimension of Entrepreneurial Commitment.....	31
3. RESEARCH METHODOLOGY	35
3.1. Research Design.....	35
3.2. Research Model.....	35
3.3. Sampling.....	36
3.4. Data Collection Method	37
3.4.1. Demographics	37
3.4.2. General Self-Efficacy Scale	37
3.4.3. Entrepreneurial Alertness Scale	37
3.4.4. Entrepreneurial Commitment Scale.....	38
4. RESEARCH FINDINGS	39
4.1. Data Analysis	39
4.2. Demographic Structures of the Participants.....	43
4.3. Factor Analyses.....	46
4.3.1. Entrepreneurial Self-Efficacy Scale Factor Analysis	46
4.3.2. Entrepreneurial Alertness Scale Factor Analysis.....	48

4.3.3. Entrepreneurial Commitment Scale Factor Analysis.....	50
4.4. Reliability Analysis.....	51
4.5. Hypothesis Testing.....	53
4.5.1. Correlations.....	54
4.5.2. Regression Analyses	56
4.6. Differentiation of Variables According to Gender, Marital Status, Age and Education Level.....	62
4.7. Research Model and Hypothesis with Dimension	67
4.8. Final Status of the Research	68
5. CONCLUSION.....	69
5.1. Implications of the Study	72
5.2. Limitation and Further Research.....	74
REFERENCES	75
APPENDIX A: SURVEY FORM	88
APPENDIX B: SURVEY FORM.....	94

LIST OF TABLES

	Page
Table 1. Normality Test Results	39
Table 2. Socio-Demographic Features of Participants	43
Table 3. Socio-Demographic Features of Participants	44
Table 4. Entrepreneurial Self-Efficacy Scale Exploratory Factor Analysis	46
Table 5. Entrepreneurial Alertness Scale Exploratory Factor Analysis	48
Table 6. Entrepreneurial Commitment Scale Exploratory Factor Analysis	50
Table 7. Reliability Coefficients of Scales	52
Table 8. Correlation Analyzes for Dimensions.....	54
Table 9. Testing H1.....	56
Table 10. Testing H1a.....	57
Table 11. Testing H1b.....	58
Table 12. Testing H2.....	59
Table 13. Testing H2a.....	60
Table 14. Testing H2b.....	61
Table 15. Differentiation of Variables According to Gender	62
Table 16. Differentiation of Variables According to Marital Status	63
Table 17. Differentiation of Variables According to Age	64
Table 18. Differentiation of Variables According to Education.....	65
Table 19. Results of the Research Hypotheses	68

LIST OF FIGURES

	Page
Figure 1. Research Model	35
Figure 2. Moderator Model.....	42
Figure 3. Proposed Research Model with Dimension	53
Figure 4. Revised Research Model with Dimension	67



1. INTRODUCTION

Entrepreneurship drives and leads economic development worldwide through the idea of innovatively transforming products and services (Mohamad, 2017). Entrepreneurship has been a continually expanding topic that has captured the interest of researchers and administrations in the last century as a result of worldwide competitiveness, technological changes, and developments in the market economy (Bilgiseven, 2020). Therefore, it has also increased the interest in the determinants of entrepreneurship.

As per some researchers the act of entrepreneurship involves the creation and implementation of novel ideas with the aim of generating economic benefits via innovations (Jones & Tilley, 2003). However, Entrepreneurship comprises the dual processes of innovating and identifying opportunities in the market, with the aim of fostering not only individual prosperity but also the collective welfare of the nations (Çakır, 2015). In other words, entrepreneurs are people who recognize market opportunities and contribute with new ideas or innovations. Entrepreneurs set goals for the success of their startups and must overcome numerous challenges and obstacles on their path towards achieving those goals.

Despite the existence of numerous self-efficacy frameworks documented in scholarly works, there has been a significant increase in emphasis on entrepreneurial self-efficacy in recent academic research. According to Bandura (1997), the basis of the “Social Cognitive Theory” is self-efficacy and individuals' performance is influenced by their perception of self-efficacy. It emphasizes contextual factors in the entrepreneurial process. It is also quite common in the cognitive processes of entrepreneurs prior to establishing a startup.

Nowadays, entrepreneurship is becoming increasingly important, and the number of entrepreneurs is growing by the day. That is why it is critical to comprehend entrepreneurs' cognitive processes, particularly how they discover opportunities. The notion of alertness holds promise in offering a substantial contribution to our comprehension of the genesis and progression of novel ideas (Tang, Kacmar, & Busenitz, 2012). The ability of entrepreneurs to spot opportunities explains how their startup ideas emerge.

Entrepreneurial commitment is the desire of entrepreneurs to keep maintaining their startups (Indrawati, Salim, Djamahir, & Djawahir, 2015). Duckworth (2016) explained that entrepreneurial commitment is a combination of passion and perseverance. Entrepreneurs, who discover the opportunity by using their knowledge, struggle and work hard for their startups. This situation increases entrepreneurs' entrepreneurial commitment. Thus, entrepreneurial alertness affects entrepreneurial commitment, and entrepreneurial self-efficacy has a moderator effect on this relationship.

1.1. Purpose of the Study

The purpose of this study is to explore the effect of entrepreneurial alertness on entrepreneurial commitment, while also examining the moderating role of entrepreneurial self-efficacy in this relationship. The study will present how important entrepreneurial alertness, commitment, and self-efficacy are for entrepreneurs and their startups.

These are relatively new concepts in the entrepreneurship research area, and only a few studies so far have attempted to explain these relationships separately. This

study will provide important insight from individuals in Turkey to fill the existing void in knowledge on this subject matter.

In the research, the differentiation of entrepreneurial alertness, entrepreneurial commitment, and entrepreneurial self-efficacy according to groups that are formed according to sociodemographic characteristics (gender, marital status, age, and education level) is another objective of the research.

1.2. Importance of the Study

Entrepreneurship drives and leads economic development worldwide. Nowadays, entrepreneurship researches focus on a range of factors that encompass various types of precedents. The cognitive factor is one of the most important examples. Entrepreneurial alertness, entrepreneurial commitment, and entrepreneurial self-efficacy are some of the cognitive factors that entrepreneurs must have before establishing their startups. The entrepreneurial commitment is commonly associated with the fact that entrepreneurial alertness and entrepreneurial self-efficacy. Research in the literature reveals results that entrepreneurial alertness increases entrepreneurial commitment. Nevertheless, in the studies that were conducted, the moderation role of entrepreneurial self-efficacy in the relationship between entrepreneurial alertness and entrepreneurial commitment has not been examined. At this point, it is thought that the research findings will fill the gap in the literature. On the other hand, in addition to the suggestions to be made within the framework of the research outputs, the policies that should be produced in order to have entrepreneurs with high entrepreneurial alertness, commitment, and self-efficacy will be introduced. As a result, contributions will be made in the field of entrepreneurship.

2. LITERATURE REVIEW

The literature review of the main concepts will be provided in this part of the study.

2.1. Concepts of Entrepreneurship

2.1.1. Entrepreneurship

The genesis of the notion of entrepreneurship can be attributed to Richard Cantillon, an Irish economist living in France during the 18th century, who initially introduced the term into the economic literature in his work, "Essai sur la nature de commerce en general." This work, which is said to have been authored in 1734 but not published until 1755, approximately two decades after Cantillon's passing, marked the first use of the term in economic discourse. The word "entrepreneurship" is derived from the French word "entreprendre," signifying "to undertake." (Bridge et al., 1998).

When the history of the concept of entrepreneurship is examined, it is discovered that the concept has a relatively recent history. Entrepreneurship has gained an increasing importance with the industrial revolution, on the other hand, it has made important contributions to the reconstruction of the economy (Bilgiseven, 2020).

When the notion of entrepreneurship first started to enter the literature, it was originally defined as attempting a business, establishing a business, and taking risks in this context. It was later expanded to include the activities of introducing ideas, developing them into products and services, and introducing them to the market (Zhao, 2005). Shane (2003) establishes a fundamental perspective on entrepreneurship wherein it is defined as a dynamic process encompassing the

identification, assessment, and utilization of opportunities for introducing innovative products, services, market structures, organizational methodologies, operational procedures, and resources that were previously non-existent. This conceptualization emphasizes the proactive and creative nature of entrepreneurial endeavors, highlighting the role of entrepreneurs in discovering and capitalizing on untapped prospects for value creation and organizational advancement.

Entrepreneurship, in its most restricted definition, encompasses the process of identifying and seizing upon innovative ideas, transforming them into tangible goods and/or services, and subsequently establishing and expanding a venture with the goal of successfully launching the product or service into the market. (Johnson, 2001). According to Global Entrepreneurship Monitor's report, entrepreneurship refers to act or process of establishment a new business (Hill & Sahasranamam, 2022).

Entrepreneurship represents organizational behavior. The essential components of entrepreneurship include innovation, proactivity, and risk-taking. (Miller, 1983). As a result, entrepreneurs discover new inventions, create new ventures, and contribute to their country's economic growth. Individuals need motivation to start a risky business in the name of economic growth (Lundstrom & Stevenson, 2005).

There is no agreement among viewpoints about how to define the concept of entrepreneurship. (Sexton & Bowman, 1986). Many theorists have examined the concepts of entrepreneurship and entrepreneurship from different perspectives, emphasized different aspects, and have made significant contributions to these concepts through their studies. The concepts of entrepreneur and entrepreneurship are

current concepts that have many different dimensions and are constantly developing (Bilgiseven, 2020).

2.1.2 Entrepreneur

Cantillon (1755), who introduced the term "entrepreneurship" to economic literature, posited a definition of entrepreneurship premised on the application of return and risk theory. He prognosticated that entrepreneurs would assume a role whereby they would purchase and sell goods at predetermined prices, in an environment characterized by unpredictable and ambiguous circumstances (Jennings, 1993). Whereas, to be an entrepreneur is to engage in the process of starting and managing a business, which may involve a variety of business activities, including, but not limited to, the exchange of goods and services (Hill & Shay, 2022).

An entrepreneur is a person who creates new ideas and turns them into practice, and while doing all this, he/she puts forth his or her creativity and uses his or her desire and enthusiasm (Kao, 1989). In a broader context, the definition of entrepreneur encompasses many functions such as business ownership, decision-making, leadership, and active participation in company management (Brandstätter, 1997). Seeing and evaluating opportunities, risking resources to take advantage of opportunities, managing the process of converting ideas into investment, and generating value, as a result, are the most important features that give that person the qualification of entrepreneurship and differentiate him or her from other members of the society. An entrepreneur is defined by these characteristics as an innovative, creative, intra-industry and inter-industry organizer, a role model in economic growth (Allen K. , 2006), and a person who can take the risk while doing all these (İrmiş & Barutçu, 2012).

Entrepreneurship can be described as the execution of innovative combinations, and the individuals who are responsible for carrying out such combinations are referred to as entrepreneurs (Schumpeter J. , 1978). Entrepreneurs are subject to a multitude of personal factors that impact their behavior and decision-making processes. These factors are identifying and capitalizing on opportunities, their orientation towards risk-taking, personal ambitions, objectives, and grade of self-confidence, as well as access to resources and including social and family support (Global Entrepreneurship Monitor, 2021).

According to Garland et al. (1984) and Steward et al. (1998), while small business owners were typically more concerned with securing an income to meet their immediate needs than with innovation, entrepreneurs had higher achievement motivation and risk-taking, as well as a proclivity for innovation and change.

Entrepreneurs encounter the difficulty of having to adhere to established norms and standards to gain legitimacy, while simultaneously distinguishing themselves from competitors to secure a strategic edge (Vossen & Ihl, 2020). Accomplished entrepreneurs possess the ability to serve as exemplars within their communities. They also offering guidance and act in a variety of stakeholder roles for other entrepreneurs (Wyrwich et al., 2019).

2.2. Self-Efficacy

2.2.1. Definition of Self-Efficacy

Self-efficacy can be described as an individual's capacity to exhibit a strong sense of confidence in effectively managing and regulating various situations (Bandura, 1995). Self-efficacy is expressed as the abilities that a person has to

activate the motivation, mental resources, and behavioral patterns he or she needs to control the cases that develop in his life (Wood & Bandura, 1989).

Luszczynska et al. (2005) define self-efficacy as the belief held by an individual regarding their personal abilities to tackle difficult and uncertain tasks and to cope with difficulties associated with special needs. In short, self-efficacy can be characterized as an individual's belief in their ability to execute specific tasks and behaviors (Salas & Cannon-Bowers, 2002).

The term self-efficacy comes from Bandura's (1977) social learning theory and refers to a person's confidence in his or her ability to complete a given task. The phenomenon of self-perception, encompassing an individual's subjective assessment of their personal capabilities and inclinations, exerts an impact on the development of intentions (Ryan, 1970). Similarly, self-efficacy influences a person's beliefs about whether or not certain goals are achievable. The self-perception of their personal abilities exerts a significant impact on their decision, decision-making processes, ambitions, level of exertion, and tenacity when faced with adversity (Bandura, 1991). If an individual perceives their capability to perform a particular behavior as inadequate, they will refrain from engaging in that behavior, regardless of any perceived societal expectations for such behavior. Self-efficacy develops gradually through the acquisition of complex cognitive, social, linguistic, and/or physical skills through experience (Bandura, 1982; Gist M. , 1987). Therefore, acquiring skills through previous accomplishments strengthens self-efficacy and contributes to higher aspirations and future performance (Herron & Sapienza, 1992).

Self-efficacy, which refers to an individual's belief in their ability to successfully execute a specific course of action, possesses substantial explanatory

potency with respect to entrepreneurial intention. Underpinned by the notion that an individual's forthcoming efforts can yield greater utility than their previous efforts, and self-efficacy is a crucial determinant of their readiness to engage in such activities (Çetin, 2011).

Self-efficacy basically evaluates three different concepts. The first concept was defined by Bandura (1977) and includes some researchers who think that self-efficacy is task-specific and can only be generalized to other tasks related to that task, only to a limited extent. Second, the concept of self-efficacy varies according to the domain under investigation, and perceptions of managerial self-efficacy are defined in light of this perspective. The final concept is related to the view of general self-efficacy. General self-efficacy is related to all of the challenges that a person may face, and it is emphasized that it has a more stable structure than other types of self-efficacy. Individual self-efficacy in the organizational field is a significant factor that influences organizational processes in a variety of ways, particularly individual performance. Perhaps the most significant effect of self-efficacy; this concept has the potential to explain a person's future job performance even better than his past performance. According to this viewpoint, self-efficacy can be viewed as an explanatory factor for the high performance that individuals should exhibit in their entrepreneurial processes (Çetin, 2011).

