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# Assessment of Entrepreneurial Traits and Small-Firm Performance with Entrepreneurial Orientation as a Mediating Factor

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**Abstract:** Entrepreneurship is considered to be one of the most critical factors contributing to the successful performance of business, innovations, and growth of the economy. Entrepreneurship is the main driver of innovation and sustainable business. The purpose of this research is to assess the main traits that are deemed essential for the successful performance of a firm. A model is developed to assess how entrepreneurs' creativity, self-efficacy, and achievement motivation influence the performance of small firms through the role of entrepreneurial orientation (EO) as a mediating variable. The hypotheses are tested by using Smart PLS (partial least squares path modeling) on a sample of 353 business owners to seek the insight of entrepreneurial traits on small-firm performance. The findings of the research show that self-efficacy and EO have a significant and positive association with the performance of a firm, while creativity and internal locus of control are fully mediated by EO. The subjective measures are used to examine the performance of a firm in terms of growth, sustainability, and financial performance, but the same can also be assessed by objective measures. The practical implication of this research provides entrepreneurs with a different perspective of the entrepreneurial traits that contribute to successful firm performance. The originality of the research lies in the attempt to explore the entrepreneurial traits that significantly influence the effectiveness of the performance of firms in the Pakistani context.

**Keywords:** entrepreneurship; entrepreneurial orientation; achievement motivation; assessment; locus of control; self-efficacy; firm performance; sustainability; creativity

## 1. Introduction

Entrepreneurship is linked to innovations of forms and is considered one of the most critical contributors to the growth of the economy, especially in today's world, as it leads to multiple benefits. In economic terms, entrepreneurship refers to risk taking and innovation. The risk taking connects to

the chance and probability of the success of novel and sustainable business ventures, ideas, products, or services, however, such innovation is likely to benefit society's development and economic growth. A firm's decision-making skills are also required to train the work force for a crisis, as well as for the job itself, bringing not only the development of products but also of society's opinion and ideas [1]. It was during the sixteenth century when the term "entrepreneur" was considered as a person who is responsible for undertaking a business venture [2]. Many researchers debated the entrepreneurial personal traits with entrepreneurial orientation (EO) at the firm level, thus, evaluating their firm's performance [3–5] based on many criteria including sustainability. Research suggests that pursuing entrepreneurship is viewed as a workable career that suits many [6,7]. Many research studies have been conducted to identify the factors that contribute to small-firm performance and sustainability and to provide business owners with insight into enhancements for the growth of their businesses. Entrepreneurial orientation (EO) is a process of developing strategic plans and policies which organizations use to identify and develop new business ventures. The research also supports Hambrick and Mason [8] with their perspective that the responsibility for setting and directing the strategic orientation of a firm lies with the CEOs. The owners play a vital role in explaining EO through proactive orientation, innovativeness, and risk-taking abilities toward competition through the adoption of new technology [9]. Researchers have an opinion that EO is a significant contributor to sustainable business performance and success and have found that firms which have a high EO perform better and showed growth in the number of new products, services, and market share [10]. EO has been extensively used as an important construct in entrepreneurship literature and has shown to have an influence on sustainability, profitability, growth and innovativeness, and firm performance. According to Bolton and Lane [11], entrepreneurial traits play a central role in achieving sustainable small-firm performance. Many studies have investigated entrepreneurial traits and their influence on sustainable business performance [4,5,9,12].

In this study, four entrepreneurial traits (creativity, self-efficacy, internal locus of control, and achievement motivation) have been linked with EO to assess their association with the sustainability and performance of a firm. According to Mahmood and Hanafi [13], and Zainol and Ayadurai [14], EO is a major contributor to the sustainable performance of a business and also contributes to the success of a firm. It was observed that firms with a higher EO showed greater performance, market share rose by showing many improvements, and some growth has also been noticed in the number of products and services [10]. The role of entrepreneurs in today's growing economy can not be neglected because they are inseparable from organizational success [15,16].

### *1.1. Research Objectives*

In the context of the stiff competitive scenario in Pakistan, firms are confronted with the challenge of survival of the fittest. In this regard, such firms look for new business opportunities ranging from technological adoption to a leap into a new business market. Such a strategic move relies heavily upon entrepreneurial orientation which is dependent upon an entrepreneur's creativity, internal locus control, self-efficacy, and achievement motivation. The absence of any such trait may cause a firm to lose potential opportunities that may endanger the future of the firm [17]. Therefore, this research explores the effect of an entrepreneur's creativity, self-efficacy, internal locus of control, and achievement motivation on small-firm performance through the mediating role of entrepreneurial orientation. In addition, the sub-objectives of this study are the following: (1) to identify the effect of the entrepreneur's creativity, self-efficacy, internal locus of control, and achievement motivation on the performance of small firms, (2) to identify the role of entrepreneurial orientation as a mediator on an entrepreneur's traits, and (3) to assess the role of entrepreneurial orientation in affecting the performance of small firms.

### 1.2. Significance of Research

The necessity of our research emerges from the conceptual and theoretical gaps which were identified from the previous literature. There seems to be a scarcity of research in the field of business performance and entrepreneurial orientation (EO), especially in the perspective of Pakistan. Past studies have contributed to the literature by empirically testing the constructs of entrepreneurial intention and few of the entrepreneur's personality traits [11,12,18]. This study is a humble attempt to incorporate the constructs of an entrepreneur's personality along with organizational orientation towards strategic shifts. Moreover, there appears to be a gap in the literature in highlighting the role of entrepreneurial internal locus of control and achievement motivation on SE performance [9]. The European Commission and Khedhaouria et al. [9] have defined small enterprises as "enterprises that employ fewer than 50 persons". We can classify entrepreneurs as those who had established and were actively managing a business, i.e., they took ownership [9,19].

## 2. Review of Previous Literature

### 2.1. Entrepreneurial Traits

For entrepreneurship to happen, an opportunity should exist that can be detected by an innovative individual or enterprise and they also take advantage of this opportunity. It is equally important to know who the entrepreneurs are and how they operate and perceive different situations [2]. There are many aspects of entrepreneurship, and to manage the company for a long period of time, the entrepreneur strives to meet the necessary objectives and expectations that are needed for the survival of a successful business. Entrepreneurial traits play a vital role in managing a small firm, as these traits affect the future direction of the company's development. Researchers believe that entrepreneurs should be capable and have multiple qualities, not only on the functional side, e.g., intelligence, experience, and knowledgeable, etc., but also capable to adapt to changes, keep motivated, and be committed to quality, etc., because an entrepreneur has to assume many different roles ranging from an investor to an accountant and marketing person [20]. According to Ugalde [21], there are many traits which are important for entrepreneurs like resilience, self-efficacy, passion, willingness to take risks, integrity, creativity, positive attitude, courage, leadership skills, and dedication, etc. In this study, four entrepreneurial traits are assessed with an entrepreneurial orientation to elucidate their interconnected relationship with the performance of a firm.

### 2.2. Entrepreneurial Creativity

Creativity has been considered to be an essential element of business models in an era of the competitive environment. According to Pretorius, Millard, and Kruger [22], enterprises need to manifest innovation and creativity in order to flourish and survive in a competitive and demanding world. The research further posited that entrepreneurs were unified in accepting that creativity was an important factor for the identification of different business opportunities. This supports the perception that creativity is a major factor among individuals for making them entrepreneurial in meeting dynamic demands and offering various opportunities. Morris and Koratko [23], defined creativity as "the soul of entrepreneurship because it is required to spot the patterns and trends that define opportunities". Entrepreneurial creativity has been taken as entrepreneurs' abilities to create different combinations of products and services or processes, adding value to the already existing market or in the creation of a new production market [24].