Individuals who hold this belief will be able to perform at a high level due to increased assertiveness and perseverance (persistence). (Shepherd & Krueger, 2002). Self-efficacy shows an individual's perception and belief in their ability to perform a specific job or task. When self-efficacy is high, individuals exhibit greater levels of initiative and perseverance, leading to enhanced performance. Conversely, low levels of self-efficacy result in decreased effort and, subsequently, poorer performance.

Notably, individuals with high self-efficacy tend to demonstrate distinct cognitive and behavioral patterns compared to those with low self-efficacy (Bandura, 1986, 1995; Eden, 1992).

2.2.2. The Sources of Self-Efficacy

Individuals develop and strengthen their beliefs about their own efficacy in four ways: (Bandura, 1977; Wood & Bandura, 1989)

1. Mastery Experiences (or Enactive Mastery)
2. Modeling (Observational Learning);
3. Social Persuasion
4. Psychological and Affective States

The integration and assimilation of efficacy information derived from all four of these sources results in an individual's performance judgments (Gist & Mitchell, 1992; Lent & Hackett, 1987). The development of an individual's self-efficacy is subject to various factors, among which includes the individual's evaluation of the presence and accessibility of resources, as well as the personal and situational constraints that may impede future performance. (Ajzen, 1987; Gist & Mitchell, 1992).

2.2.2.1. *Mastery Experiences (or Enactive Mastery)*

"Enactive Mastery Experiences are the most powerful source of a sense of self-efficacy" because they provide the most reliable evidence (Bandura, 1997; Bandura, 1994). Mastery experiences are the type of experience that a person has as a result of his or her activities (Bandura, 1995). The mastery experiences process mentioned is for humans; consists of the steps of experiencing, thinking, and learning.

Positive or negative experiences that a person has gained through trial and error can affect their abilities and beliefs of people about their duties (Bandura, 1977).

According to Tschannen-Moran et al. (1998), the task must be difficult and there must be no intense external assistance. When a person fails to complete a task, she or he can self-efficacy decreases. Constant success at a task builds self-efficacy belief. People become less concerned about minor failures once their self-efficacy beliefs are established.

People who have low self-efficacy can increase their self-efficacy as they achieve certain goals. However, these goals need to be important and achievable. Self-efficacy belief is formed through experiences (Bandura, 1997). Setting small goals with high feasibility and easily achievable goals is the best way to stay motivated. However, it is critical that these small goals are part of a larger, more significant goal. Seeing the successful accomplishment of small goals while pursuing the big goal help in the development of one's self-efficacy (Bandura, 1982). According to Wood and Bandura (1989), when individuals achieve results that are considered successful, their self-confidence will increase and they will be able to manage their failures and negative situations more effectively.

In this context, Bandura posited that in order for individuals to develop a robust sense of self-efficacy, which is derived from the mastery experience, several factors come into play. These factors include the individual's self-knowledge structure, which develops over time through their interaction with their environment, the task's content and level of difficulty, the amount of effort expended to accomplish, and the duration of time spent performing similar tasks. All of these elements

contribute to the development and strengthening of an individual's self-efficacy beliefs (Bandura, 1997).

2.2.2.2. Modeling (Observational Learning)

Another source that determines self-efficacy beliefs is the observation of experiences achieved by others (Bandura, 1994). In other words, the attainment of goals or accomplishments that individuals associate with their own personal attributes, or that are achieved by individuals who share similar characteristics, is another factor that affects the development of self-efficacy beliefs (Ordun, 2005). In terms of role model selection, individuals' taking appropriate role models by making social comparisons brings about the use of effective strategies to manage events (Wood & Bandura, 1989). At the same time, successful models not only enhance individuals' knowledge and understanding but also equip them with valuable skills, techniques and strategies that can be applied in challenging circumstances (Bandura, 1982). In this case, individuals' self-efficacy beliefs are affected (Wood & Bandura, 1989).

The most critical point in which the observed experiences can be the source of the self-efficacy belief is the belief that the person has about the similarity with the person being compared (Bandura, 1997). When people see that the person they choose as a role model is successful, the belief that their individual skills will be sufficient for this job becomes stronger and they make more effort. When a person sees a situation that people similar to him fail, he thinks in that his own skills will be insufficient in this job and makes less effort (Bandura, 1995). In other words, in order for the perceived experiences to effectively demonstrate an individual's self-efficacy belief, it is crucial that the individual perceives themselves as possessing similar characteristics to the model whose accomplishments they are observing. Failure to establish this

perceived similarity between oneself and the model will not result in an impact on the individual's self-efficacy belief, regardless of the model's behaviors or outcomes (Bandura, 1994).

As a result, observing the success of the individual who is taken as a role model affects the observing individual positively and increases his/her belief about his ability to do the job. Observing his/her failure by the observing individual can negatively affect the individual's self-efficacy belief. Although observation is a weaker resource than mastery experiences that help build self-efficacy beliefs, people can be more sensitive to such a source of information when they are unsure of their abilities. In situations where there is no or limited opportunity to experiment, modeling based on observation can become a more important resource for the development of self-efficacy beliefs. Even experienced people with high self-efficacy can increase their self-efficacy even more by learning alternative ways of doing the job through modeling (Strecher et al., 1986).

2.2.2.3. Social Persuasion

Albert Bandura identified verbal persuasion as one of the sources of self-efficacy belief. Verbal or social persuasion refers to the act of convincing individuals that they possess the requisite capability to attain their objectives (Bandura, 1997). In other words, verbal persuasion is the positive feedback and encourages expressed by other individuals regarding the performance of the individuals work (Kotaman, 2008).

It is expected that the positive feedbacks that individuals receive from their work or realistic supports that they can do the given task will cause the individual to be motivated to achieve the job and to spend more effort (Gist M. , 1987; Wood & Bandura, 1989). When a person is led to believe that his/her abilities are sufficient to

perform a task, he/she will exert greater effort and resist failure as much as possible. Social Persuasion method is an important resource in this respect. The individual who achieves success by making more effort as a result of social persuasion, will increase his/her belief in his/her skills one more step through this experience (Bandura, 1995).

When social persuasion is misused or exaggerated, it can increase individuals' self-efficacy perceptions to unrealistic levels and cause a feeling of inadequacy rather than competence in the process. In other words, unrealistic encouragement can cause the individual to be disappointed after his/her effort (Kotaman, 2008). When person persuaded that one's skills are inadequate, one is expected to make no effort or give up quickly in the face of failure (Bandura, 1995). Emphasizing that failures can be eliminated by the person is the power of social persuasion. Similarly, providing positive feedback in positive situations is an important tool for increasing self-efficacy. Some studies have shown that giving feedback to people increases their self-efficacy (Zimmerman, 2000).

The effect of social persuasion depends on the credibility, expertise, competence, and dignity of the persuasion attempter, as well as on the timing of the feedback (Bandura, 1977); (Gist & Mitchell, 1992). Social persuasion can be especially effective when it is emphasized and perceived as persuasive that efforts to achieve goals will bring successful results, rather than compliments on personal characteristics (Hesline & Klehe, 2006).

2.2.2.4. Psychological and Affective States

Physiological and affective states have been posited to play a significant role in the development of self-efficacy beliefs. These states, which include anxiety, stress, exhaustion, and mood, can exert an impact on an individual's sense of self-efficacy

(Pajares, 1997). When the person has a calm mind, self-efficacy belief will increase (Maddux & Kleiman, 2016). Personal skills, interpretation of expected body signals, and emotional state all have an impact on self-efficacy beliefs. It also that what matters is not the sheer intensity of affective and physical reactions, but how they are perceived and interpreted. In cases of physical activity, feeling pain and tiredness may cause him/her to reduce his/her effort. As an affective state, a positive mindset will increase self-efficacy beliefs, while a negative mindset will decrease self-efficacy beliefs (Bandura, 1994).

Individuals evaluate their self-efficacy by relying on information from their physical and psychological states or based on their perceptions (Bandura, 1982). The person's coping with stress and changing the negative mindset will positively affect one's self-efficacy belief. (Bandura, 1994). Because individuals rely on the information they have obtained as a result of their psychological and physical conditions or evaluate their self-efficacy based on their perceptions (Bandura, 1982). State such as personality and mood can increase or decrease person's self-efficacy by stimulating the individual in the process of performing a task (Bandura, 1977). State such as personality and mood can increase or decrease the level of self-efficacy by stimulating the individual in the process of performing a task (Gist & Mitchell, 1992).

It is important for individuals to strengthen their self-efficacy beliefs, to control and improve their physical and affective state, and to take steps to reduce their stress levels (Gist M., 1987; Wood & Bandura, 1989). To summarize, people can boost their sense of self-efficacy by learning how to reduce stress and alter their frame of mind when faced with difficulties or difficult tasks (Bandura, 1994).

2.2.3. The Effect of Self-Efficacy on the Individual

Self-efficacy beliefs affect individual's thought processes, decision-making processes, and affective. These effects are classified under four main headings (Bandura, 1994).

- Cognitive Processes
- Motivation Processes
- Affective Processes
- Selection Processes

2.2.3.1. Effect on Cognitive Process

Individuals who have high perceived self-efficacy imagine the success of their work and the consequences. Individuals beliefs in own self-efficacy shape the type of anticipatory scenarios they create and rehearse. Thinking about anticipatory imaginary scenarios guides people in their work, helps them find solutions, improves their performance, makes them aware of potential problems, and prepares them for these problems. Individuals who doubt their own efficacy have a negative impact on their performance by imagining failure in their minds. The individual who thinks that he/she will not get positive results will make less effort. Imagining failure causes the individual to focus on failure, exaggerating the difficulty of the task s/he is facing, focusing on the obstacles and weakening his/her belief in his/her own abilities. The thinking process plays an important role in predicting future events and generating possible solutions for people. For this reason, the cognitive process of individuals is affected by the person's self-efficacy belief (Bandura, 1994).

2.2.3.2. Effect on Motivation Process

Individuals who have high self-efficacy beliefs are highly motivated to overcome negativities while making more effort to fulfill the tasks assigned to them (Öncü, 2012). There are three different types of motivation related to self-efficacy belief.

- Causal Attributions
- Outcome Expectancies
- Cognized Goals

Causal Attributions: In the causal attributions dimension, the person associates failure and success with their own skills. People who believe that they are qualified in terms of their personal characteristics think that they do not make enough effort when they are unsuccessful. People who believe that they are not qualified in terms of their personal characteristics think that their skills are insufficient when they encounter an unsuccessful situation (Bandura, 1994).

Outcome Expectancies: According to Bandura (1982), self-efficacy belief and outcome expectancies interact and create different psychological effects on the person. Confident people are expected to have a high self-efficacy belief and a positive outcome expectation. At the same time, this person is prepared to do appropriate action. A person who has negative outcome expectancies and a high self-efficacy belief is expected to take social action, protest, complain, or change his/her environment. A person who has negative outcome expectancies and a low self-efficacy belief is expected to surrender or be disinterested and irrelevant. A person who believes to have low self-efficacy is expected to devalue himself/herself or to be hopeless and dejected.

As long as the person's outcome expectancies is high, the motivation of the person will be high. However, in this case, the person's self-efficacy belief is also effective, although the outcome expectation is high, if the person does not have confidence in his/her skills, s/he may prefer not to make the necessary effort (Bandura, 1994).

Cognized Goals: Personally relevant goals energize and motivate people goals are what people want to do, get, or achieve. Self-efficacy belief enables people to be motivated more easily, while motivation makes people take action and put in more effort (Margolis & McCabe, 2004). When the person strives for a specific goal, personal motivation will also increase. Fulfilling the goals set by himself/herself will also be a reward for the person. In this case, it is critical that the person has a strong sense of self-efficacy. The more confidence in person own skills, the easier it will be for them to motivate himself/herself by setting goals. People who see own low self-efficacy will make less effort (Bandura, 1994).

2.2.3.3. Effect on Affective Process

According to Bandura, people's belief in their ability to cope with negative events determines a person's motivation level and how much stress and depression they will face in these difficult situations. Therefore, perceived self-efficacy affects the anxiety level of the person. The greater a person's confidence in his ability to control undesirable events, the less negative scenario thinking and anxiety there will be. If the person does not believe his control skills, s/he will increase the level of anxiety by creating negative scenarios in own mind (Bandura, 1994).

People who have self-efficacy beliefs look at their futures more constructively, which helps them focus on the future (Epel et al., 1999). People who living in difficult

conditions can be emotionally damaged. Self-efficacy has a helpful effect during the recovery period of people with trauma and similar problems. People who believe that they can recover from their trauma try harder to regain their health. People who have low self-efficacy beliefs accept external influences rather than taking action (Benight & Bandura, 2004).

2.2.3.4. Selection Processes

While people who avoid activities they believe they cannot achieve, they make an effort against activities and situations that they think they can do. The person's knowledge, social environment, and personal characteristics develop and change as a result of this selection process. This affects the person's choices, career and personal development (Bandura, 1994).

The environment in which they live has a great impact on the development of individuals. Individuals are partly a product of their environment in which they live. Individuals' self-efficacy beliefs can affect their activities and preferences for the environment and even shape their lives. Self-efficacy beliefs have the power to affect the lives of individuals through the selection processes (Bandura, 1993).

When people face an uncertain or difficult situation, their self-efficacy beliefs affect their decisions. People are afraid of events that they think are beyond their ability, and this fear may lead them to choose avoidance behavior from that this event. When they believe that they can cope with the event, they take action and make an effort rather than running away (Bandura, 1977).

2.2.4. Entrepreneurial Self-Efficacy

Entrepreneurial self-efficacy is defined in different ways. Baum, Locke and Smith (2001) defines entrepreneurial self-efficacy as individuals' self-confidence in

any job. According to Luthans, Stajkovic and Ibrayeva (2000) is defined entrepreneurial self-efficacy as individuals' cognitive, mental process and behavioral mastery level and they argue that individuals with higher levels of entrepreneurial self-efficacy are better equipped to make quick decisions in challenging situations, resulting in effective and efficient outcomes. Different perspectives on the concept of entrepreneurial self-efficacy emerge from the various definitions put forward in scholarly literature (Yener & Salur, 2017).

Entrepreneurial self-efficacy affects both the personality formation and the role harmony determined according to the norms in the society in which one lives, through normative and descriptive norms (Baughn et al., 2006). Studies conducted in individual and collectivist societies reveal that the perception of entrepreneurial self-efficacy, which is affected by environmental factors, significantly affects entrepreneurial intention and success (Kropp et al., 2008).

The effect of entrepreneurial self-efficacy perception on entrepreneurship is tried to be explained with the social psychology approach. There are two reasons why explaining entrepreneurial self-efficacy with social psychology is need. First, the perception of self-efficacy includes goals, sense of control, and evaluations of the subject. The other is that the perception of self-efficacy emerges from the interaction of the individual with the environment. It is considered necessary to examine the perception of entrepreneurial self-efficacy within the framework of social cognition theory with a social psychological approach for the stated reasons (Yener & Salur, 2017).

The main role of entrepreneurs is to recognize and taking advantage of opportunities by taking advantage of economic disequilibria through identifying or

knowing opportunities. However, the process by which this is accomplished is continuous, unsystematic, and frequently lacks a clear objective (Kirzner, 1979). According to Krueger (2000) states that with the perception of entrepreneurial self-efficacy, individuals compare their own abilities with the factors in the environment. When the individual combines his/her own self-efficacy with the factors which are norms, opportunities, threats of the environment in which s/he lives, the sense of entrepreneurship is formed or not. If it is positive, the individual makes an entrepreneurial decision. Entrepreneurs can only manage this process if they have strong self-efficacy, or the belief that they are capable of successfully performing the roles and tasks of an entrepreneur (Chen et al., 1998)

A general conclusion from research investigating the direct impact of self-efficacy on the development of entrepreneurial intentions suggests that individuals possessing higher levels of entrepreneurial self-efficacy tend to exhibit stronger entrepreneurial intentions and consequently exhibit a greater propensity to perceive themselves as having an actionable idea (Drnovšek et al., 2010). According to Rauch and Frese's (2007), research, the possession of entrepreneurial self-efficacy plays a pivotal role in elevating the probability of starting a business start-up activity. Luthans and Ibrayeva (2006), self-efficacy has a direct and mediating effect on entrepreneur performance.

2.3. Entrepreneurial Opportunity

2.3.1. Definition of Entrepreneurial Opportunity

Entrepreneurship is basically a field that studies the interaction of opportunity and entrepreneurial individual (Venkataraman, 1997). Venkataraman (1997) defines the field of entrepreneurship as “entrepreneurship is a field that examines how and by whom, with what effects, effective opportunities in the emergence of new products

and services are discovered, evaluated and exploited.” (Shane & Venkataraman, 2000)

An entrepreneur is defined as an individual who sees an opportunity and gathers resources to take advantage of it (Christensen et al., 1989). The ability to recognize opportunities represents a crucial attribute of a successful entrepreneur. The identification of opportunities demands imagination and observational awareness, enabling the entrepreneur to contrast the current state of affairs with potential alternatives (Global Entrepreneurship Monitor, 2021).

Opportunities are one of the basic concepts that define the limit and alteration conditions in the field of entrepreneurship. Because there can be no entrepreneurship without an opportunity. A potential entrepreneur may be extremely creative and hardworking, but a crucial precondition for entrepreneurship to take place is the identification and pursuit of a specific opportunity that aligns with the individual's skills and interests. In other words, the recognition and exploitation of a viable opportunity represent a necessary condition for entrepreneurial action to materialize. Therefore, entrepreneurial activities cannot take place in the absence of an identified opportunity. Therefore, opportunities in entrepreneurship research which role played has attracted great attention by scientists in recent years (Short et al., 2010).

The discovery of a business or market opportunity is a necessary condition for entrepreneurship, and while alertness to entrepreneurial opportunities is a personal process, the opportunities themselves are objective (Vodã et al., 2020).

The term opportunity is used in many disciplines to mean “starting a new business” (Hills et al., 1999) & (Long & McMullan, 1984); (Gaglio, 2004). Baron

(2006) defines opportunity as “perceived opportunity to create economic value” that previously has not been exploited and is not currently being exploited by others.

Entrepreneurship opportunities are defined as opportunities that reveal organizational methods that cause new products, services, raw materials and outputs to be sold above the production cost (Casson, 1982).

According to Schumpeter (1934), the essence of opportunity is innovation. Due to this innovation, new combinations (e.g., new products, technologies, etc.) emerge, resulting in a short-term and revolutionary change. Change in technology, political factors, macroeconomic factors and social trends create new knowledge. Entrepreneurs can use these knowledge to figure out how to recombine resources into more valuable forms. Change in the equilibrium price of resources; it allows entrepreneurs to buy resources at a lower price, recombine them into more valuable forms, and sell the output they create in the hope of making a profit (Shane, 2003).

According to Kirzner (1973; 1979), the concepts of "opportunity" and "opportunity for profit" are equivalent. He defines opportunity for profit as taking advantage of the misappropriation of resources in the economy caused by a form of waste in society. Therefore, the entrepreneur evaluate the opportunity by developing a better combination that eliminates the imbalance, thereby making a profit (Chelly, 2011).

Shane and Venkataraman (2000) define the concept of entrepreneurial opportunity as "the ability to produce new goods, new services, new raw materials and new organizational methods and sell them at a higher cost than production".

Sarasvathy et al. the opportunity; It defines it as a set of ideas, beliefs, and activities that enable the creation of goods and services for future use, even though there is no market for them (Sarasvathy et al., 2003).

Based on the definitions in the literature, it can be called that any situation that can be called an opportunity points to a need that is not clearly defined in the market or to resources/capabilities that are not used at all/sufficiently. Opportunities are not fully formed at the beginning and can be elaborated over time as they are developed by the entrepreneur (Ardichvili et al., 2003).

Even if an entrepreneur recognizes good opportunities and possesses the necessary competencies to establish a business, an individual's concern for unsuccessful outcomes may impede their ability to initiate a business (Hill & Shay, 2022). Recognizing good opportunities to start a business may not be enough to entice entrepreneurs to do so if they do not believe they have the necessary skills, knowledge, and experience or if they are afraid that the businesses they start will fail. As a result, self-perceptions and risk attitudes assume significant roles as determinants in the decision to start a new business (Shepherd, 2020). While entrepreneurial intention and perception of opportunities are crucial for aspiring entrepreneurs, successfully translating these intentions and perceptions into a new business requires self-efficacy belief and the ability to confront the potential risk of failure that is naturally associated with entrepreneurship (Global Entrepreneurship Monitor, 2021).

2.3.2. Entrepreneurial Opportunity Recognition

Opportunities are one of the important pillars of the entrepreneurial process. Because the entrepreneurial process encompasses all activities related to the perception of opportunities and the utilization of these perceived opportunities in

creating an organization (Keh et al., 2002). Opportunity recognition can be understood as the process of identifying and evaluating new business ideas as well as assessing the potential market and technological feasibility. This entails identifying market gaps or unmet needs as well as emerging technologies that can be used to meet these needs. Successful opportunity recognition involves a deep understanding of market dynamics and technological trends and the ability to synthesize this information to identify promising business opportunities (Ozgen, 2003). In this context, the entrepreneurial process is the creation of a new organization following an opportunity (Kuratko et al., 1997).

Ardichvili and Cardozo (2000) identify the main factors that lead entrepreneurial opportunity recognition.

- Entrepreneurial alertness
- Information asymmetry and prior knowledge
- Discovery versus purposeful search.
- Networking versus solo entrepreneurship
- Creativity

Later, these factors were updated as follows (Ardichvili et al., 2003).

- entrepreneurial alertness;
- information asymmetry and prior knowledge;
- social networks;
- personality traits, including optimism and self-efficacy, and creativity; and
- type of opportunity itself.

According to Ardichvili and Cardozo (2000);

- Entrepreneurial opportunities involve applying existing technology to a new market or industry, rather than offering an entirely new product/service.
- Entrepreneurial opportunities arise through exploration rather than planned (purposive) research.
- Prerequisites for successful opportunity recognition; are a combination of entrepreneurial alertness, access to social networks, and prior knowledge of market and customer problems (prior knowledge may exist as a result of work experience, non-work experience and events or due to relevant to these markets education.).
- Opportunity recognition does not require extraordinary creativity and prior knowledge of the ways to serving markets.

The opportunity development process begins with entrepreneurial alertness. The combination of many factors such as certain personality traits (creativity and optimism), previous knowledge and experience about the identified opportunity, and social networks may increase alertness. In short, the concept of entrepreneurial alertness is at the core of opportunity identification. (Ardichvili et al., 2003).

2.3.3. Entrepreneurial Alertness

The entrepreneurial alertness construct represents a central position in the entrepreneurial process. This construct is an organizational factor that impacts the performance of startups and constitutes a valuable source of competitive advantage (Daniel et al., 2021). The concept of alertness is seen as a concept that has the potential to contribute greatly to the understanding of how entrepreneurs come up with new business ideas (Tang et al., 2012).

Kirzner have the first to use the term "alertness" to describe the entrepreneurial process of opportunity recognition (Ardichvili et al., 2003). According to Kirzner (1973), entrepreneurial alertness is a special state of sensitivity to potentially valuable goals and new accessible resources. Opportunities are objective facts found in the environment and those who have the ability to distinguish useful information from non-useful can identify opportunities (Tang, 2007). Active utilization of entrepreneurial opportunities depends on prior knowledge of the markets, entrepreneur alertness, advanced and active social network, high knowledge about markets and high levels of creativity (Vodã et al., 2020). Alertness is defined as a process and perspective that enables some people to be more aware of changes, shifts, opportunities, and overlooked possibilities (Kirzner, 1997).

Entrepreneurial alertness is defined as a multidimensional construct in theory, including the active process of scanning and searching the environment to identify new and relevant information, the ability to identify and establish connections among disparate pieces of information, and the capacity to evaluate and make judgments about the potential opportunities that are revealed (Stanić, 2020).

The concept of alertness is based on the assumption that entrepreneurs perceive and reason distinctly from other business people, and that these differences lead to the identification of creative business opportunities (Gaglio, 2004). Kaish and Gilad (1991) compared entrepreneurs and managers and found that entrepreneurs differ from managers in terms of time spent searching for information, sources of information used, and attention to risk cues.

On the other hand, Minniti (2004) has explained the interaction between opportunity identification and alertness with information asymmetry. Entrepreneurial

opportunities arise from information asymmetry, and in an environment where information is distributed asymmetrically, the alert individual turns this information advantage into an opportunity.

When faced with uncertainty, some entrepreneurs truly possess asymmetric information, dialectic judgment, keen alertness, or imaginative vision that enables them to manage as probabilistic risk the uncertainty that their rivals eschew (because, to the rivals, the unknowns resolve into nothing more than a mere guessing game) (Trost, 2019).

2.3.4. Dimension of Entrepreneurial Alertness

According to Tang et al. (2012), alertness has three complementary dimensions: alert scanning and search, alert association and connections, and evaluation and judgements.

The dimension of entrepreneurial alertness known as "Scanning and Search" encompasses the entrepreneur's possession of prior knowledge, readiness, and heightened awareness towards emerging opportunities. By engaging in effective scanning and search activities, entrepreneurs are equipped to explore new ideas from diverse perspectives, thereby increasing their knowledge base within the relevant domain (Busenitz, 1996). This dimension facilitates the entrepreneur's ability to identify and capitalize on potential opportunities by actively seeking and assimilating new information.

The second dimension of entrepreneurial alertness referred to as "Association and Connection" involves the process of integrating diverse fragments of information and reconstructing them into coherent alternatives. This dimension encompasses the ability to access new information, exhibit creativity, and engage in logical extensions.

Entrepreneurs gather information and apply it in innovative ways, using their association skills. Through this dimension, entrepreneurs are able to explore multiple options and uncover unique connections. By connecting disparate pieces of information, they develop a holistic understanding and identify previously unnoticed associations (Tang et al., 2012).

The other dimension of entrepreneurial alertness known as "Evaluation and Judgements" involves the entrepreneur's process of assessing and making informed judgments regarding new information and its implications for business opportunities and profit potential. Within this dimension, entrepreneurs evaluate the potential positivity of an opportunity and consider their own willingness to undertake associated risks. Based on these evaluations and judgments, entrepreneurs make decisions regarding whether to pursue the identified opportunity and engage in entrepreneurial action (McMullen & Shepherd, 2006; Tang et al., 2012).

2.4. Entrepreneurial Commitment

According to Allen and Meyer (1990), the use of the term “commitment” to describe very different structures has caused great confusion in the literature.

The psychological mindset of commitment is still being debated across a variety of research domains, including entrepreneurship. Many research have argued on commitment importance in the entrepreneurial process, and it is said to have a direct impact on entrepreneurial performance. Shortly, the importance of commitment in entrepreneurship is widely supported (Tasnim & Singh, 2016).

Allen and Meyer (1990) defined the concept of commitment as a psychological state that enables the individual to be attached to the organization.

Commitment is the strength of an individual's identity in a particular organization. This definition includes three features:

1. An acceptance of a belief and organizational purpose or values,
2. Willingness to strive towards achieving organizational goals,
3. Strong desire to maintain organizational membership (Beugré, 1998).

Commitment drives the entrepreneur to move forward with the business, which enables them to maintain and improve long-term business performance (Man & Lau, 2000). Commitment allows entrepreneurs to be fully committed, determined, and dedicated to their responsibilities and duties while also taking proactive actions (De Tienne & Chandler, 2004). Therefore, commitment can also be conceptualized as "grit," which is a combination of perseverance and passion (Duckworth, 2016). Given the high risk of failure that comes with establishing new startup businesses, entrepreneurs must demonstrate a high level of commitment in order to succeed in the competitive business landscape (Raine & Pandya, 2019).

2.4.1. Definition of Entrepreneurial Commitment

Entrepreneurial commitment often leads to entrepreneurial activities (Erikson, 2002; Vohora, Wright, & Lockett, 2004). Particularly, entrepreneurial commitment is a critical juncture in moving from the opportunity-framing phase to the pre-organization phase (Parente & Feola, 2013). In general, entrepreneurial commitment can be understood as various actions and decisions while establishing startups (Bruyat & Julien, 2001).

The level of commitment demonstrated by an entrepreneur is widely recognized as a critical factor in the transformation of an entrepreneur's entrepreneurial idea into a startup (Parente & Feola, 2013).

Entrepreneurial commitment entails a substantial dedication of various valuable assets such as time, effort, and resources, encompassing financial capital, intellectual capabilities, social connections, and emotional resilience (Fayolle et al., 2011). This commitment plays a pivotal role in shaping the core ideas of an entrepreneur, fostering the emergence of innovative products, recognizing market prospects, establishing robust investor networks, cultivating an adaptive environment, and effectively responding to dynamic market trends (Cardon & Kirk, 2013; Jaeger & Schultz, 2017).