### 2.3. Entrepreneurial Self-Efficacy

The entrepreneurial self-efficacy is the extent to which people perceive themselves to carry out various tasks, and roles of entrepreneurship in a successful manner [25–27]. According to Bandura [26], in his self-efficacy theory, defined entrepreneurial self-efficacy as an individual's own belief of performing a certain task. The theory was built on four basic ways needed to increase

self-efficacy and they are enactive mastery, verbal persuasion, individual judgment, and role modeling. It is less likely that entrepreneurs will be sufficiently motivated to engage themselves in the creation of new ventures having entrepreneurial self-efficacy to its minimum level. It was further suggested by researchers that higher entrepreneurial self-efficacy tends to have been found in entrepreneurs who possess higher work satisfaction and can lead their firms to higher growth in terms of opportunity, employment and revenue as compared to those who are lower in self-efficacy [15,25,26,28,29]. It was found that individuals having strong self-efficacy, desire more for personal accomplishments and also to master a challenging task rather than avoiding those threats. These abilities in entrepreneurs make them set challenging goals for themselves where they are deeply engrossed in fulfilling their commitments [26].

#### *2.4. Entrepreneurial Internal Locus of Control*

Entrepreneurs perceive that the success or failure of a happening is due to internal or external factors and these factors cause important implications on the behavior of an individual. It was found that the cause of success or failure is attributed more to the internal factors, likeability and efforts, and less on the external factors such as task difficulty and luck [30]. Studies suggest that an internal locus of control takes precedence over a positive entrepreneurial attitude [31]. Entrepreneurs with an internal locus of control believe that they have mastered their fate, and therefore are alert, directive, and confident in controlling and managing their external environments. The study further reveals that an internal locus tends to generate more desirable well-being [32]. Entrepreneurs that have an internal locus of control are found to target attainable, however, challenging goals for themselves, and show persistence at the time of distress, experience minimum job dissatisfaction, and are generally more successful [33,34]. From an entrepreneur's point of view, the locus of control is of two types, internal and external. Internal locus of control means that businesses are being performed in an uncertain and competitive environment. Entrepreneurs having the locus of control believe that they will be held responsible for their actions to achieve success [5]. Prakash, Jain, and Chauhan [35] studied supportive government policies, locus of control, and student's entrepreneurial intensity. A study of India explained that locus of control is a mental term introduced by Rotter [36], that refers to how somebody thinks they control an incident that may affect them. The Latin word for locus "place" can be internal or external. A person with internal control believes that they are responsible for their life. You have an external audit, i.e., nothing else besides you, when you believe that you do so or business (business education big and more) perceives the severity of astonishing studies. Locus of control is a form of business-based education and past studies have explained that locus of control may change from time to time. An internal locus of control involves high individual faith in a person's ability to handle their situation and is measured as an essential quality for the potential entrepreneur. The classical character features of an entrepreneur have a strong internal locus of control. Nevertheless, if there is no strong or high internal locus of control it will be difficult for an individual to take the risk, which is related to the starting of new business. Past study has revealed that an individual's locus of control (LOC) plays an important role in defining the level of entrepreneurial awareness. Hsiao, Lee, and Chen [37] researched the influence of internal locus of control on the entrepreneurship and mediating role of human capital. Social capital explained that locus of control increases entrepreneurship growth of social transactions and developed development on some networks through the development of individual development networks. The external and the internal LOC of the person has come from the concept of personality traits, such as some people who have not believed in the victory and that only internal controls are required and able to control the situation. Researchers have concluded that having an internal locus of control is considered to improve, organize, and develop their capabilities and problems of their work, and therefore the high level of a business is emerging at any given time.

### 2.5. Entrepreneurial Achievement Motivation

“The need for achievement is the drive to excel, to achieve concerning a set of standards” [38]. The author further found an association between entrepreneurship and the need for achievement and that this need for achievement is imperative for the success of small business owners or entrepreneurs [38]. It has been believed that achievement motivation can be learned as it is not biologically determined but culturally driven. There are cultures where there is a lot of socialization process which helps in producing entrepreneurs and creates a high need for achievement motivation [7,38–40]. Zhao et al. [41] studied the relationship between entrepreneurial motivation and crowdfunding success using a qualitative analysis based on the Kickstarter website. The data explained entrepreneurial motivation by dividing it into the following two types: The first type is common motivation which considered risk appetite, achievement needs, control points, and tolerance to ambiguity, etc. The second type is task-oriented motivation which considered goal setting and self-efficacy. Entrepreneurial motivation is divided into the following four types: family security, intrinsic rewards, independence and autonomy, and extrinsic rewards. The entrepreneur is motivated for tracking wealth and fame, which are the motivation of taking social responsibility and motivation for pursuing self-achievement. Mahto and McDowell [42] conducted a study on entrepreneurial motivation by considering a non-entrepreneur’s journey to becoming an entrepreneur and concluded that entrepreneurship is considered as an action-oriented phenomenon and entrepreneurial motivation is the most important element of an individual’s contribution in the entrepreneurial practice. People will play a key role in entrepreneurial motivation and an entrepreneurship phenomenon is incomplete without this process.

### 2.6. Entrepreneurial Orientation

Entrepreneurial orientation is one of the most important driving forces behind entrepreneurial activities and is described as a process for developing strategies in organizations which are based on the entrepreneurs’ actions and decisions [5,43,44]. Hussain, Rahman, and Shah [45] described EO as a managerial stance used for planning and strategic-making processes which enables a firm to take entrepreneurial actions and choices. These strategic-making processes include renewal of the organization, learning innovations, and improved ways to generate revenue, as well as successfully deploying resources efficiently and effectively with the aim to reach optimum performance. EO emphasizes five dimensions which are innovativeness, competitive aggressiveness, risk taking, proactiveness, and autonomy, all of which best explain the performance of a firm [46,47]. The literature suggests that EO is an entrepreneurial process which is encouraged by business owners and stimulated by business owners’ traits of creativity, self-efficacy, internal locus of control, and achievement motivation [5,48,49]. Miller [50] has posited a practical point regarding specific EO dimensions. He recommended that “an entrepreneurial firm engages in product market innovation, undertakes somewhat risky ventures, and is the first to come up with proactive innovations, beating competitors to the punch”. There has been growing consensus that EO reflects the three components of proactiveness, innovativeness, and risk taking [13,15,44,50–52]. The first dimension is proactiveness. It refers to those processes aimed for “seeking new opportunities which may or may not be related to the present line of operations, introduction of new products and brands ahead of the competition, and strategically eliminating operations which are in the mature or declining stage of life cycle” [51]. Proactiveness emphasizes the importance of entrepreneurial initiatives by creating a competitive advantage and anticipating changes in the future demand of the business. The second dimension, innovativeness, was first pointed out by Schumpeter [53], who called it “creative destruction” where the process disturbs the current market causing a shift in the use of resources intended to be used for the introduction of novel products and services, thus, creating wealth. To further elaborate, this dimension has been considered to pursue and support experimentation in the development of new and novel ideas [51]. The third dimension is described as risk taking, as every business is prone to risk. Resources are specifically assigned to the task of risk management which is generally in the form of an enterprise risk

management framework in which all business risks are identified on a robust basis and its mitigation plans are prepared to either eliminate or reduce the risk to an acceptable and manageable level for the size and nature of the organization [51].