2.4.2. Dimension of Entrepreneurial Commitment

Commitment is a psychological construct that pertains to an individual's emotional response, which is observable through their attitudes, beliefs, and behaviors and can range from a minimum level to a maximum level (Karacan, 2018). Meyer and Allen (1997), who started their research on commitment in the early 1980s, sought to answer the question of what makes some employees in nonprofit organizations so committed to volunteering and how this sense of commitment can be instilled in others.

According to Erikson (2002) entrepreneurial commitment can be conceptualized as the holistic effort of an entrepreneur's emotional, cognitive, and physical resources towards the attainment of the startup's core objectives. Therefore, the entrepreneurial attribute of actively scanning the environment for unexplored opportunities and incessantly pursuing novel ideas holds significant value in creating the commitment of entrepreneurs (Tang, 2008).

According to Mowday et al. (1979), there are three underlying dimensions of commitment:

1. a strong belief in the goals and values of an organization,
2. a willingness to expend significant effort on behalf of the organization,
3. a strong desire or intent to continue working for the organization.

Meyer and Allen's (1991) theoretical framework, the construct of commitment is a multifaceted concept that comprises affective, continuance, and normative commitment components. Specifically, commitment is characterized by emotional attachment and identification with the organization's goals and values (affective), a strong desire to belong in the long term (continuance), and a willingness to expend significant effort (normative) (Meyer & Herscovitch, 2001).

Tang (2008) extended upon the research of Mowday et al.'s (1979) and Meyer & Herscovitch (2001) with a focus on entrepreneurial domain. Specifically entrepreneurial commitment influence the three components of commitment:

Continuance: the entrepreneurs' desire to stay with the new business despite the uncertainties and unpredictability of the start-up process,

Behavioral: willingness of the entrepreneurs to expend in significant effort for the new businesses; and

Affective: entrepreneurs' emotional attachment to, identification with, and involvement in the new ventures.

When the literature is examined, the research "Environmental Munificence for Entrepreneurs: Entrepreneurial Alertness and Commitment" (Tang, 2008) exhibited that entrepreneurial alertness has a significant effect on entrepreneurial commitment. However, the research in Indonesia shows that there is an opposite direction in the relationship between entrepreneurial alertness and commitment (Indrawati et al., 2015).

Erikson (2002) emphasized that an entrepreneur should have entrepreneurial self-efficacy in order to be more alert and sensitive to unexplored opportunities in the environment. Furthermore, according to Luthans and Ibrayeva (2006), self-efficacy has a direct and mediating effect on entrepreneurial performance. However, when the literature is examined, there is no research about the moderation effect of entrepreneurial self-efficacy in relation between entrepreneurial alertness and entrepreneurial commitment.

Based on the literature review provided above, the following hypotheses were developed:

H₁: Entrepreneurial Alertness has positive effect on Entrepreneurial Commitment.

H_{1a}: Association and Connections has positive effect on Continuance.

H_{1b}: Association and Connections has positive effect on Behavioral.

H_{1c}: Association and Connections has positive effect on Affective.

H_{1d}: Scanning and Search has positive effect on Continuance.

H_{1e}: Scanning and Search has positive effect on Behavioral.

H_{1f}: Scanning and Search has positive effect on Affective.

H_{1g}: Evaluation and Judgements has positive effect on Continuance.

H_{1h}: Evaluation and Judgements has positive effect on Behavioral.

H_{1i}: Evaluation and Judgements has positive effect on Affective.

H₂: Entrepreneurial Self-Efficacy moderates the relationship between Entrepreneurial Alertness and Entrepreneurial Commitment.

H_{2a}: Entrepreneurial Self-Efficacy moderates the relationship between Association and Connections and Continuance.

H_{2b}: Entrepreneurial Self-Efficacy moderates the relationship between Association and Connections and Behavioral.

H_{2c}: Entrepreneurial Self-Efficacy moderates the relationship between Association and Connections and Affective.

H_{2d}: Entrepreneurial Self-Efficacy moderates the relationship between Scanning and Search and Continuance.

H_{2e}: Entrepreneurial Self-Efficacy moderates the relationship between Scanning and Search and Behavioral.

H_{2f}: Entrepreneurial Self-Efficacy moderates the relationship between Scanning and Search and Affective.

H_{2g}: Entrepreneurial Self-Efficacy moderates the relationship between Evaluation and Judgement and Continuance.

H_{2h}: Entrepreneurial Self-Efficacy moderates the relationship between Evaluation and Judgement and Behavioral.

H_{2i}: Entrepreneurial Self-Efficacy moderates the relationship between Evaluation and Judgement and Affective.

3. RESEARCH METHODOLOGY

3.1. Research Design

In this thesis it is intended to find out how the entrepreneurial alertness as moderated by entrepreneurial self-efficacy and effected on the entrepreneurial commitment. Our hypothesis are constructed on these three concepts. Our variables are entrepreneurial self-efficacy, entrepreneurial alertness and entrepreneurial commitment. The correlation between these three concepts is analyzed in this research.

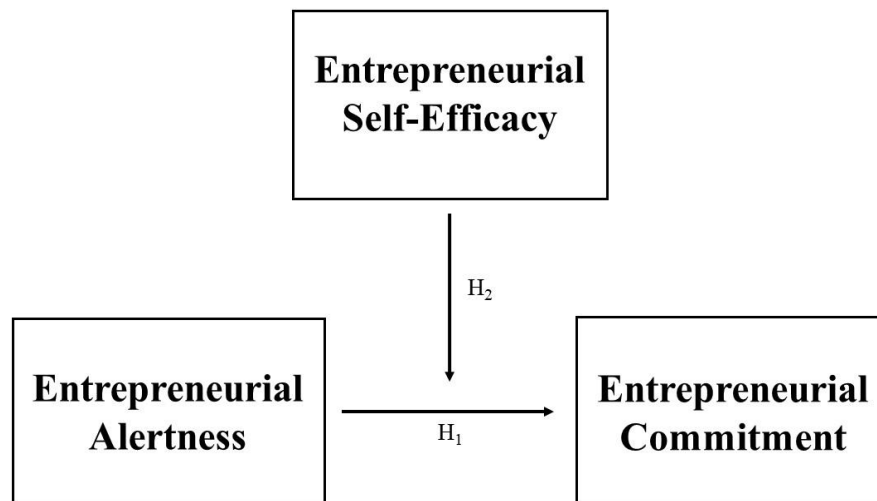
3.2. Research Model

Within the scope of the research, entrepreneurial self-efficacy and entrepreneurial alertness are considered as the independent variables, with entrepreneurial self-efficacy serving as the moderator variable, while entrepreneurial commitment is regarded as the dependent variable. To assess the formulated hypotheses, the following research model is proposed:

The research model is shown in Figure 1.

Figure 1

Research Model



Based on the aforementioned framework, the research hypotheses was formulated as follows:

H₁: Entrepreneurial Alertness has positive effect on Entrepreneurial Commitment.

H₂: Entrepreneurial Self-Efficacy moderates the relationship between Entrepreneurial Alertness and Entrepreneurial Commitment.

3.3. Sampling

The sample of the research consisted of the individuals who have startups in Turkey. The appropriate scales chose and they uploaded to Google Form. The link of the survey was sent entrepreneurs who has a startup in 22 techno parks such as Teknopark İstanbul and Teknopark Ankara by email has a profile on StartupMarket, StartupWatch and StartupCentrum by direct message on website or LinkedIn. It was sent to totally 4179 entrepreneurs and the date collection period was started in March, 2022 and ended in May, 2022. A total of 243 participants who have startups in Turkey were reached by using “convenience sampling” method. While 8 participants has not wanted to participate in the survey, 6 participants did not complete the survey. Based

on the provided data, the research sample size was determined to be 229 participants, indicating the number of individuals included in the study's sample.

3.4. Data Collection Method

The questionnaire was developed and prior to development of scale; all required permission were taken via email by the original developer of the research who developed scales. It consists of four parts; demographics questions, general self-efficacy scale, entrepreneurial alertness scale and entrepreneurial commitment scale. A detailed account of each part is provided under separate subheadings.

3.4.1. Demographics

The demographics part of the questionnaire consisted of 11 items, enabling the collection of data pertaining to various demographic variables such as gender, age, education level, age of startups, and breakeven point.

3.4.2. General Self-Efficacy Scale

The scale has been originally developed by Schwarzer, R., & Jerusalem, M. (1995). Respondents were required to provide their responses on a 5-point Likert-type scale, ranging from 5 (strongly agree) to 1 (strongly disagree). The scale has 10 items and is a uni-dimensional scale.

3.4.3. Entrepreneurial Alertness Scale

The scale has been developed by Tang et al. (2012). Respondents were required to provide their responses on a 5-point Likert-type scale, ranging from 5 (strongly agree) to 1 (strongly disagree). This scale has 13 items and 3 dimension. These dimensions are “scanning and search”, “association and connection”, and “evaluation and judgment”.

3.4.4. Entrepreneurial Commitment Scale

In this part, the Entrepreneurial Commitment developed by Tang (2008). Comprising a total of 8 items, the scale evaluates entrepreneurial commitment using a 5-point Likert-type scale. Within this scale, two items were developed to assess the continuance dimension of commitment, with the first item being reverse coded. Behavioral dimension of commitment was measured with two items, and the affective dimension of commitment was measured with four items.



4. RESEARCH FINDINGS

The findings of the collected data will be used to analyze data.

4.1. Data Analysis

The collected data was analyzed using SPSS version 25.00. Descriptive statistics were employed to assess the levels of entrepreneurial alertness, commitment, and self-efficacy among the study participants. Additionally, the distribution of the data was examined, and the outcomes of the normality test were presented in Table 1 to determine the suitable analysis techniques to be employed in further research.

Table 1

Normality Test Results

Variable	Skewness	Kurtosis
Entrepreneurial Self-Efficacy	0,027	-0,447
I can always manage to solve difficult problems if I try hard enough.	1,927	5,101
If someone opposes me, I can find the means and ways to get what I want.	1,215	2,799
It is easy for me to stick to my aims and accomplish my goals.	1,078	1,562
I am confident that I could deal efficiently with unexpected events.	0,729	0,880
Thanks to my resourcefulness, I know how to handle unforeseen situations.	0,565	0,650
I can solve most problems if I invest the necessary effort.	1,089	1,532
I can remain calm when facing difficulties because I can rely on my coping abilities.	0,929	1,835
When I am confronted with a problem, I can usually find several solutions.	0,236	-0,765
If I am in trouble, I can usually think of a solution	0,134	-1,015
I can usually handle whatever comes my way.	0,572	0,075
Entrepreneurial Alertness	0,063	-0,638
Scanning and Search	0,666	-0,043
I have frequent interactions with others to acquire new information.	1,230	0,870

I always keep an eye out for new business ideas when looking for information.	1,287	1,798
I read news, magazines, or trade publications regularly to acquire new information.	0,999	0,616
I browse the internet every day.	1,790	3,721
I am an avid information seeker.	1,329	1,953
I am always actively looking for new information.	0,987	0,720
Association and Connection	0,399	-0,525
I see links between seemingly unrelated pieces of information.	0,648	-0,064
I am good at “connecting dots.”	0,687	0,184
I often see connections between previously unconnected domains of information.	0,584	0,001
Evaluation and Judgment	0,128	-0,249
I have a gut feeling for potential opportunities.	0,963	0,774
I can distinguish between profitable opportunities and not-so-profitable opportunities.	0,409	-0,187
I have a knack for telling high-value opportunities apart from low-value opportunities.	0,326	-0,124
When facing multiple opportunities, I am able to select the good ones.	0,578	1,008
Entrepreneurial Commitment	0,340	-0,077
Behavioral	-0,709	1,678
If this business idea is not successful, I am willing to go to work for someone else.	0,378	-0,928
Even if this business idea is not successful, I will never go to work for someone else.	-0,119	-1,060
Continuance	0,675	0,515
There is no limit as to how long I would give maximum effort to establish my business.	0,678	-0,375
My personal philosophy is to “do whatever it takes” to establish my own business.	0,671	-0,338
Starting a business is much more desirable than other career opportunities I have.	1,167	0,850
If I start a business, it will help me achieve other important goals in my life.	1,062	1,090
Affective	0,435	-0,930
Overall, my skills and abilities will help me start a business.	0,507	-0,625
I am confident I can put in the effort needed to start a business.	0,640	-0,763

Normal distribution assumption: It is a more accurate approach to evaluate by looking at the values of 'skewness and kurtosis' (Seçer, 2015). In accordance with the research of George and Mallery (2010), if the kurtosis and skewness coefficients are between -2 and +2, the data show the normal distribution. It can be said that this study mostly fulfilled the acceptable range, and the values are normally distributed with just the exception of the three items. According to Kline (2011), it was suggested that the absolute values of Skewness and Kurtosis should not be greater than 3 and 10. Based on this recommendation, the absolute values of the skewness and kurtosis of all the items in this study are within the acceptable range. Therefore, to keep the study intact and due to the relatively high sample size, these three items would be neglected.

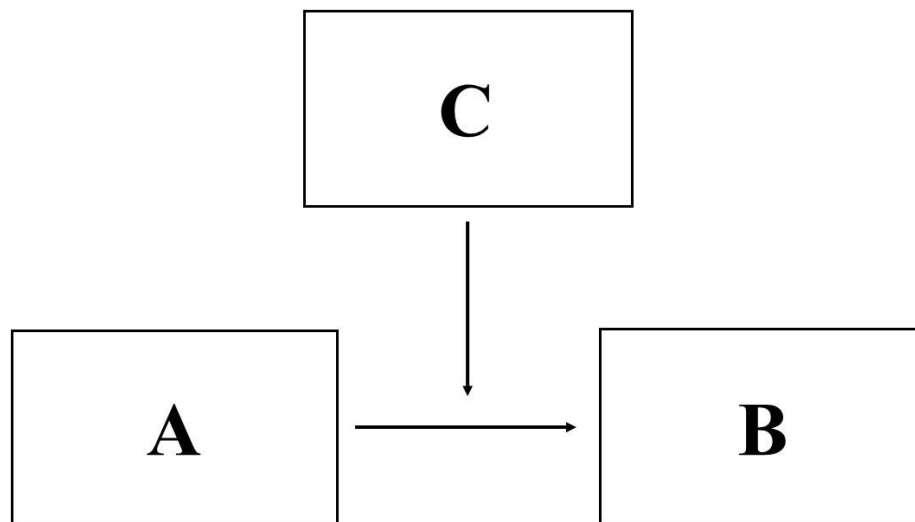
Variables exhibiting a normal distribution were subjected to appropriate statistical tests for analyzing group comparisons. Specifically, for comparing binary groups, the t-test was employed, while the ANOVA was utilized when comparing three or more groups. To examine the relationships among the scale of Entrepreneurial Self-Efficacy, Entrepreneurial Alertness, and Entrepreneurial Commitment, the preferred statistical analysis was the Pearson Correlation Test. Additionally, in order to assess the differences between groups, a "Post Hoc" test was employed.