Many studies have taken proactiveness, innovativeness, and risk taking as one combined measure to represent EO. The researchers have further suggested that these dimensions can be grouped into one variable or a single EO construct because the relationship of EO performance and the dimensions are of equal value [54]. According to Miller [50], the construct of EO is composed of three dimensions (i.e., risk taking, proactiveness, and innovativeness) and a shared variance among these dimensions exists, and therefore the presence of EO cannot be claimed in the absence of covariation among these dimensions. Wales [55] explained entrepreneurial orientation as one of the most crucial elements of entrepreneurship, and in addition to other research studies of management, several recent studies have been carried out to investigate the phenomenon of entrepreneurial orientation. Brouthers, Nakos and Dimitratos [56] demonstrated that entrepreneurial orientation was primarily introduced to describe entrepreneurial behavior. Past studies have explained that entrepreneurial capabilities play a very key role in the introduction of new products and new market expansion. In today's dynamic environment, where rapid changes occur that reduces the life cycle of products, EO plays an important role in the search for new opportunities, tools, and techniques to bring innovations into a firm. Moreover, different aggressive marketing techniques also help the organization boost its consistent growth and give different benefits to a firm [49]. Jogaratnam [57] defines EO, initially, abstracted as a one-dimensional idea, but the three widely used dimensions of entrepreneurial orientation are risk taking, reactivity, and innovativeness. Firms that use EO screen the market all the time and react very quickly in order to achieve different emerging and successful opportunities and targets ahead of their competitors, and therefore take a competitive advantage over competitors in the market. These firm are very active and practically work to deliver the best possible goods, as well as products and services to the market with unique features and innovation and earn a huge profit that ultimately helps the firms succeed. The concept of EO has raised various debates in past studies regarding its nature and the conceptualization of the constructs. For example, EO to be taken as a reflective construct (meaning reflected in its dimensions) or as a formative construct (meaning created by them) [58].

### 3. Conceptual Framework and Hypotheses Formulation

#### 3.1. Creativity and Firm Performance

The researchers have defined creativity as the conception and execution of original and innovative ideas to establish a new business venture. Although researchers found that creativity is a necessary entrepreneurial skill to start a new venture, other researchers suggested that creativity is a viable component for both established and new ventures [9,48]. There has been little attention given in the literature regarding creativity and firm performance [59]. There are many situations where entrepreneurs have to make decisions using their process of intuition, irrespective of the fact that the firm's resources are available or not. The entrepreneur must exhibit strong qualities of being a leader by redesigning business strategies and motivating employees through creative thinking [48]. On the basis of the research objectives and a comprehensive review of literature, the following hypothesis has been generated:

**Hypothesis 1 (H1).** *Creativity has a significant and positive effect on small-firm performance.*

#### 3.2. Self-Efficacy and Firm Performance

Entrepreneurial self-efficacy is considered to be a vigorous predictor of a firm's performance. According to Hmieleski and Baron [25] and Cumberland, Meek, and Germain [60] self-efficacy is an individual's faith in being capability of successfully performing the different roles and tasks of entrepreneurship. Furthermore, the researchers found that there is a significant relationship between

entrepreneurial self-efficacy and firm performance, that is to say, entrepreneurs that show higher self-efficacy achieve higher revenue and growth. Entrepreneurial self-efficacy affects an individual's decision not only in creating new ventures but also in existing ongoing work, especially in the area of new venture strategy. Hmieleski and Baron [25] found that entrepreneurs who are self-assured in their abilities are likely to develop strategic plans for their firm, set challenging goals, and are persistent in accomplishing goals. Other studies state that entrepreneurs that possess high self-efficacy are highly ambitious and set challenging goals for their business ventures. Care has to be taken when setting challenging goals to assure that the goals are attainable, while at the same time keeping the entrepreneurs motivated to work with full determination in the interest of their business [61]. There is extensive literature and empirical research available stating that self-efficacy predicts future performance. On the basis of social learning theory, entrepreneurs who have self-efficacy hold a strong belief in their capabilities to accomplish an entrepreneurial task. They tend to establish goals that are challenging in nature and show persistence in their efforts to accomplish a task, which is reflected in the improved performance of a business [62]. On the basis of the research objectives and a comprehensive review of literature, the following hypothesis has been generated:

**Hypothesis 2 (H2).** *Self-efficacy has a significant and positive effect on small-firm performance.*

### 3.3. Internal Locus of Control and Firm Performance

Internal locus of control is the degree to which people deem that they can manage the outcome of events that greatly influence their lives. A strong link has been found between people having an internal locus of control and their increased growth, earnings [33], and job satisfaction [32]. Previous studies have empirically proven that individuals with an internal locus of control exhibit more of the qualities of an entrepreneur as compared to external locus of control. Therefore, entrepreneurs with internal locus of control engage in more innovative tasks and have greater confidence in their capabilities to influence their environment. They have the tendency to take a great number of risks, to be proactive by leading rather than following the competition, and to take prompt actions during the strategic-making process. The result of their research was based on small firms concluding that internal prospects lead to successful firm performance [50]. They found that individuals with an internal locus of control tend to have the ability to control their environment by making efforts to influence their environment in order to achieve their desired outcomes which, consequently, affects the performance of the firm [37]. The findings of all these studies are consistent in stating that firms led by individuals with internal locus of control perform better as compared with those headed by external locus of control [63]. On the basis of the research objectives and a comprehensive review of literature, the following hypothesis has been generated:

**Hypothesis 3 (H3).** *Internal locus of control has a significant and positive effect on small-firm performance.*

### 3.4. Achievement Motivation and Firm Performance

All people who possess the trait of a need for achievement are high achievers who bear a strong desire for success and establish challenging standards for themselves. They not only strive to achieve outstanding outcomes but also seek improvements in their actions to obtain the best results. Researchers have identified this trait as one of the major attributes of an entrepreneur who strives to win higher satisfaction [5]. Motivation is considered as one of the dynamic forces among individuals striving for success. Likewise, the success in a business venture can motivate an entrepreneur's personal desire or drive. The researcher further elaborates on the idea that at times there is ample resources and opportunities and still the business is not a successful venture only because the entrepreneur does not have the desire to achieve success [64]. On the basis of the research objectives and a comprehensive review of literature, the following hypothesis has been generated:

**Hypothesis 4 (H4).** *Achievement motivation has a significant and positive effect on small-firm performance.*

### 3.5. Relationships among Entrepreneurial Traits, Entrepreneurial Orientation, and Firm Performance

A thorough review of literature encompassing the individual constructs has highlighted the need to study these variables in a holistic manner. Although a number of studies have been carried out in the past using different entrepreneurial traits as predictors of firm performance [65], the entrepreneurial traits have also been studied to measure their effect on firm's performance. Nevertheless, there seems to be a gap in research where all these constructs have been brought together. Notably, the research of Khedhaouria et al. [9] is important in this regard where the entrepreneurial traits of self-efficacy and creativity have been empirically tested as predictors to determine the mediating role of entrepreneurial orientation on firm performance. Their study revealed that the two traits have a significant effect on a firm's performance when supported by a strategic decision-making process, i.e., entrepreneurial orientation. In addition, the study by Ahmed [66] suggests the traits of achievement motivation and internal locus of control should be tested in the same realm. Poon, Ainuddin, and Junit [67] and Khedhaouria et al. [9] carried out similar studies which also highlighted the significance of these two traits in order to develop a concrete understanding of the antecedents of a firm's performance.

### 3.6. Entrepreneurial Orientation (EO) and Small-Firm Performance

The relationship between EO and small-firm performance has been researched thoroughly in many parts of the world. Researchers have conducted a meta-analysis on the relationship of EO and the performance of the firm, in which they included 51 articles stating a positive and significant relationship between the two. One study also showed that by having cultural differences as a control variable among continents that were being considered by researchers in their studies, the results were statistically insignificant, stating that despite having a different culture the relationship between EO and small-firm performance is of similar context [51]. From the arguments of previous studies, it was found that firms could achieve an advantage by representing a suitable degree of boldness, newness, and responsiveness. In the era of rapid changing environments, where business and product life cycles are short lived and uncertainty prevails in the present operations, a firm needs to continually look for new opportunities to generate more profit for the future. Thus, it was posited that EO leads a firm towards higher performance [44]. EO acts as major contributor and is a valuable predictor of a firm's success. There is a significant relationship found for EO on the growth of small firms [13]. Semrau, Ambos, and Kraus [68] studied entrepreneurial orientation and SMEs performance crossways communal culture. Another important study described that EO is considered as a firm's key concept and tool for making different strategies [69]. In a rapid changing environment where a large number of opportunities are available in the market that help in the success of a firm, EO plays a key role in the search for opportunities and, mostly, those firms that adopt the capabilities of EO become successful. It is difficult for small firms to survive in the long run, and therefore there is a critical need for the effective development of business strategies so that the business can continue and prosper. It has been observed that firms with higher entrepreneurial orientation tend to develop certain strategies that will affect performance differently [69]. On the basis of the research objectives and a comprehensive review of literature, the following hypotheses have been generated:

**Hypothesis 5a (H5a).** *EO has a significant impact as a mediator between creativity and small-firm performance.*

**Hypothesis 5b (H5b).** *EO has a significant impact as a mediator between self-efficacy and small-firm performance.*

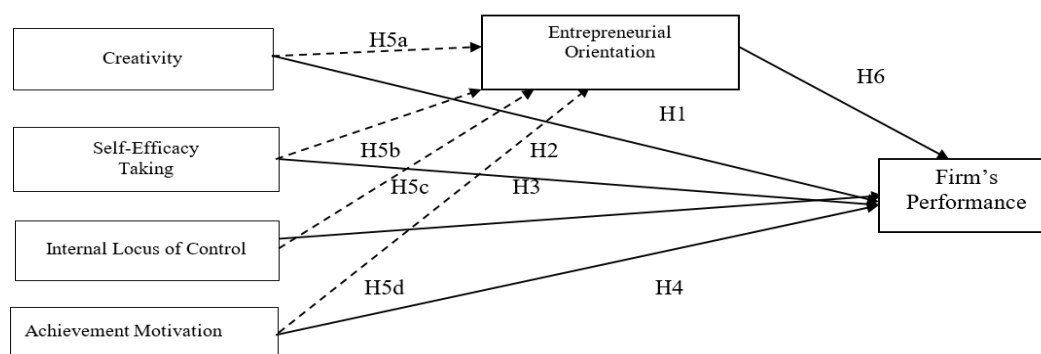
**Hypothesis 5c (H5c).** *EO has a significant impact as a mediator between internal locus of control and small-firm performance.*



**Hypothesis 5d (H5d).** *EO has a significant impact as a mediator between achievement motivation and small-firm performance.*

**Hypothesis 6 (H6).** *EO has a significant and positive effect on small-firm performance.*

A meticulous discussion of the literature and the constructs demonstrated the theoretical and conceptual model for the current study, as shown in Figure 1.



**Figure 1.** Theoretical and conceptual model. Source: previous literature [42,59,63,67,69].

#### 4. Material and Methods

This section covers the components that are necessary for the methodology of this research. The research methodology suggests the sampling size, data collection tools, as well as methods and analysis. The research problem of the study decides which methodology to choose so that a judgment can be made about the congruence of one methodology to another regarding the research problem [70]. The research methodology used in this study is survey research. Survey research provides a quantitative or numeric description of attitudes or opinions by studying a given sample from a population. This survey research is a strategy of inquiry that included longitudinal and cross-sectional studies with data that were collected through structured interviews and questionnaires from the period January 2018 to June 2018, and then used to generalize the findings drawn from the sample of a population [71].

##### 4.1. Research Philosophy

The philosophical paradigm in the research directs the researcher's perspective to frame and plan how to conduct the research within a discipline [71]. Post-positivism provides a substantial scope for human aspirations. It also has a reductionist approach where the perspective is to reduce the propositions and ideas into a small and distinct set of ideas, which can be tested similar to variables comprised of hypothesis and research questions. A post-positivist lens develops the knowledge, which is based on careful measurement and observation of the reality that lies in the outer world [72].

##### 4.2. Research Design

Research design in any research is the most crucial part as it provides the basic sense and the logical sequence from the gathering of required data to the process of analysis leading towards the conclusion [73]. The tradition of inquiry is explanatory. Explanatory research is used to understand the connection of different causes and their effects [73]. As in this study, various independent variables are measured on dependent variables to see their impact on each other. Independent variables are also measured with the mediating variable and then the effect of the mediating variable measured on the dependent variable. For this study, primary data were collected through a structured questionnaire on Google forms from business owners of Karachi. An email was also sent along with the form for the consent of the respondents stating that their information would be held confidential and that

they could withdraw at any point in time. It was a cross-sectional study and the time horizon of this research was prefixed and planned. Limited time was allotted to conduct the research.

#### 4.3. Targeted Population

The population of this study was comprised of the entrepreneurs who are defined as individuals who are setting up businesses or ventures and taking on the financial risks and rewards of the venture. Following this definition, the current study established some particular criteria for identifying the target population. Entrepreneurs could partake in the survey according to the following criteria: (a) entrepreneurs had established their business in Karachi and were actively managing the business, that is, they took ownership and were part of a decision-making process [9,74], (b) the firm must have been functional for the last three years, and (c) the firm must have had a minimum of five employees working under the owner. The population for this study was heterogeneous in terms of entrepreneurs' gender, age, and education, as well as the size of the firm.

#### 4.4. Sample and Sampling Method

Since the population frame is unknown and the exact number of entrepreneurs cannot be obtained, therefore, purposive sampling has been used in this study. Purposive sampling is used when necessary information is extracted from a specific group of people who could provide the relevant information [73]. The suggested sample size is 385 [75] with a 95% confidence interval and a 5% error of margin. Samples were drawn from purposive sampling to get the necessary information from the respondents.