To conduct a moderation analysis, one would typically use regression analysis techniques to model the relationship between the two variables of interest while also including the moderator variable in the model. Then, Hayes (2017) examined whether the relationship between the two variables changed at different levels of the moderator. As shown in Figure 2. It was explored the concept of moderation, whereby the influence of an independent variable A on a dependent variable B is contingent upon or influenced by another variable C. The presence of a moderator suggests that

the size, sign, or strength of the relationship between A and B can be depended on C. In the specific context of the research, it investigated the moderating role of Self-Efficacy in the relationship between Entrepreneurial Alertness and Entrepreneurial Commitment, employing regression analysis to examine this interaction. Throughout the analysis, a significance level of $p < 0.05$ is utilized to assess statistical significance of the obtained results.

Figure 2

Moderator Model (Hayes, 2017).



Finally, difference tests were employed to assess the association between the research variables and descriptive variables. Moreover, these tests were utilized to compare the values derived from the data measurement tools with the demographic variables.

4.2. Demographic Structures of the Participants

Table 2

Socio-Demographic Features of Participants

Questions	Info	N	%
Gender	Female	50	21,8
	Male	179	78,2
	Total	229	100,0
Marital Status	Married	86	37,6
	Single	143	62,4
	Total	229	100,0
Age	18-24	45	19,7
	25-34	114	49,8
	35+	70	30,6
	Total	229	100,0
Education	HS/AS	24	10,5
	BSc.	126	55,0
	MSc./PhD.	79	34,5
	Total	229	100,0

Table 2 shows the distribution of socio-demographic characteristics among participants. Specifically, 78.2% of the individuals in the study are male, while 21.8% are female. Furthermore, 37.6% of the participants are identified as married, whereas the remaining 62.4% are categorized as single. The age level of 229 participants, 49.8% participants are between 25-34 years- old. Of the 229 participants, 30.6% are between more than 35 years- old. In addition, 55.0% of the participants are Bachelor' Degree, 34.5% are Master's and Doctoral Degrees.

Table 3*Socio-Demographic Features of Participants*

Questions	Info	N	%	Questions	Info	N	%
Work Experience	No Work Experience	11	4,8	Total Employees	1-4	141	61,6
	Internship	13	5,7		5-24	82	35,8
	Less than 5 years	63	27,5		25-49	5	2,2
	Between 5-10 years	51	22,3		50-100	1	,4
	More than 10 years	91	39,7		Total	229	100,0
	Total	229	100,0				
Age of Startups	Between 6 months - 1 years	83	36,2	Breakeven	Yes	82	35,8
	Between 1-2 years	69	30,1		No	147	64,2
	More than 2 years	77	33,6		Total	229	100,0
	Total	229	100,0				
Breakeven Time	Less than 1 years	57	24,9				
	Between 1-2 years	12	5,2				
	Between 2-3 years	6	2,6				
	Between 3-5 years	7	3,1				
	No	147	64,2				
	Total	229	100,0				
Business Sector	Software	58	25,3				
	Health	30	13,1				
	Service	23	10,0				
	Game	16	7,0				

Marketing	11	4,8
Technology	9	3,9
Financial	10	4,4
Education	10	4,4
Market Place	9	3,9
Tourism	8	3,5
Proptech	8	3,5
Agriculture	7	3,1
Defence	6	2,6
Energy	5	2,2
Others	19	8,3
Total	229	100,0

According to the socio-demographic features of participants table, 39.7% of participants have more than 10 years and 27.5% of participants have less than 5 years work experience. 33.6% of participants have startups which are more than 2 years old, and 36.2% of participants have startups which are between 6 month - 1 years-old. 64.2% of the 229 participants could not reach the breakeven point. 61.6% of entrepreneurs have between 1-4, and 35.8% of entrepreneurs have between 5-24 employees. While 25.3% of startups work in the software sector, 13.1% of startups work in the health sector.

4.3. Factor Analyses

Within the research, an exploratory factor analysis was implemented to analyze the underlying factors of the scales utilized. Results are given in subtitles.

4.3.1. Entrepreneurial Self-Efficacy Scale Factor Analysis

Table 4

Entrepreneurial Self-Efficacy Scale Exploratory Factor Analysis

Item No	Item	Factor Loading	Eigenvalues	Factor	Label
ESE5	Thanks to my resourcefulness, I know how to handle unforeseen situations.	,768	3,881	Entrepreneurial Self-Efficacy %38,8	
ESE4	I am confident that I could deal efficiently with unexpected events.	,677			
ESE9	If I am in trouble, I can usually think of a solution.	,669			
ESE10	I can usually handle whatever comes my way.	,658			
ESE8	When I am confronted with a problem, I can usually find several solutions.	,656			
ESE6	I can solve most problems if I invest the necessary effort.	,614			
ESE2	If someone opposes me, I can find the means and ways to get what I want.	,581			
ESE7	I can remain calm when facing difficulties because I can rely on my coping abilities.	,534			
ESE3	It is easy for me to stick to my aims and accomplish my goals.	,518			
ESE1	I can always manage to solve difficult problems if I try hard enough.	,510			
% of variance: % 38,88; KMO: ,838; x ² :606,435 s.d.:45, p<0.05					

In conducting the exploratory factor analysis on the data obtained from the Entrepreneurial Self-Efficacy Scale, factors were identified based on the criterion of eigenvalues exceeding 1.00. The factor load value of the items belonging to these factors should be 0.45 or higher, however, this value can be as low as 0.30 (Büyüköztürk, 2010). The analysis incorporated items with factor loadings exceeding 0.50, as well as considering the difference between factor loadings when an item loaded onto multiple sub-factors. Subsequently, it was determined that none of the variables displayed a common variance loading below 0.30. Furthermore, a subsequent examination revealed that there were no items with a difference of less than 0.1 in the factor loadings when an item loaded onto multiple sub-factors. 10 items were collected under a single factor and explained 38.88% of the total variance. Considering the previous studies on the subject, it was named as "Entrepreneurial Self-Efficacy" scale.

Based on the results obtained from the principal components analysis conducted on the responses to the "Entrepreneurial Self-Efficacy" questionnaire, it was determined that the sample size met the required adequacy criteria, as evidenced by a KMO measure of 0.838. Furthermore, the significance of the Bartlett's Sphericity test ($X^2=606.435$; $p < 0.05$) further supports the appropriateness of the data for exploratory factor analysis (Çakır, 2014). With due consideration to these findings, Table 4 provides an overview of the outcomes derived from the exploratory factor analysis performed on the Entrepreneurial Self-Efficacy Scale.

4.3.2. Entrepreneurial Alertness Scale Factor Analysis

Table 5

Entrepreneurial Alertness Scale Exploratory Factor Analysis

Item No	Item	Factor Loading	Eigenvalues	Factor Label
EA9	I often see connections between previously unconnected domains of information.	,859	3,886	Association and Connection %32,38
EA7	I see links between seemingly unrelated pieces of information.	,840		
EA8	I am good at “connecting dots.”	,823		
EA3	I read news, magazines, or trade publications regularly to acquire new information.	,798	1,659	Scanning and Search %13,82
EA6	I am always actively looking for new information.	,730		
EA5	I am an avid information seeker.	,701		
EA4	I browse the Internet every day.	,538		
EA2	I always keep an eye out for new business ideas when looking for information.	,514		
EA11	I can distinguish between profitable opportunities and not-so-profitable opportunities.	,779	1,418	Evaluation and Judgment %11,815
EA12	I have a knack for telling high-value opportunities apart from low-value opportunities.	,752		
EA13	When facing multiple opportunities, I am able to select the good ones.	,601		
EA10	I have a gut feeling for potential opportunities.	,569		
% of variance: % 58,022; KMO: ,760; x ² :892,682 s.d.:66, p<0.05				

In the exploratory factor analysis conducted on the data obtained from the questions in the Entrepreneurial Alertness Scale, factors were identified based on the criterion of eigenvalues exceeding 1.00. Moreover, the factor loadings of items associated with these factors were expected to be 0.45 or higher, although a lower

threshold of 0.30 was also considered acceptable (Büyüköztürk, 2010). Items with factor loadings above 0.50, as well as those exhibiting notable difference in factor loadings across multiple sub-factors, were included in the analysis. Notably, no expressions with a standardized variance load below 0.30 were identified. Afterward, the item (EA: 1. I have frequent interactions with others to acquire new information.) with a difference of less than 0.1 in the factor loadings of an item on more than one sub-factor was excluded from the analysis. The remaining 12 items were grouped under 3 dimensions and explained 58,022% of the total variance. Considering the previous studies on the subject, the sub-dimensions of the Entrepreneurial Alertness Scale were named "Scanning and Search", "Evaluation and judgment", and "Association and Connection".

Based on the results obtained from the principal components analysis conducted on the responses to the "Entrepreneurial Alertness" questionnaire, it was determined that the sample size met the required adequacy criteria, as evidenced by a KMO measure of 0.760. Furthermore, the significance of the Bartlett's Sphericity test ($\chi^2=892,682$; $p < 0.05$) further supports the appropriateness of the data for exploratory factor analysis (Çakır, 2014). With due consideration to these findings, Table 5 provides an overview of the outcomes derived from the exploratory factor analysis performed on the Entrepreneurial Alertness Scale.

4.3.3. Entrepreneurial Commitment Scale Factor Analysis

Table 6

Entrepreneurial Commitment Scale Exploratory Factor Analysis

Item No	Item	Factor Loading	Eigenvalues	Factor Label
EC4	My personal philosophy is to “do whatever it takes” to establish my own business.	,919	3,228	Continuance %40,35
EC6	If I start a business, it will help me achieve other important goals in my life.	,765		
EC5	Starting a business is much more desirable than other career opportunities I have.	,716		
EC3	There is no limit as to how long I would give maximum effort to establish my business.	,478		
EC1	If this business idea is not successful, I am willing to go to work for someone else.	,904	1,313	Behavioral %16,41
EC2	Even if this business idea is not successful, I will never go to work for someone else.	,784		
EC8	I am confident I can put in the effort needed to start a business.	,902	1,011	Affective 12,43
EC7	Overall, my skills and abilities will help me start a business.	,842		
% of variance: % 69,19; KMO: ,763; χ^2 :509,851 s.d:28, p<0.05				

Given that the exploratory factor analysis was conducted on the data derived from the Entrepreneurial Commitment Scale, several criteria were considered for factor inclusion. Specifically, factors with eigenvalues exceeding 1.00 and factor loadings of 0.45 or higher for the associated items were acceptable, although a lower threshold of 0.30 was also considered (Büyüköztürk, 2010). Furthermore, items with factor loadings exceeding 0.45 and discrepancies in factor loads among items loading onto multiple sub-factors were included in the analysis. The examination revealed that

the common variance load fell below 0.30, and the difference between factor loads did not drop below 0.1. These findings suggest the robustness and reliability of the factor structure obtained from the analysis. 8 items were grouped under 3 dimensions and explained 69.19% of the total variance. Considering the previous studies on the subject, the sub-dimensions of the Entrepreneurial Commitment Scale were named “Continuance”, “Behavioral” and “Affective”.

Based on the results obtained from the principal components analysis conducted on the responses to the "Entrepreneurial Commitment" questionnaire, it was determined that the sample size met the required adequacy criteria, as evidenced by a KMO measure of 0.763. Furthermore, the significance of the Bartlett's Sphericity test ($X^2=509.851$; $p < 0.05$) further supports the appropriateness of the data for exploratory factor analysis (Çakır, 2014). With due consideration to these findings, Table 6 provides an overview of the outcomes derived from the exploratory factor analysis performed on the Entrepreneurial Commitment Scale.

4.4. Reliability Analysis

Within this section, an assessment of internal consistency was carried out for the Entrepreneurial Alertness Scale, the instrument of data collection, as well as for the Entrepreneurial Commitment and Entrepreneurial Self-Efficacy Scales. The evaluation criteria for Cronbach's Alpha values in this analysis are outlined as follows; α values are:

$0,00 \leq \alpha < 0,40$	Unreliable
$0,40 \leq \alpha < 0,60$	Low Reliability
$0,60 \leq \alpha < 0,80$	Moderate Reliable
$0,80 \leq \alpha \leq 1,00$	High Reliability (Özdamar, 2014).

Table 7*Reliability Coefficients of Scales*

Scales	Cronbach's Alpha	Number of Questions
Entrepreneurial Self-Efficacy	,812	10
Entrepreneurial Alertness	,793	12
Association and Connection	,829	3
Scanning and Search	,736	5
Evaluation and Judgment	,699	4
Entrepreneurial Commitment	,710	8
Continuance	,760	4
Behavioral	,652	2
Affective	,738	2

The Entrepreneurial Alertness Scale, the Entrepreneurial Self-Efficacy Scale, and the Entrepreneurial Commitment Scale, was assessed through the calculation of Cronbach's Alpha coefficients. The obtained Cronbach's Alpha value for the Entrepreneurial Alertness Scale was 0.793, indicating a satisfactory level of internal consistency. Similarly, the Entrepreneurial Self-Efficacy Scale demonstrated good reliability with a Cronbach's Alpha value of 0.812. The Cronbach's Alpha coefficient for the Entrepreneurial Commitment Scale was 0.710, suggesting an acceptable level of internal consistency. These high Cronbach's Alpha values attest to the reliability of the scales and confirm their suitability for use in the subsequent analysis.

The reliability of the sub-dimensions within the Entrepreneurial Alertness Scale was assessed using Cronbach's Alpha coefficients. The association and connection sub-dimension exhibited a Cronbach's Alpha value of 0.829, indicating a high level of internal consistency. Similarly, the scanning and search sub-dimension

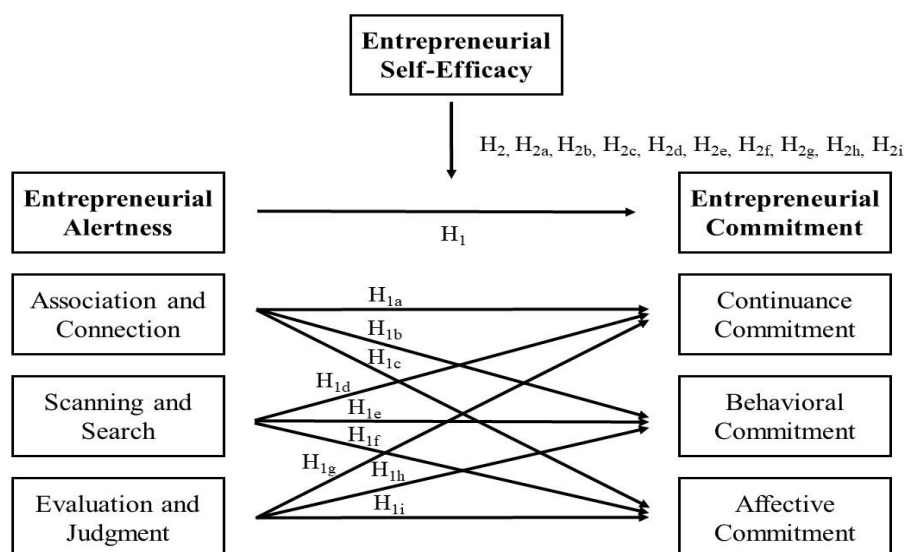
demonstrated satisfactory reliability with a Cronbach's Alpha value of 0.736. The evaluation and judgment sub-dimension yielded a Cronbach's Alpha value of 0.699, suggesting an acceptable level of internal consistency. These robust Cronbach's Alpha values provide evidence for the reliability of the sub-dimensions within the scale, confirming their suitability for utilization in subsequent analyses.

The reliability of the sub-dimensions within the Entrepreneurial Commitment construct was assessed using Cronbach's Alpha coefficients. The Continuance sub-dimension exhibited a Cronbach's Alpha value of 0.760, indicating a satisfactory level of internal consistency. The Behavioral sub-dimension demonstrated a Cronbach's Alpha value of 0.652, suggesting a moderate level of reliability. The Affective sub-dimension yielded a Cronbach's Alpha value of 0.738, indicating a good level of internal consistency. These Cronbach's Alpha values support the reliability of the sub-dimensions within the Entrepreneurial Commitment construct, confirming their suitability for utilization in subsequent analyses.

4.5. Hypothesis Testing

Figure 3

Proposed Research Model with Dimension



In this part of this study, it will be tested using correlation analysis and regression analyses. Results are given in subtitles.

4.5.1. Correlations

In this part of the study, the association between Entrepreneurial Alertness, Entrepreneurial Commitment, and Entrepreneurial Self-Efficacy was investigated using the parametric test method of "Pearson Correlation Analysis." The statistical significance of the relationships was assessed at a significance level of $p < 0.05$. The evaluation criteria for the correlation coefficient are as follows;

“If $0.00 = r$, there is no correlation”

“If $0.00 < r < 0.29$, there is a low level of correlation.”

“If $0.30 < r < 0.69$, there is a moderate correlation.”

“If $0.70 < r < 0.99$, there is a high level of correlation.”

“If $1.00 = r$, there is a perfect correlation” (Köklü et al., 2006).

Table 8

Correlation Analyzes for Dimensions

		1.	2.	3.	4.	5.	6.	7.	8.	9.
1.Entrepreneurial Self-Efficacy	r	1	,510	,475	,254	,461	,451	,382	,106	,543
	p		,000	,000	,000	,000	,000	,000	,109	,000
2.Entrepreneurial Alertness	r		1	,718	,772	,767	,461	,381	,188	,483
	p			,000	,000	,000	,000	,000	,004	,000
3.Association and Connection	r			1	,353	,409	,299	,250	,060	,387
	p				,000	,000	,000	,000	,367	,000
4.Scanning and Search	r				1	,308	,330	,290	,129	,303
	P					,000	,000	,000	,051	,000

5.Evaluation and Judgment	r	1 ,404 ,314 ,218 ,417
	P	,000 ,000 ,001 ,000
6.Entrepreneurial Commitment	r	1 ,921 ,497 ,650
	P	,000 ,000 ,000
7.Continuance	r	1 ,194 ,485
	P	,003 ,000
8.Behavioral	r	1 ,138
	P	,036
9.Affective	r	1
	P	

Considering the results of the Pearson Correlation test according to Table 8; a significant and moderate positive correlation was identified among the participants' Entrepreneurial Alertness, Entrepreneurial Self-Efficacy, and Entrepreneurial Commitment dimensions ($p < 0.05$). Furthermore, a statistically significant and moderate positive correlation was observed between the participants' Association and Connection dimension and both the Entrepreneurial Self-Efficacy and Affective dimension ($p < 0.05$). Similarly, a significant and moderate positive correlation was found between the participants' Evaluation and Judgment dimension and both the Entrepreneurial Self-Efficacy and Affective dimension ($p < 0.05$).

4.5.2. Regression Analyses

In this section of the study, an analysis of relationships between a dependent variable and independent variables will be provided.

4.5.2.1 Regression Analysis for the contribution of Entrepreneurial Alertness on Entrepreneurial Commitment

Table 9

Testing H1

	Unstandardized Coefficients		Standardized Coefficients			F	R ²
	B	S. Error	β	t	p		
Constant	,669	,065		10,318	,000		
Entrepreneurial Alertness	,567	,072	,461	7,825	,000	61,225	,212
Dependent Variable: Entrepreneurial Commitment							

* $p < 0.05$

The findings indicate that the proposed model is statistically significant and accounts for 21.2% of the variance in Entrepreneurial Commitment based on Entrepreneurial Alertness ($R^2=.212$; $F(1,227)=161.225$, $p<0.05$). The results reveal a significant and positive predictive relationship between Entrepreneurial Alertness and Entrepreneurial Commitment ($\beta=0.461$, $t=7.825$, $p<0.05$). In other words, higher levels of Entrepreneurial Alertness among the participants in the study group are associated with higher levels of Entrepreneurial Commitment. Furthermore, upon examining the regression equation while controlling for other predictor variables, it is observed that a one-unit increase in Entrepreneurial Alertness corresponds to a .567 increase in Entrepreneurial Commitment (Table 9).

“**H₁**: Entrepreneurial Alertness has positive effect on Entrepreneurial Commitment.” was accepted.

4.5.2.2. Regression Analysis for the contribution of Association and Connection on Affective

Table 10

Testing H1a

	Unstandardized Coefficients		Standardized Coefficients			F	R ²
	B	S. Error	β	t	p		
Constant	,283	,049		5,809	,000	40,093	,150
Association and Connection	,338	,053	,387	6,332	,000		
Dependent Variable: Affective							

* $p < 0.05$

The analysis reveals that the proposed model is statistically significant and accounts for 15.0% of the variance in Affective dimension based on Association and Connection ($R^2=.150$; $F(1.227)=40.093$, $p<0.05$). The results demonstrate a significant and positive predictive relationship between Association and Connection and Affective dimension ($\beta=0.387$, $t=6.332$, $p<0.05$). In other words, higher levels of Association and Connection among the participants in the study group positively impact their Affective levels. Furthermore, upon examining the regression equation while controlling for other predictor variables, it is observed that a one-unit increase in Association and Connection corresponds to a 0.338 increase in Affective dimension (Table 10).

“**H_{1a}**: Association and Connection has positive effect on Affective.” was accepted.

4.5.2.3. Regression Analysis for the contribution of Evaluation and Judgment on Affective

Table 11

Testing H1b

	Unstandardized Coefficients		Standardized Coefficients			F	R ²
	B	S. Error	β	t	p		
Constant	,139	,063		2,201	,029		
Evaluation and Judgment	,360	,052	,417	6,905	,000	47,672	,174
Dependent Variable: Affective							

* $p < 0.05$

The analysis reveals that the proposed model is statistically significant and accounts for 17.4% of the variance in the Affective dimension based on Evaluation and Judgment ($R^2=.174$; $F(1.227)=47.672$, $p<0.05$). The results demonstrate a significant and positive predictive relationship between Evaluation and Judgment and the Affective dimension ($\beta=0.417$, $t=6.332$, $p<0.05$). In other words, higher levels of Evaluation and Judgment among the participants in the study group positively impact their Affective levels. Furthermore, upon examining the regression equation while controlling for other predictor variables, it is observed that a one-unit increase in Evaluation and Judgment corresponds to a 0.360 increase in the Affective dimension (Table 11).

“**H_{1b}**: Evaluation and Judgment has positive effect on Affective.” was accepted.

4.5.2.4. Regression Analysis for the contribution of Entrepreneurial Self-Efficacy on relationship between Entrepreneurial Alertness and Entrepreneurial Commitment

Table 12

Testing H2

	Unstandardized Coefficients		Standardized Coefficients		F	R ²
	B	S. Error	β	t		
Constant	1,110	,033		33,792	,000	
Entrepreneurial Alertness	,163	,034	,314	4,750	,000	
Entrepreneurial Self-Efficacy	,152	,034	,293	4,431	,000	28,578 ,246
Interaction	,011	,029	,022	,394	,694	
Dependent Variable: Entrepreneurial Commitment						

* $p < 0.05$

The moderator role of Entrepreneurial Self-Efficacy was examined by adding the interaction variable (Z Entrepreneurial Alertness x Z Entrepreneurial Self-Efficacy) to the model in Table 12. It is seen that this model is statistically significant, but the interaction variable does not contribute significantly to the model ($t=,394$, $p>0.05$). As a result, it has been evaluated that Entrepreneurial Self-Efficacy has no moderation role.

“**H₂**: Entrepreneurial Self-Efficacy moderates the relationship between Entrepreneurial Alertness and Entrepreneurial Commitment.” was rejected.

4.5.2.5. Regression Analysis for the contribution of Entrepreneurial Self-Efficacy on relationship between Association and Connection and Affective

Table 13

Testing H2a

	Unstandardized Coefficients		Standardized Coefficients		F	R ²
	B	S. Error	β	t		
Constant	,551	,030		18,083	,000	
Association and Connection	,106	,033	,207	3,251	,001	
Entrepreneurial Self-Efficacy	,224	,032	,436	6,960	,000	37,923578 ,336
Interaction	-,066	,026	-,142	-2,533	,012	
Dependent Variable: Affective						

***p<0.05**

The moderator role of Entrepreneurial Self-Efficacy was examined by adding the interaction variable (Z Association and Connection x Z Entrepreneurial Self-Efficacy) to the model in Table 13. It is seen that this model is statistically significant with the interaction variable has a significant contribution to the model created ($p=0.12<0.05$). As a result, it has been evaluated that Entrepreneurial Self-Efficacy has a moderation role.

“**H_{2a}**: Entrepreneurial Self-Efficacy moderates the relationship between Association and Connection and Affective.” was accepted.

4.5.2.6. Regression Analysis for the contribution of Entrepreneurial Self-Efficacy on relationship between Evaluation and Judgment and Affective

Table 14

Testing H2b

	Unstandardized Coefficients		Standardized Coefficients		F	R ²
	B	S. Error	β	t		
Constant	,495	,030		16,508	,000	
Evaluation and Judgment	,111	,031	,215	3,534	,000	
Entrepreneurial Self-Efficacy	,233	,031	,453	7,435	,000	39,355
Interaction	,055	,025	,118	2,180	,030	,344
Dependent Variable: Affective						

***p<0.05**

The moderator role of Entrepreneurial Self-Efficacy was examined by adding the interaction variable (Z Evaluation and Judgment x Z Entrepreneurial Self-Efficacy) to the model in Table 14. It is seen that this model is statistically significant and the interaction variable has a significant contribution to the model created ($p=0.030<0.05$). As a result, it has been evaluated that Entrepreneurial Self-Efficacy has a moderation role.

“**H_{2b}**: Entrepreneurial Self-Efficacy moderates the relationship between Evaluation and Judgment and Affective.” was accepted.

4.6. Differentiation of Variables According to Gender, Marital Status, Age and Education Level

Table 15

Differentiation of Variables According to Gender

	Gender	N	$\bar{X}$	SS	T	p
Entrepreneurial Self-Efficacy	Female	50	,83	,43	,971	,332
	Male	179	,77	,44		
Entrepreneurial Alertness	Female	50	,77	,34	-,372	,710
	Male	179	,80	,44		
Association and Connection	Female	50	,69	,55	-,073	,942
	Male	179	,70	,60		
Scanning and Search	Female	50	,56	,44	-1,165	,245
	Male	179	,65	,53		
Evaluation and Judgment	Female	50	1,10	,51	,514	,608
	Male	179	1,05	,62		
Entrepreneurial Commitment	Female	50	1,19	,50	1,098	,274
	Male	179	1,10	,52		
Continuance	Female	50	1,10	,75	,682	,496
	Male	179	1,01	,77		
Behavioral	Female	50	2,05	,61	1,982	,049
	Male	179	1,84	,67		
Affective	Female	50	,51	,47	-,150	,881
	Male	179	,52	,53		

According to Table 15, participants' gender and Entrepreneurial Alertness and its sub-dimensions; association and connection, scanning and search and evaluation and judgment and Entrepreneurial Commitment scale and its sub-dimensions continuance and affective and Entrepreneurial Self-Efficacy did not differ significantly ($p > 0,05$). Behavioral differs significantly ($p < 0,05$)

In addition, it was determined that the behavioral levels of female participants were higher than male participants, and this was statistically significant.

Table 16

Differentiation of Variables According to Marital Status

	Marital Status	N	$\bar{X}$	SS	T	p
Entrepreneurial Self-Efficacy	Married	86	,83	,41	1,264	,208
	Single	143	,75	,45		
Entrepreneurial Alertness	Married	86	,81	,45	,593	,554
	Single	143	,78	,40		
Association and Connection	Married	86	,70	,55	-,020	,984
	Single	143	,70	,61		
Scanning and Search	Married	86	,62	,57	-,220	,826
	Single	143	,64	,48		
Evaluation and Judgment	Married	86	1,13	,60	1,524	,129
	Single	143	1,01	,59		
Entrepreneurial Commitment	Married	86	1,19	,52	1,783	,076
	Single	143	1,07	,52		
Continuance	Married	86	1,19	,73	2,420	,016
	Single	143	,94	,78		
Behavioral	Married	86	1,83	,72	-1,076	,283
	Single	143	1,92	,63		
Affective	Married	86	,58	,51	1,414	,159
	Single	143	,48	,51		

According to Table 16, participants' marital status and Entrepreneurial Alertness and its sub-dimensions; association and connection, scanning and search and evaluation and judgment and Entrepreneurial Commitment scale and its sub-

dimensions behavioral, affective and Entrepreneurial Self-Efficacy did not differ significantly ($p>0,05$). Continuance differ significantly ($p<0.05$).