#### 4.5. Instrumentation and Scaling

Primary methods were used for the data collection. The questionnaire used for this research was structured, adapted, and modified based on the research being conducted. The variables used in this study were adopted from past studies. The first section of the questionnaire was based on demographic information. The demographics consisted of information regarding the respondents as well as the firm. The demographics of the respondents included gender, age, and education of the entrepreneur. The age of the firm was also identified from the question, "when was the firm established?" and data was collected about the size of the firm by asking the respondents how many employees worked for the organization. The second section of the questionnaire was based on the study constructs. All the constructs were tracked on a five-point Likert scale ranging from 5 (strongly agree), 4 (agree), 3 (neutral), 2 (disagree), and 1 (strongly disagree). The construct of creativity was measured through four items which was initially developed by Tierney et al. [76] and for this study were adopted from Khedhaouria et al. [9]. A sample item to know about creativity was "I feel that I am good at generating novel ideas". A general self-efficacy scale was used to measure the construct of self-efficacy, which had been developed by Schwarzer et al. [77]. This scale was composed of 10 items adopted from Khedhaouria et al. [9] to measure and understand self-efficacy beliefs. A few examples of the items from self-efficacy are, "I can always manage to solve difficult problems if I try hard enough" and "no matter what comes my way, I'm usually able to handle it". The construct of internal locus of control was measured using the locus of control of behavior scale [78]. This scale consists of 16 items measuring the extent an individual perceives actions as being an outcome of an individual's behavior. If the action is attributed to relating to personal efforts, then it is an internal control. A sample of the items is "when I make plans, I'm almost certain that I can make them work". To measure the construct of need for achievement, a five-item instrument was adapted [7]. The scale was developed by Hermans [79], and it has also been discussed in the literature by McClelland [38], and then later in (1987). Entrepreneurial orientation was measured using the scale adapted from Khedhaouria et al. [9]. Covin and Wales [58] devised this scale on the three dimensions of entrepreneurial behavior, i.e., risk taking, innovativeness, and proactiveness. In this study, each dimension had three items to measure the behavior. To assess firm performance both subjective and objective measures can be used. More commonly, subjective measures are used because objective measures are at times difficult to interpret for new ventures as they are less

susceptible to common procedure bias. Strong reliability and validity have, however, been exhibited by subjective measures Dees and Robinson [19]. In this study, two items were adapted from the literature reflecting financial performance and growth of the entrepreneurs [9]. Item one, “the financial profit of your firm is exceptionally well this year” reflects that the respondent is satisfied with the firm’s performance and the actions taken during the year have gone in favor of the organization. Item two, “the sales volume of your firm was higher than the average growth of the last three years” reflects that the market for the products and services are also doing well.

#### 4.6. Reliability Test

The results in Table 1 exhibit the reliability test that reflects the consistency of the measuring instrument. Cronbach’s alpha value, an indicator for item consistency, was measured in this regard. The higher the value of Cronbach’s alpha, the better the goodness of the tool is considered to be [73]. Each scale used in this study was evaluated for reliability. For the tool measuring creativity, the Cronbach’s alpha coefficient was found to be 0.719, which is acceptable as suggested by Nunnally and Bernstein [80]. Self-efficacy and internal locus of control reliability scores were 0.912 and 0.853, respectively. For achievement motivation, the Cronbach’s alpha value was 0.845, reflecting good consistency of the measure. Entrepreneurial orientation and firm performance values were satisfactory and were 0.769 and 0.806, respectively. Since all of the values for reliability were seen to be under satisfactory limits, there was no need to delete any of the items from the measuring instruments.

**Table 1.** Reliability test.

Construct	No. of Items	Cronbach’s Alpha
Creativity	4	0.719
Self-efficacy	10	0.912
Internal locus of control	17	0.853
Achievement motivation	5	0.845
Entrepreneurial orientation	9	0.769
Firm performance	2	0.806

Source: authors’ estimations.

#### 4.7. Content and Face Validity

According to Sekaran and Bougie [73], content validity confirms that the items and dimensions under each construct are true representatives of the notion being measured. In this study, experts’ opinions were sought for the appropriateness of the measures and face validity. As suggested by Sekaran and Bougie [73], “face validity designates that the items that are planned to measure a concept do on the face of it look like they measure the concept”. For this study, the instruments were shown to some of the potential respondents to obtain their feedback on the pertinence of the item’s wordings, general instructions, and understanding, which might lead to possible difficulty while answering, and for the overall completeness of the instrument being surveyed. On the basis of the respondents’ suggestions, the questionnaire was also translated in our native language, Urdu, by experts and then retranslated into English in an iterative process keeping the essence and the meaning of each item intact to its originality.

#### 4.8. Structural Equation Modeling (SEM)

The data analysis was conducted using partial least squares path modeling (Smart PLS 3.2.8 version 2017: SmartPLS GmbH, Bönningstedt, Germany). According to Schumacker and Lomax [81], “structural equation modeling (SEM) uses various types of models to depict relationships among observed variables, with the same basic goal of providing a quantitative test of a theoretical model hypothesized by the researcher”. It is considered to be a second-generation method for multivariate data analysis. SEM has been used to either confirm or explore a theory [82]. SEM is usually taken as a

confirmatory technique rather than an exploratory technique. Moreover, it also helps to analyze latent construct and to enable various types of investigations such as linear regression, hypothesis testing, variance and covariance estimation, and confirmatory factor analysis [82]. SEM is also proficient in measuring unidimensionality for each construct along with measuring the validity and reliability of the same. It also provides an assessment of overall model fit and simultaneous testing of each parameter on an individual basis, and therefore it gave the most suitable model fit for the data that was collected for this study.

#### 4.9. Estimation Techniques

The data was collected from 353 entrepreneurs, and based on the research objectives the analytical tests were applied. The analysis covered descriptive and inferential statistics including structural equation modeling, as well as exploratory and confirmatory modeling. Researchers have estimated construct validity, convergent validity, discriminant validity, heterotrait-monotrait (HTMT), and path analysis models for direct and indirect effects. The SPSS version 21 (SPSS IBM, New York, NY, USA) and Smart PLS 3.2.8 version 2017 were used for the analysis.

#### 4.10. Respondents' Profile

The current study presents the data of 353 entrepreneurs as the respondents of the survey. Out of these 353 respondents, 78.5% were males while only 21.5% were females. A total of 49% of the respondents belonged to the age group of 24 to 35 years, 32% were 35 to 45 years of age, and only 19% were 45 years and above. The vast majority of the respondents were leading their companies with the number of employees ranging from 10 to 50 (47.3%), whereas 32.3% employed less than 10 employees, and only 20.4% had more than 50 employees in their companies. The respondents' profiles were also found to be diversified and heterogeneous in terms of education, as 45.6% reported having postgraduate degrees and 34% had undergraduate degrees, however, 8% of the respondents had attended primary school only, 11.6% of respondents were identified to possess some additional training or diploma, whereas 7.9% attended high school.

## 5. Data Analysis and Findings

### 5.1. Descriptive Statistics

To have a holistic view of the data, descriptive analysis is significantly important. It offers the researcher an understanding of the important dimensions of data including mean, standard deviation, skewness, and Kurtosis, etc. The descriptive statistics, shown in Table 2, reflect that the mean value of all constructs range from 3.268 to 4.024. The standard deviation and skewness values range from  $-1.5$  to  $+1.5$ , which is in the acceptable range. Moreover, the Kurtosis values lie between  $-3$  and  $+3$  that substantiate the normality pattern of the sample data [83]. Hence, it can be inferred from the statistics that the respondents have a positive and satisfactory level of opinion towards the variables of creativity, self-efficacy, internal locus of control, achievement motivation, entrepreneurial orientation, and firm performance.

### 5.2. Testing of the Measurement Model (Outer Model)

Evaluation of the outer model measures the relationship between the constructs and their respective loadings on each indicator that is the measurement model and also between constructs that is the structural model. The measurement model helps to empirically compare the established measurement theoretically, while the latter depicts reality as proposed by the sample data. The measurement model, which is the outer model, is examined to affirm the validity and reliability of the constructs being measured at the same time assuring the reliability of the instrument used [83].

**Table 2.** Descriptive statistics.

Construct	N	Mean	SD	Skewness	Kurtosis
CR	353	3.819	0.686	−0.978	0.551
SE	353	3.814	0.590	−0.834	0.949
ILC	353	3.268	0.508	−0.818	0.780
AM	353	4.024	0.632	−0.798	0.678
EO	353	3.479	0.570	0.890	0.567
FP	353	3.621	0.901	0.564	0.998

Source: authors' estimations.