In addition, it was determined that the continuance levels of the married participants were higher than the single participants, and this was statistically significant.

Table 17

Differentiation of Variables According to Age

	Age	N	$\bar{X}$	SS	t	p
Entrepreneurial Self-Efficacy	18-24	45	,69	,40	1,333	,266
	25-34	114	,79	,43		
	35+	70	,82	,47		
Entrepreneurial Alertness	18-24	45	,76	,42	,105	,900
	25-34	114	,80	,42		
	35+	70	,79	,43		
Association and Connection	18-24	45	,68	,58	,297	,744
	25-34	114	,73	,61		
	35+	70	,66	,57		
Scanning and Search	18-24	45	,70	,54	,654	,521
	25-34	114	,63	,50		
	35+	70	,59	,51		
Evaluation and Judgment	18-24	45	,91	,48	2,110	,124
	25-34	114	1,06	,62		
	35+	70	1,14	,60		
Entrepreneurial Commitment	18-24	45	1,06	,51	,874	,419
	25-34	114	1,10	,50		
	35+	70	1,18	,55		
Continuance	18-24	45	,94	,79	1,302	,274
	25-34	114	,99	,70		

	35+	70	1,15	,85		
	18-24	45	1,93	,51		
Behavioral	25-34	114	1,86	,65	,218	,804
	35+	70	1,90	,77		
	18-24	45	,43	,48		
Affective	25-34	114	,55	,54	,821	,441
	35+	70	,53	,49		

According to Table 17, the age of the participants, Entrepreneurial Alertness and its sub-dimensions; association and connection, scanning and search and evaluation and judgment and Entrepreneurial Commitment scale and its sub-dimensions continuance, behavioral, affective and Entrepreneurial Self-Efficacy do not differ significantly ($p > 0.05$).

Table 18

Differentiation of Variables According to Education

	Education	N	$\bar{X}$	SS	t	p
Entrepreneurial Self-Efficacy	HS/AS	24	,69	,42		
	BSc.	126	,78	,45	,707	,494
	MSc./PhD.	79	,81	,43		
Entrepreneurial Alertness	HS/AS	24	,66	,41		
	BSc.	126	,80	,42	1,220	,297
	MSc./PhD.	79	,81	,42		
Association and Connection	HS/AS	24	,61	,54		
	BSc.	126	,69	,58	,562	,571
	MSc./PhD.	79	,75	,61		
Scanning and Search	HS/AS	24	,51	,44		
	BSc.	126	,69	,53	1,815	,165
	MSc./PhD.	79	,58	,49		

Evaluation and Judgment	HS/AS	24	,90	,55	1,973	,141
	BSc.	126	1,03	,61		
	MSc./PhD.	79	1,15	,58		
Entrepreneurial Commitment	HS/AS	24	,94	,46	2,275	,105
	BSc.	126	1,10	,54		
	MSc./PhD.	79	1,19	,50		
Continuance	HS/AS	24	,88	,69	,821	,441
	BSc.	126	1,02	,81		
	MSc./PhD.	79	1,10	,71		
Behavioral	HS/AS (1)	24	1,60	,68	3,026	,050 2→1
	BSc. (2)	126	1,88	,62		
	MSc./PhD.	79	1,98	,71		
Affective	HS/AS	24	,40	,49	1,347	,262
	BSc.	126	,50	,50		
	MSc./PhD.	79	,58	,53		

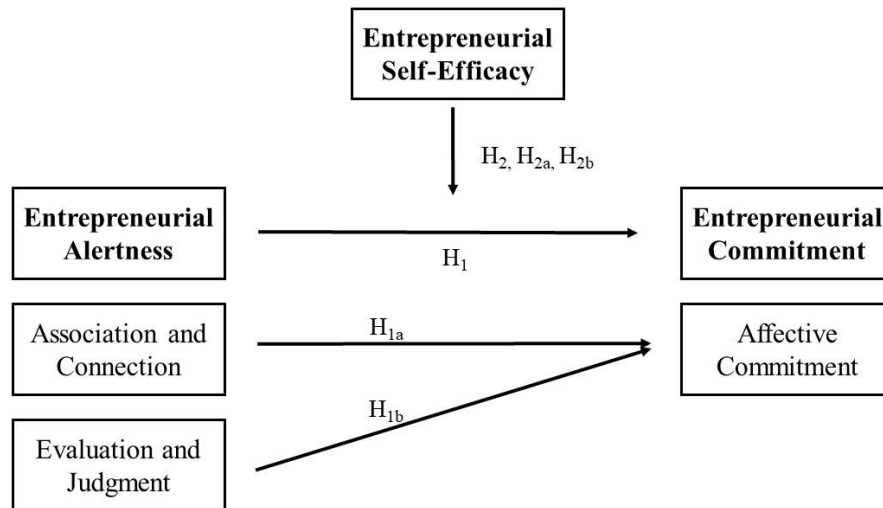
According to Table 18, while the education of the participants, Entrepreneurial Alertness and its sub-dimensions; association and connection, scanning and search and evaluation and judgment and Entrepreneurial Commitment scale and its sub-dimensions continuance and affective and Entrepreneurial Self-Efficacy did not differ significantly ($p > 0,05$). Behavioral differs significantly ($p < 0,05$).

In addition, it was determined that the behavioral levels of the bachelor's degree graduates were higher than the high school / associate degree graduates, and this situation was statistically significant.

4.7. Research Model and Hypothesis with Dimension

Figure 4

Revised Research Model with Dimension



H₁: Entrepreneurial Alertness has positive effect on Entrepreneurial Commitment.

H_{1a}: Association and Connection has positive effect on Affective.

H_{1b}: Evaluation and Judgment has positive effect on Affective.

H₂: Entrepreneurial Self-Efficacy moderates the relationship between Entrepreneurial Alertness and Entrepreneurial Commitment.

H_{2a}: Entrepreneurial Self-Efficacy moderates the relationship between Association and Connection and Affective.

H_{2b}: Entrepreneurial Self-Efficacy moderates the relationship between Evaluation and Judgment and Affective.

4.8. Final Status of the Research

All in all, status of the proposed hypotheses has been demonstrated in Table 19 as below.

Table 19

Results of the Research Hypotheses

Hypothesis	Result
H₁ : Entrepreneurial Alertness has positive effect on Entrepreneurial Commitment.	Supported.
H_{1a} : Association and Connections has positive effect on Continuance	Rejected.
H_{1b} : Association and Connections has positive effect on Behavioral	Rejected.
H_{1c} : Association and Connections has positive effect on Affective	Supported.
H_{1d} : Scanning and Search has positive effect on Continuance	Rejected.
H_{1e} : Scanning and Search has positive effect on Behavioral	Rejected.
H_{1f} : Scanning and Search has positive effect on Affective	Rejected.
H_{1g} : Evaluation and Judgements has positive effect on Continuance	Rejected.
H_{1h} : Evaluation and Judgements has positive effect on Behavioral	Rejected.
H_{1i} : Evaluation and Judgements has positive effect on Affective	Supported.
H₂ : Entrepreneurial Self-Efficacy moderates the relationship between Entrepreneurial Alertness and Entrepreneurial Commitment.	Rejected.
H_{2a} : Entrepreneurial Self-Efficacy moderates the relationship between Association and Connections and Continuance.	Rejected.
H_{2b} : Entrepreneurial Self-Efficacy moderates the relationship between Association and Connections and Behavioral.	Rejected.
H_{2c} : Entrepreneurial Self-Efficacy moderates the relationship between Association and Connections and Affective.	Supported.
H_{2d} : Entrepreneurial Self-Efficacy moderates the relationship between Scanning and Search and Continuance.	Rejected.
H_{2e} : Entrepreneurial Self-Efficacy moderates the relationship between Scanning and Search and Behavioral.	Rejected.
H_{2f} : Entrepreneurial Self-Efficacy moderates the relationship between Scanning and Search and Affective.	Rejected.
H_{2g} : Entrepreneurial Self-Efficacy moderates the relationship between Evaluation and Judgement and Continuance.	Rejected.
H_{2h} : Entrepreneurial Self-Efficacy moderates the relationship between Evaluation and Judgement and Behavioral.	Rejected.
H_{2i} : Entrepreneurial Self-Efficacy moderates the relationship between Evaluation and Judgement and Affective.	Supported.

5. CONCLUSION

Nowadays, studies about entrepreneurship focus on entrepreneurial education, environmental factors effects, and cognitive factors, while trying to understand issues such as startups' venture capital collection and startups' growth strategies. Economically, the contribution of startups to the economies of countries is also examined. These studies help to get to know the entrepreneur and understand the success of startups. These achievements emerge from entrepreneurs who can identify opportunities, evaluate the opportunities they define, and have high entrepreneurial self-efficacy. Startups emerge when an opportunity is noticed; that is, when entrepreneurs who have high alertness it is discovered. Entrepreneurs' commitment to their startups and their entrepreneurial self-efficacy are expected to be high in the face of difficulties. From this point of view, in this study, the relationship between entrepreneurial alertness and entrepreneurial commitment investigate and the moderator role of entrepreneurial self-efficacy in this relationship evaluate.

According to the finding obtained from the study, entrepreneurial alertness has a significant effect on entrepreneurial commitment. Therefore, the research “Environmental Munificence for Entrepreneurs: Entrepreneurial Alertness and Commitment” (Tang, 2008) indicates the same relationship between them. On the contrary, the research among Indonesian entrepreneurs shows that there is an opposite direction in the relationship between entrepreneurial alertness and commitment (Indrawati et al., 2015). The difference of these research results with research of Indrawati et al, (2015) likely because of startups age that more than three years, whereas startups age are less than three year for Tang's (2008) and this research.

According to another finding of the research, association and connection focuses on learning new knowledge, creativity, and engaging with reason, while an

affective commitment is an affective commitment to identifying and engaging with new work. In the research conducted, it was concluded that association and connection which is a dimension of entrepreneurial alertness increased affective commitment.

If the entrepreneurs think that the opportunity they finds may be positive by filtering out the information that is not necessary, they will evaluate their own willingness to endure the uncertainties. They will use the opportunity to take entrepreneurial action, relying on the ability to manage the business. In the research conducted, it was concluded that evaluation and judgment which is a dimension of entrepreneurial alertness increased affective commitment.

According to the regression analysis conducted to evaluate the moderation effect, entrepreneurial self-efficacy does not have a moderation role in the relationship between entrepreneurial alertness and entrepreneurial commitment. Entrepreneurs need to have entrepreneurial self-efficacy to be more alert and sensitive to unexplored opportunities (Erikson, 2002). Entrepreneurs who have high self-efficacy are more likely to recognize opportunities and evaluate the opportunity appropriately. The difference of this research result is the examination of the moderator effect of entrepreneurial self-efficacy in the relationship between entrepreneurial alertness and entrepreneurial commitment.

Entrepreneurs try to discover opportunities by bringing together previously unconnected information. When they perceive a relationship from unconnected information, they want to commit to this opportunity. Self-efficacy enhances the realization of this relationship. In the research conducted, it was concluded that

entrepreneurial self-efficacy moderates the relationship between association and connection and affective commitment.

Evaluation and judgment serve as a filter that functions as a selective agent, determining the inclusion and consideration of specific information. Making judgments helps entrepreneurs identify new opportunities. In the evaluation and judgment process, entrepreneurs develop their insight abilities and increase their commitment to their startups. Self-efficacy enhances the realization of this relationship. According to the finding obtained from the study, it was concluded that entrepreneurial self-efficacy plays a moderating role in the relationship between evaluation and judgment and affective commitment.

Based on the analysis conducted considering demographic characteristics, the findings revealed a positive correlation between age and entrepreneurial self-efficacy, alertness, and commitment. Opportunities can be discovered by entrepreneurs who have entrepreneurial alertness and experienced can distinguish useful information. Entrepreneurs get older, the experiences they gain will increase their entrepreneurial self-efficacy. As a natural outcome of several years of effort in their startups and increasing age, entrepreneurs will develop certain commitment.

According to another finding of the research, behavioral commitment which is a dimension of entrepreneurial commitment differs significantly. Behavioral commitment is higher in female entrepreneurs. Langowitz et. al, (2006) contend that entrepreneurial women face substantial challenges and exert effort to overcome them when establishing startups.

Through education, entrepreneurs acquire the necessary skills and knowledge to effectively engage in domestic and international market competition. This

educational process facilitates the development of critical abilities encompassing areas such as financing, planning, management, and research and development. According to another finding of the research, behavioral commitment which is a dimension of entrepreneurial commitment differs significantly. In addition, it was determined that the behavioral levels of the undergraduate graduates are higher than the high school / associate degree graduates.

5.1. Implications of the Study

In today's changing business and economic landscape, entrepreneurship holds immense significance. Thus, in light of this perspective, the findings of this study are poised to make a noteworthy contribution to the global entrepreneurial culture. Through an extensive review and analysis of the literature, it was determined that a direct correlation exists between entrepreneurial alertness and entrepreneurial commitment among entrepreneurs, while entrepreneurial self-efficacy does not exhibit a moderating effect on this association. Nevertheless, upon investigating the sub-dimensions within the relationship between entrepreneurial alertness and entrepreneurial commitment, a moderation effect of entrepreneurial self-efficacy was found in relationships.

The research findings underscored the salient factors pertinent to entrepreneurship, highlighting their significance. Incubation centers, technology transfer offices, techno parks, and accelerator programs can play an important role by organizing various trainings and activities and sharing up-to-date written documents on entrepreneurship to increase entrepreneurial alertness. A well-developed and active mentoring network, current market information, and accessible resources increase entrepreneurial alertness. In this way, the entrepreneur gains prior knowledge of the opportunities. They can gather the acquired information and evaluate it. In short,

entrepreneurs' access to information should be easy and accessible so that the entrepreneurial alertness level of entrepreneurs can be kept high.