### 5.3. Construct Validity

Construct validity indicates the relevance of the items that are measured in the construct of the concept being studied. According to Chan [84], item loadings that are less than 0.30 are poor, between 0.31 to 0.50 they are fair, between 0.51 to 0.60 they are moderate, between 0.61 to 0.80 they are moderately strong, and between 0.81 to 1 they are very strong [54]. In this study, a total of 24 indicators (AM5, EO1, EO2, EO3, EO8, EO9, IC1, IC10, IC12, IC13, IC14, IC15, IC16, IC4, IC5, IC6, IC7, IC8, IC9, SE1, SE3, SE7, SE8, and SE9) have been deleted, as they possess poor loadings as per the abovementioned criteria. Table 3 shows that each indicator significantly loads at 0.01 level of significance. It further assumes validity through factor analysis. Finally, the results lead to the consideration that the overall measurement of the model and construct validity is preserved.

**Table 3.** Significance of factor loadings.

Variables	Items	Loadings	Standard Deviation	T Statistics	p-Values
Achievement motivation	AM 1	0.724	0.048	15.065	0.000
	AM 2	0.772	0.044	17.390	0.000
	AM 3	0.782	0.037	21.355	0.000
	AM 4	0.576	0.075	7.676	0.000
Creativity	CR 1	0.748	0.036	20.620	0.000
	CR 2	0.720	0.041	17.350	0.000
	CR 3	0.698	0.046	15.236	0.000
	CR 4	0.740	0.036	20.521	0.000
Entrepreneurial orientation	EO 4	0.706	0.041	17.276	0.000
	EO 5	0.755	0.033	23.065	0.000
	EO 6	0.702	0.048	14.714	0.000
	EO 7	0.660	0.056	11.759	0.000
Firm performance	FP 1	0.880	0.025	35.747	0.000
	FP 2	0.871	0.031	27.780	0.000
Inter locus of control	IC 11	0.665	0.064	10.362	0.000
	IC 17	0.738	0.050	14.734	0.000
	IC 2	0.682	0.066	10.318	0.000
	IC3	0.724	0.053	13.734	0.000
Self-efficacy	SE 10	0.648	0.047	13.758	0.000
	SE 2	0.666	0.048	13.978	0.000
	SE 4	0.754	0.030	25.474	0.000
	SE 5	0.785	0.030	26.483	0.000
	SE 6	0.712	0.047	15.251	0.000

Source: authors' estimations.

#### 5.4. Convergent Validity

By evaluating all reflective indicators the validity can be performed, and by observing the construct's discriminant and convergent validity the validity can also be examined. In an attempt to establish convergent validity, researchers deem outer loadings of the items or indicators, the average variance extracted (AVE), and the composite reliability (CR). Convergent validity is considered good if the factor loadings of indicators (items) on their related construct is 0.50 or above and AVE is 0.50 or above. The scores of CR is recommended as 0.70 or above [85,86]. As shown in Table 3, factor loadings with all retained items exceeds the criteria of 0.50 on their related constructs. As shown in Table 4, there is good reliability among all the retained items as the values of composite reliabilities (CR) ranged from 0.799 to 0.868 which exceeds the value recommended above. Finally, the values of average variance extracted (AVE) are analyzed with the abovementioned cut-off of 0.50, which depicts that more than 50% of the variance of its indicators are being explained by the constructs. As observed from Table 4, the values of AVE are either exceeding the threshold of 0.50 or are nearly 0.50. Therefore, it is observed that all the results provide good convergent validity.

**Table 4.** Convergent validity test.

Variable	Composite Reliability	AVE
Achievement motivation	0.808	0.516
Creativity	0.817	0.528
Entrepreneurial orientation	0.799	0.499
Firm performance	0.868	0.767
Internal locus of control	0.796	0.494
Self-efficacy	0.839	0.511

Source: authors' estimations.

#### 5.5. Discriminant Validity

Discriminant validity is assessed to confirm the validity of the outer model constructs ensuring that no intercorrelations exist among the constructs. To further elaborate, discriminant validity means that each item is related to their constructs rather than other constructs. This can be evaluated by comparing the square root of the average variance extracted (AVE) with correlations among the constructs, as suggested by Fornell and Lacker [85] and Chin et al. [87]. As shown in Table 5, the entire diagonal values which are the square root of AVE are greater than inter-construct correlations, as suggested by Hair et al. [88]. In this study, discriminant validity is giving good proof. To summarize, in this study construct, convergent, and discriminant validity has been established.

**Table 5.** Discriminant validity Fornell–Larcker criterion.

Variables	AM	CR	EO	FP	IC	SE
Achievement motivation	0.718					
Creativity	0.587	0.727				
Entrepreneurial orientation	0.325	0.431	0.706			
Firm performance	0.328	0.334	0.306	0.876		
Internal locus of control	0.114	0.262	0.363	0.134	0.703	
Self-efficacy	0.578	0.646	0.408	0.356	0.255	0.715

Source: authors' estimations.

#### 5.6. Hetrotrait-Monotrait (HTMT)

The hetrotrait-monotrait (HTMT) value is regarded as the ratio of correlation to discriminant validity. According to Henseler, Ringle, and Sarsdet [89], the value of 0.85 is considered as a threshold to confirm discriminant validity. In this study, the discriminant validity has also been achieved because all the values are less than the abovementioned threshold.

### 5.7. Structural Model (Inner Model)

When all the requirements to satisfy the measurement model of the reflective constructs are met, then, the subsequent phase measures the structural model by evaluating the coefficient of determination ( $R^2$ ), effect size ( $F^2$ ), predictive relevance ( $Q^2$ ), and the path coefficient, as recommended by Hair et al. [88] and Ahmed et al. [90]. The R-squared value represents how much the dependent variable is explained by one or more exogenous variables. Researchers suggest that an acceptable level of  $R^2$  depends on the research area taken into consideration [86]. Chin et al. [87] proposed three categories of  $R^2$ , the first being substantial with a value of 0.67, the second moderate with a value of 0.33, and the third weak with a value of 0.19. Any value of less than 0.19 is unacceptable. Other researchers, such as Falk and Miller [91], suggest a minimum acceptable R-squared value to be 0.10. Therefore, in our study, the  $R^2$  value of EO is 0.277 and firm performance is 0.179 which explicates that 28% of the endogenous variable is defined by exogenous variable and 18% variance occurs on the exogenous variable. Therefore, the model confirms the criterion set by Falk and Miller [91]. To analyze the effect of an exogenous variable on an endogenous variable,  $F^2$  and  $Q^2$  are analyzed which also provides the predictive relevance of the whole model, as shown in Figure 2. According to Cohen [92], the  $F^2$  value of 0.02 is considered a small effect size, however, 0.15 is considered medium, and 0.35 is considered a large effect size. In this study, AM, CR, EO, IC, and SE recorded a small effect size of 0.015, 0.003, 0.023, 0.000, and 0.017, respectively. The predictive relevance ( $Q^2$ ) of the model has also been evaluated using the Stone–Geisser test. The predictive relevance explains “the model and its parameters estimate how well the observed values are measured” [87]. It is established through blindfolding and a value greater than zero signifies the predictive relevance of the model. In this study, the  $Q^2$  value of EO is 0.124 and the FP value is 0.120, which are more than zero, thus indicating the predictive relevance of the model. The model’s goodness of fit can be assessed by the standard root mean residual (SRMR) and, as suggested by Henseler, Hubona, and Ray [93], a value of 0.08 is considered as good enough to assess the fitness of the model in PLS-SEM. In the present study, the value is 0.075 providing a reasonable model fit. After establishing the outer model’s goodness of fit, standardized path coefficients are inspected to test the hypotheses assumed for this study. It uses the bootstrapping technique to reach a conclusion that statistically the path coefficients are either significant or not. To assess the path coefficient, the percentile bootstrap confidence interval of 97.5% is used.

### 5.8. Path Analysis and Hypotheses Testing for Direct Effects

To test the robustness of the model with better stability and precision by Hair et al. (2010), direct relationships of creativity, self-efficacy, internal locus of control, achievement motivation, and entrepreneurial orientation are measured first. As shown in Table 6, the result for  $CR \rightarrow FP$  ( $\beta = 0.077$ , nonsignificant), the relationship for  $H_1$ , shows that there is no direct relationship between creativity and firm performance;  $SE \rightarrow FP$  ( $\beta = 0.164$ ,  $p < 0.01$ ), the relationship expressed for  $H_2$ , is positive and significant;  $IC \rightarrow FP$  ( $\beta = -0.002$ , nonsignificant), the relationship expressed for  $H_3$ , depicts that there is no direct relationship between internal locus of control and firm performance;  $AM \rightarrow FP$  ( $\beta = 0.141$ ,  $p < 0.05$ ), the relationship for  $H_4$ , shows that achievement motivation and firm performance has a positive and significant impact on firm performance; and  $EO \rightarrow FP$  ( $\beta = 0.161$ ,  $p < 0.01$ ), the relationship expressed for  $H_6$ , is positive and significant. The other results of the relationship show that  $AM \rightarrow EO$  ( $\beta = 0.084$ , non-significant);  $CR \rightarrow EO$  ( $\beta = 0.212$ ,  $p < 0.01$ );  $IC \rightarrow EO$  ( $\beta = 0.257$ ,  $p < 0.01$ ); and  $SE \rightarrow EO$  ( $\beta = 0.159$ ,  $p < 0.05$ ) are all significant.

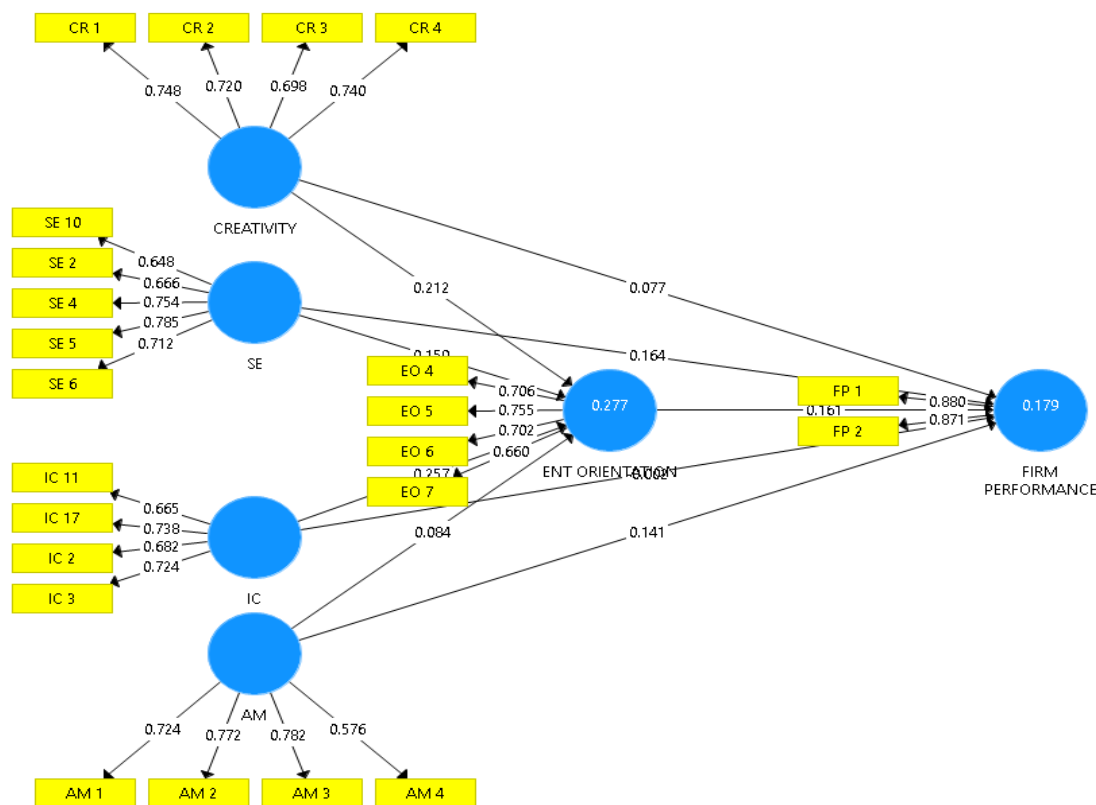


Figure 2. Path analysis model. Source: authors’ estimations.

Table 6. Direct hypotheses results.

Hypothesis Number	Hypothesized Effect	Path Coefficient	SE	T Statistics	p-Value	Decision
H1	Creativity -> firm performance	0.077	0.084	0.913	0.361	Insignificant
H2	Self-efficacy -> firm performance	0.164	0.064	2.561	0.010 *	Significant
H3	Internal locus of control -> firm performance	-0.002	0.061	0.034	0.973	Insignificant
H4	Achievement motivation -> firm performance	0.141	0.066	2.143	0.032 **	Significant
H6	Entrepreneurial orientation -> firm performance	0.161	0.065	2.486	0.013 **	Significant

\*  $p < 0.01$  and \*\*  $p < 0.05$ . Source: authors’ estimations.

### 5.9. Path Analysis and Hypotheses Testing for Mediation Effects

We have employed the bootstrapping method to examine the mediation effects of EO [94,95]. As shown in Table 7, the results show that EO does not mediate achievement motivation and firm performance as the results are insignificant ( $\beta = 0.013$ ) and range between  $-0.007$  and  $0.043$ , therefore, zero occurred between the lower boundary (LB), and the upper boundary (UB). Therefore, hypothesis H5d is not supported, however, EO completely mediates creativity and firm performance because zero does not lie between the LB and UB, and therefore hypothesis H5a is supported. Similarly, EO again completely mediates internal locus of control and firm performance because zero does not occur



between the LB and UB, and therefore H5c is supported. EO does not mediate between self-efficacy and firm performance because zero occurred between the LB and UB, and therefore H5b is not supported.

**Table 7.** Path analysis and hypotheses testing for mediating effects.

Hypothesis Number	Hypothesized Effect	Path Coefficient	SE	T Statistics	p-Value	Decision
H5a	Creativity -> entrepreneurial orientation -> firm performance	0.034	0.017	2.002	0.045**	Significant
H5b	Self-efficacy -> entrepreneurial orientation -> firm performance	0.026	0.017	1.550	0.121	Insignificant
H5c	Internal locus of control -> entrepreneurial orientation -> firm performance	0.042	0.019	2.170	0.030**	Significant
H5d	Achievement motivation -> entrepreneurial orientation -> firm performance	0.013	0.013	1.025	0.306	Insignificant

\*  $p < 0.01$ ; \*\*  $p < 0.05$ . Source: authors' estimations.