Entrepreneurial alertness and entrepreneurial commitment is the cognitive process of the entrepreneur at the stage of establishing a new startup, and it is obvious that it gives important clues for the success of the startup in the future. The more committed entrepreneurs are to their startups and the more they are willing to face challenges, the better their chances of success. It should enable decision makers such as incubators and technology transfer offices to discover the skills and abilities of entrepreneurs. Entrepreneurs may have developed skills in the past that they are unaware of it, so the past experience can be benefited and talents discovered. During the establishment phase of their startups, they may face numerous challenges, and their willingness and intention to continue their startups may decrease. Therefore, mentoring, psychological support, and various trainings can help them increase their commitment to their startups. It can be revealed that they can provide the effort with their talents against difficulties and obstacles. Entrepreneurial commitment must be increased in order for entrepreneurs to be successful.

Entrepreneurship-related institutions such as incubation centers, techno parks, and accelerator programs should improve the dimensions of entrepreneurial alertness, which are the dimensions of association and connection, evaluation and judgment, in order to increase the affective commitment of entrepreneurs and ensure the entrepreneurs identification with their startups. They should also continue to improve entrepreneurial self-efficacy, which has a moderator effect on these two relationships. Entrepreneurs must first be aware of the opportunities and threats in their environment in order to increase their entrepreneurial self-efficacy. They have to be confident in their abilities, thanks to their previous success. Positive feedback from

entrepreneurship-related institutions, as well as psychological and emotional support, will boost entrepreneurial self-efficacy.

5.2. Limitation and Further Research

Within the framework of time restrictions, the questionnaire was delivered to entrepreneurs via online platforms. It is beyond our control to make sure who actually completed the questionnaire since it was an online survey. Although the questionnaire was sent to many people, the response rate is very low. Therefore, caution must be exercised when making broad generalizations within the confines of this research.

The term entrepreneurial alertness needs to be brought to a definite conclusion both conceptually and empirically in the literature. The concepts of entrepreneurial awareness and entrepreneurial alertness should be clearly differentiated from each other. Entrepreneurial commitment is the actions and actions taken in the process of establishing a new startup. Therefore, in future studies, the processes after the establishment of the startup should also be taken into consideration. Finally, entrepreneurial self-efficacy should be examined as an independent variable in future studies.

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APPENDIX A: SURVEY FORM

Sayın Katılımcı;

Bu çalışma Yeditepe Üniversitesi, Sosyal Bilimler Enstitüsü, İşletme Bölümü Prof. Dr. Özlem Kunday'ın danışmanlığında tez çalışmasına devam eden İşletme Yüksek Lisans Programı öğrencisi Burak Kızmaz tarafından, girişimcilerin; girişimcilik öz yeterliliği, girişimsel uyanıklığı ve girişimsel bağlılığı arasındaki ilişkileri yakından incelemek amacıyla yürütülmektedir.

Bu amaçla tutumlarınızı, davranışlarınızı ve düşüncelerinizi değerlendiren bazı ölçüm araçlarını doldurmanız istenecektir. Araştırmacı tarafından size verilecek olan soru seti 4 anketten oluşmaktadır ve anket setini doldurma sürenizin yaklaşık 15 dakika sürmesi beklenmektedir.

Bu çalışma kapsamında vereceğiniz tüm bilgiler tamamen gizli kalacaktır. Çalışmaya katılımınızın anonim olması beklenmekte ve sizden isim-soy isim gibi bilgiler istenmemektedir. Soruların hiçbirisi mahremiyetinize ve size zarar verici nitelikte değildir. Sizlerden elde edilen bilgiler bireysel değil, grup olarak değerlendirilecektir. Soruların doğru ve yanlış cevapları yoktur. Bu yüzden, lütfen soruları içtenlikle cevaplayınız. Verdiğiniz bilgiler sadece araştırmacılar tarafından değerlendirilecektir ve elde edilecek bilgiler bilimsel yayınlarda kullanılacaktır.

Çalışmaya katılım tamamıyla gönüllülük esasına dayanmaktadır. Katılım sırasında herhangi bir nedenden ötürü kendinizi rahatsız hissederseniz çalışmayı istediğiniz anda bırakmakta ve daha önce alınmış ama işleme konmamış verileri geri almakta serbestsiniz. Ancak yanıtlarınız tüm sorulara cevap vermeniz halinde değerlendirmeye alınacaktır. Bu sebeple, soruların tamamını doldurmanız araştırma için büyük önem taşımaktadır. Bu formda anlatılan araştırmanın etik yönleriyle ve/veya araştırma detaylarıyla ilgili sorularınız veya önerileriniz varsa lütfen burak.kizmaz@std.yeditepe.edu.tr adresinden ulaşınız.

Değerli katkılarınızdan dolayı şimdiden çok teşekkür ediyoruz.

Araştırmada ne yapacağım anlatıldı. Bu çalışmaya gönüllü olarak katılmayı kabul ediyorum. Bilgilerimin gizli tutulacağını farkındayım.

() Katılmak istiyorum

() Katılmak istemiyorum

Demografik Bilgi Formu

1. Cinsiyetiniz:
☐ Kadın
☐ Erkek
2. Yaşınız:
☐ 18-24 yaş aralığı
☐ 25-34 yaş aralığı
☐ 35-44 yaş aralığı
☐ 45-54 yaş aralığı
☐ 55 yaş ve üzeri
3. Medeni durumunuz:
☐ Evli
☐ Bekâr
4. Eğitim durumunuz:
☐ Lise
☐ Ön Lisans
☐ Lisans
☐ Yüksek Lisans
☐ Doktora
5. Girişiminizin yaşı?
☐ 6 ay - 1
☐ 1 - 2
☐ 2 - 3
☐ 3 - 5
6. Sizin dışınızda kaç çalışanınız bulunmaktadır?
☐ 1 - 4
☐ 5 - 24
☐ 25 - 49
☐ 50 - 100
☐ 100 üzeri

7. Hangi sektörde faaliyet göstermektedirsiniz?
.....
8. Başabaş noktasına ulaştınız mı?
☐ Evet
☐ Hayır
9. Başabaş noktasına ne kadar sürede ulaştınız?
.....
10. Ekosistem desteğinden faydalandınız mı? (çoktan seçmeli)
☐ TÜBİTAK
☐ KOSGEB
☐ Kuluçka Merkezleri
☐ Teknoloji Transfer Ofisleri
☐ Hızlandırma Programı
☐ Mentorluk
☐ Diğer
11. Kaç yıldır iş hayatındasınız?
☐ Hiç iş tecrübem yok.
☐ Staj yaptım.
☐ 5 yıl ve daha az süredir çalışıyorum.
☐ 5-10 yıl arası çalışıyorum.
☐ 10 yıl ve daha çok süredir çalışıyorum.

GİRİŞİMCİLİK ÖZ-YETERLİLİĞİ

<i>Aşağıda insanların genel hallerini yansıtabilecek bazı ifadeler yer almaktadır. Lütfen her bir ifadeyi okuyarak cevaplarınızı genel halinize göre, çoğunlukla nasıl olduğunuzu düşünerek veriniz. Olmak istediğinize göre değil, şu an kendinizi nasıl görüyorsanız ona göre cevaplayınız.</i> <i>Aşağıdaki ifadelerin, sizi ne kadar tanımladığını “Kesinlikle Katılmıyorum”dan “Kesinlikle Katılıyorum”a doğru uzanan değerlendirme aralığında <u>cevap seçeneklerinden birine X işareti koyarak belirtiniz.</u></i>	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle Katılıyorum
Yeterince dersenem, her zaman zor sorunları çözmeyi başarabilirim.					
Biri bana karşı çıkarsa, istediğimi elde etmenin yollarını ve araçlarını bulabilirim.					
Hedeflerime bağlı kalmak ve hedeflerime ulaşmak benim için kolaydır.					
Beklenmedik olaylarla etkili bir şekilde başa çıkabileceğimden eminim.					
Becerikliliğim sayesinde, öngörülemeyen durumlarla nasıl başa çıkacağımı biliyorum.					
Gerekli çabayı gösterirsem çoğu sorunu çözebilirim.					
Zorluklarla karşılaştığımda sakin kalabilirim çünkü başa çıkma yeteneklerime güvenirim.					
Bir sorunla karşılaştığımda genellikle birkaç çözüm bulabilirim.					
Zor bir durumdaysam, genellikle bir çözüm düşünebilirim.					
Genelde önüme çıkan her şeyi halledebilirim.					

GİRİŞİMSEL UYANIKLIK

<i>Aşağıda insanların genel hallerini yansıtabilecek bazı ifadeler yer almaktadır. Lütfen her bir ifadeyi okuyarak cevaplarınızı genel halinize göre, çoğunlukla nasıl olduğunuzu düşünerek veriniz. Olmak istediğinize göre değil, şu an kendinizi nasıl görüyorsanız ona göre cevaplayınız.</i> <i>Aşağıdaki ifadelerin, sizi ne kadar tanımladığını “Kesinlikle Katılmıyorum”dan “Kesinlikle Katılıyorum”a doğru uzanan değerlendirme aralığında <u>cevap seçeneklerinden birine X işareti koyarak belirtiniz.</u></i>					
	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle Katılıyorum
Yeni bilgiler edinmek için başkalarıyla sık sık etkileşime girerim.					
Bilgi ararken her zaman yeni iş fikirlerine dikkat ederim.					
Yeni bilgiler edinmek için düzenli olarak haberleri, dergileri veya ticari yayınları okurum.					
Her gün internete göz atarım.					
Hevesli bir bilgi arayıcıyım.					
Her zaman aktif olarak yeni bilgiler arıyorum.					
Görünüşte ilgisiz bilgi parçaları arasında bağlantılar görüyorum.					
"Noktaları birleştirmede" iyiyimdir.					
Daha önce bağlantısı olmayan bilgi alanları arasında sık sık bağlantılar görüyorum.					
Olası fırsatlar için içimde içgüdüsel bir his var.					
Kârlı fırsatları ve çok kârlı olmayan fırsatları ayırt edebilirim.					
Düşük değerli fırsatlardan ayrı olarak yüksek değerli fırsatları anlatma konusunda bir hünerim var.					
Birden fazla fırsatla karşılaştığımda iyi olanları seçebiliyorum.					

GİRİŞİMSEL BAĞLILIK

<i>Aşağıda insanların genel hallerini yansıtabilecek bazı ifadeler yer almaktadır. Lütfen her bir ifadeyi okuyarak cevaplarınızı genel halinize göre, çoğunlukla nasıl olduğunuzu düşünerek veriniz. Olmak istediğinize göre değil, şu an kendinizi nasıl görüyorsanız ona göre cevaplayınız.</i> <i>Aşağıdaki ifadelerin, sizi ne kadar tanımladığını “Kesinlikle Katılmıyorum”dan “Kesinlikle Katılıyorum”a doğru uzanan değerlendirme aralığında <u>cevap seçeneklerinden birine X işareti koyarak belirtiniz.</u></i>	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle Katılıyorum
Bu iş fikri başarılı olmazsa, başka biri için çalışmaya hazırım.					
Bu iş fikri başarılı olmasa bile asla başkası için çalışmam.					
İşimi kurmak için azami çabayı ne kadar süre verebileceğimin üst sınırı yok.					
Kişisel felsefem, kendi işimi kurmak için “ne gerekiyorsa yapmaktır”.					
Bir iş kurmak, benim için sahip olduğum diğer kariyer fırsatlarından çok daha fazla arzu edilir.					
Bir iş kurarsam, hayatımdaki diğer önemli hedeflere ulaşmama yardımcı olur.					
Genel olarak, becerilerim ve yeteneklerim bir iş kurmama yardımcı olacak.					
Bir iş kurmak için gereken çabayı gösterebileceğime eminim.					

APPENDIX B: SURVEY FORM
Demographic Information Form

1. Gender:
 - ☐ Female
 - ☐ Male
2. Age:
 - ☐ 18-24
 - ☐ 25-34
 - ☐ 35-44
 - ☐ 45-54
 - ☐ 55 years and older
3. Marital status:
 - ☐ Married
 - ☐ Single
4. Education status:
 - ☐ High school
 - ☐ Associate Degree
 - ☐ BSc.
 - ☐ MSc.
 - ☐ PhD.
5. Age of your startup?
 - ☐ 6 months - 1 years
 - ☐ 1 - 2 years
 - ☐ 2 - 3 years
 - ☐ 3 - 5 years
6. How many employees do you have besides yourself?
 - ☐ 1 - 4
 - ☐ 5 - 24
 - ☐ 25 - 49
 - ☐ 50 - 100
 - ☐ over 100

7. In which sector do you operate?
.....
8. Have you reached the breakeven point?
- () Yes
- () No
9. How long did it take to reach the breakeven point?
.....
10. Did you benefit from ecosystem support? (Multiple choice)
- () TUBITAK
- () KOSGEB
- () Incubation Centers
- () Technology Transfer Offices
- () Acceleration Program
- () Mentoring
- () Other
11. How many years have you been in business?
- () No work experience
- () Internship
- () Less than 5 years
- () Between 5-10 years
- () More than 10 years

ENTREPRENEURIAL SELF-EFFICACY

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I can always manage to solve difficult problems if I try hard enough.					
If someone opposes me, I can find the means and ways to get what I want.					
It is easy for me to stick to my aims and accomplish my goals.					
I am confident that I could deal efficiently with unexpected events.					
Thanks to my resourcefulness, I know how to handle unforeseen situations.					
I can solve most problems if I invest the necessary effort.					
I can remain calm when facing difficulties because I can rely on my coping abilities.					
When I am confronted with a problem, I can usually find several solutions.					
If I am in trouble, I can usually think of a solution					
I can usually handle whatever comes my way.					

ENTREPRENEURIAL ALERTNESS

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I have frequent interactions with others to acquire new information.					
I always keep an eye out for new business ideas when looking for information.					
I read news, magazines, or trade publications regularly to acquire new information.					
I browse the internet every day.					
I am an avid information seeker.					
I am always actively looking for new information.					
I see links between seemingly unrelated pieces of information.					
I am good at “connecting dots.”					
I often see connections between previously unconnected domains of information.					
I have a gut feeling for potential opportunities.					
I can distinguish between profitable opportunities and not-so-profitable opportunities.					
I have a knack for telling high-value opportunities apart from low-value opportunities.					
When facing multiple opportunities, I am able to select the good ones.					

ENTREPRENEURIAL COMMITMENT

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
If this business idea is not successful, I am willing to go to work for someone else.					
Even if this business idea is not successful, I will never go to work for someone else.					
There is no limit as to how long I would give maximum effort to establish my business.					
My personal philosophy is to “do whatever it takes” to establish my own business.					
Starting a business is much more desirable than other career opportunities I have.					
If I start a business, it will help me achieve other important goals in my life.					
Overall, my skills and abilities will help me start a business.					
I am confident I can put in the effort needed to start a business.					