## 6. Discussion

The current study makes an effort to contribute to the literature by integrating four entrepreneurial traits into the performance of a small firm through the mediation of entrepreneurial orientation. An attempt was made to answer the research question for this study which was how does an entrepreneur's self-efficacy, creativity, internal locus of control, and achievement motivation along with EO affect the performance of a small-firm. Thus, we tested the theoretical framework empirically. Although the emphasis in this study also specified the empirical association amongst small-firm performance and entrepreneurial traits (such as self-efficacy, creativity, internal locus of control, and achievement motivation) and entrepreneurial orientation, which has a large sample of entrepreneurs, overall, the reliability and validity of the instruments used to measure the variables are found to be satisfactory. The concept has been built on the fact that entrepreneurs with small businesses play a vital role in influencing the decision-making process, which in essence is the EO [9]. We found that self-efficacy, achievement motivation, and EO are directly and positively linked with the performance of a small firm. Therefore, the proposed hypotheses H<sub>2</sub>, H<sub>4</sub>, and H<sub>6</sub> are all found to be significant. The results of this study are in agreement with previous studies such as those by Khedhaouria et al. [9], Bakar et al. [15], and Rayawan and Efrata [63], where the entrepreneurial traits showed a positive and strong relationship with firm performance. Regarding the relationship between self-efficacy and small-firm performance, the findings are in alignment with studies that suggested individuals with strong self-efficacy have more desire for personal accomplishments and mastering the challenging task to make their business successful [9,61]. Other studies state that entrepreneurs possess high self-efficacy and are highly ambitious, and therefore they set challenging goals for their business venture. In this study, similar results indicate that entrepreneurs in this context are also ambitious. This finding may be further supported by the fact that a majority of the respondents held a postgraduate degree (45.6%). Therefore, the inclination of the entrepreneurs in Pakistan towards education can be a reflection of their high self-efficacy. Care has to be taken while setting challenging goals as the goals should be attainable, while, at the same time, also keep them motivated to work with full determination in the interest of their business [61]. Self-efficacy translates an entrepreneur's viewpoint into efforts that consequently result in improved firm performance [62]. Scholars have also identified factors where self-efficacy can lead

to successful performance through conscientiousness and openness to experience. They empirically verified that conscientiousness and openness to experience have a strong and positive relationship with the entrepreneurial performance [62,96]. Although the current study does not encompass the above stated entrepreneurial traits, they can be considered for empirical testing in the context of Pakistan for their effects on a firm's performance. The results for H<sub>4</sub>, regarding the relationship between achievement motivation and firm performance, support McClelland's [38] theory which states that in an entrepreneurial role, achievement motivation is significantly linked with the performance of a firm. The outcomes exhibit a significant and affirmative association among the two constructs. Interestingly, McClelland [38] suggests that the need for motivation achievement is a cultural phenomenon which varies from country to country [63]. He provides evidence that the higher the achievement among the entrepreneurs, the better the entrepreneurial performance [63]. These findings may also be attributed to the age of entrepreneurs. Since 49% of the respondents in this study belong to the age group of 24 to 35 years, the high achievement may be a result of their young and vibrant age [63]. In an attempt to understand the relationship between EO and firm performance, the result also indicates a positive and significant association for H<sub>6</sub>, and also confirms that EO acts as a major contributor and is a valuable predictor of a firm's success. Similar relationships have also been confirmed through former studies, which supports the fact that entrepreneurial processes play a vital role in the growth of a small business [13,44]. EO facilitates firms to influence knowledge that is available both inside and outside of the firm to calculate risk, to extract new offerings through innovativeness, to proactively look for new opportunities, and to undertake new accomplishments [45,97]. From the theoretical perspective, this study provides substantial evidence by empirically stating that entrepreneurial ventures having a high level of decision-making process, i.e., EO may be accompanied with high levels of growth and performance. A noteworthy and interesting finding of this study is the relationship between creativity and small firm performance. Although the literature supports a significant relationship between the two [48], the current study presents a contrasting view through a nonsignificant relationship. From a practical perspective, this insignificant relationship is very important as creativity is an individual trait which may not directly affect the performance of a firm [9]. Furthermore, this statement is also proven through the results of H<sub>5a</sub> where creativity and firm performance are found to be significantly correlated in the presence of EO as a mediator. Thus, these findings provide entrepreneurs with practical insights into how they can capitalize on their creative skills through effective decision-making processes, however, when the relationship between internal locus of control and a firm's performance is tested, the results indicate an insignificant relationship. In contrast, a study by Rayawan and Efrata [63] proposed the idea that entrepreneurs, despite their internal locus of control, need autonomy to take risks. Thus, this trait is dependent upon EO to be effective [98,99]. This contrasting result may also be attributed to the field of work [63]. Entrepreneurs in this study were heterogeneous in terms of the industries they belonged to. Previous studies revealed that the entrepreneurs in a dynamic business environment are required to exhibit high internal locus of control [63].

## 7. Conclusions

The study has been conducted to measure the effects of creativity, self-efficacy, internal locus of control, and achievement motivation on the performance of a small firm through the mediation of entrepreneurial orientation (EO). With a sample size of 353 entrepreneurs, the findings of the research provide valuable insights for both practitioners and academic researchers. This study concluded that EO is the mediating factor between creativity and a firm's performance, however, creativity does not have a direct association with the performance of a small firm. Thus, it concluded that creativity is a skill from which firms can benefit only in the case when the entrepreneurs exhibit a reasonably high level of EO. The study also shows that there is no mediation of EO between self-efficacy and a small-firm's performance, however, self-efficacy has a direct and significant influence on a small-firm's performance. Similarly, achievement motivation and a firm's performance are not mediated by EO, although achievement motivation demonstrated a direct effect on a firm's performance. Internal locus

of control and a firm's performance are also mediated by EO, while internal locus of control does not have a direct association with the firm's performance. Thus, we concluded that internal locus of control in the presence of EO gives more autonomy to take a risk and can proactively understand the different dynamics of the business environment. We also found that by controlling the entrepreneurial traits of creativity, self-efficacy, internal locus of control, and achievement motivation, EO has a direct effect on small-firm performance. The findings of this study provide insights for entrepreneurs including that their firm's performance can be enhanced by promoting EO and encouraging this strategy-making process through exploiting and exploring creative and innovative ideas, a proactive attitude towards different dynamics of the business environment, and risk-taking abilities efficiently and effectively. Further, the study needs to be investigated beyond discussing the entrepreneurial traits as reflective constructs only, and should also focus on studying the variable of EO as a formative construct. Furthermore, the study should attempt to assess performance on objective measures to enhance the explicative power of performance.

## 8. Practical Implications of the Research

From a practical perspective, the findings provide entrepreneurs with practical insight into how they can capitalize on their creative skills through effective decision-making processes. However, with respect to the relationship between internal locus of control and the firm's performance, we proposed the idea that the entrepreneurs, despite their internal locus of control, need autonomy to take risks. Thus, this trait is dependent upon effective entrepreneurial orientation. The results further reveal that the entrepreneurs in a dynamic business environment are required to exhibit high internal locus of control. The results of this study can provide guidelines to the entrepreneurs of small firms concerning how they can enhance their profitability and competitive advantage by manipulating different factors.

## 9. Future Avenues for Research

The present study, inconsistent with previous studies, assessed a firm's financial performance using subjective measures [9,19]. Although subjective measures to evaluate performance exhibit strong validity and reliability, the study should attempt to measure a firm's financial performance through financial statements. It is further suggested that the construct of EO has been assessed as a reflective construct, whereas it could be tested as a formative construct along with the entrepreneurial traits.

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