Green Entrepreneurial Self-Efficacy And Its Outcomes: The Mediating Role Of The Attitude Towards Entrepreneurship

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Abstract

The objective of this research is to investigate the correlation between green entrepreneurial self-efficacy (GESE) and its outcomes, which include innovative work behavior (IWB) and entrepreneurial intention (EI). Specifically, the study will focus on the mediating effect of attitude towards entrepreneurship (ATE) using the framework of theory of planned behavior (TPB). Data was collected from 307 employees working in SMEs related to the textile industry in Pakistan. M+ is used to test the research model. The research findings indicated that individuals' belief in their ability to succeed as green entrepreneurs had a beneficial effect on their inclination to engage in creative work practices and pursue entrepreneurial endeavors. Moreover, the attitude towards entrepreneurship served as a mediator in the connection between green entrepreneurial self-efficacy and its resulting effects, namely creative work behavior and entrepreneurial intention. Green entrepreneurial self-efficacy is the belief in one's ability to successfully engage in environmentally sustainable entrepreneurial activities. This study suggests that green entrepreneurial self-efficacy can be an effective tool for managers to induce entrepreneurial intention and innovative work behavior. This research added to green self-efficacy, innovation, and entrepreneurial literature and provided understandings into how managers could enhance the green entrepreneurial self-efficacy of employees to boost innovative work behavior and entrepreneurial intention.

Keywords: green entrepreneurial self-efficacy (GESE), innovative work behavior (IWB), attitude towards entrepreneurship (ATE), entrepreneurial intention (EI).

INTRODUCTION

Self-efficacy refers to an individual's awareness of their ability to successfully do a specific task (Chen and Zhou, 2017). Self-efficacy is also defined as the measurement of the degree of confidence that an individual's holds to perform a variety of business activities (Jiangru Wei et al., 2020). The theoretical framework of social cognition acknowledges self-efficacy as a crucial determinant of entrepreneurial behavior (Alshebami, 2023). While entrepreneurship is all about taking risk, combining resources, developing innovative products or services, and responding quickly to the available opportunities (Stephens et al., 2013). Integrating the concept of green entrepreneurship with self-efficacy refers to an individual's belief in making positive contributions to address environmental concerns while doing commercial activities (Chu et al., 2021). Green Entrepreneurial Self-Efficacy (GESE) is an entrepreneur's strong belief in their own ability...
to create environmentally beneficial and financially successful businesses (Alshebami, 2023). GESE presents a new perspective by combining the focus on environmentally sustainable practices with the traditional notion of entrepreneurial self-efficacy. The significance of green entrepreneurial self-efficacy is paramount in the current corporate landscape due to the growing importance of sustainability and environmental responsibility. The GESE is a concept related to the field of entrepreneurial research considering environmentally friendly businesses (Kasouf et al., 2015). GESE significantly enhances entrepreneurial performance and predicts individuals’ entrepreneurial ambition with great concern of environmental protection (Caines et al., 2019). Green entrepreneurial self-efficacy is particularly relevant in industries and sectors where businesses have the potential to make a significant impact on environmental sustainability (Guo, 2022). Some key sectors where green entrepreneurial self-efficacy is essential include renewable energy and carbon emissions, recycling and green waste management, eco-friendly transportation, sustainable agriculture, green building and construction, green research and development, and green consulting or advisory services.

In these sectors, individuals with high levels of green entrepreneurial self-efficacy are more likely to implement innovative business policies and strategies that drive towards transformation of conventional business ventures into green industries (Ahmed, 2020). Innovative work behavior (IWB) is defined as the process by which an individual inside an organization produces, disseminates, and implements any creative novel activity in order to enhance his working methods (Afsar et al., 2019). In other words, the conduct of staff to offer innovative and valuable ideas in company operations and services. Innovative work behavior is the result of an individual's ability to come up with new innovative idea for development a novel plan, to address business problems (Amabile, 1988). One way to assess creative work behavior is to look at how green self-efficacy affects the process of developing and carrying out entrepreneurial decisions (Barakat et al., 2014). In the literature, an entreprenuers, who has a higher GESE are more likely to set innovation-related objectives for their businesses (Jiangru Wei et al., 2020). The literature also demonstrates that the IWB of entrepreneurs is very important for survival in the dynamic business environment (Jiangru Wei et al., 2020).

Therefore, the reinforcement of IWB is an important objective in entrepreneurial research (Chen and Zhou, 2017). Green entrepreneurial self-efficacy is linked to innovative work behavior as important determinants in both adaptation to environmental changes and success in entrepreneurial activities (Obschonka and Stuetzer, 2017; Jiangru Wei et al., 2020). Entrepreneurial intention (EI) represents an individual’s readiness and commitment to engage in entrepreneurial activities (Darmanto & Pujiarti, 2020). EI reflects the personal determination to start a business and serve as a crucial predictor to entrepreneurial behavior (Ceresia & Mendola, 2020). The Theory of Planned Behavior (TPB), proposed by Ajzen, 1991, is emerged as the dominant theoretical framework for explaining behavioral intentions due to its simplicity, conceptual coherence, and versatility across different behavioral domains (Tegtmeier, 2012; Charalampos Botsaris and Vasiliki Vamvaka, 2014). Investigating how green entrepreneurial self-efficacy is developed is very important for scholars because a large number of research publications indicate that individuals who possess entrepreneurial capabilities have higher chances of developing entrepreneurial intentions through venture creation activities (Tesvati & Tiatri, 2021). GESE is a significant
factor in determining entrepreneurial intention within the realm of literature (Arshad et al., 2016). The connection between green entrepreneurial self-efficacy (GESE) and entrepreneurial intention (EI) is essential for comprehending how individuals' beliefs about their capabilities in green entrepreneurship impact their intention to participate in environmentally sustainable entrepreneurial endeavors (Botha, 2020). Furthermore, individuals who have a strong sense of green entrepreneurial self-efficacy are more inclined toward green entrepreneurship. This increased level of green self-efficacy concerning the environment cultivates a favorable mindset and confidence in one's capacity to tackle the difficulties related to starting and managing a sustainable enterprise (Bachmann et al., 2021). When individuals possess the belief in their ability to create a beneficial influence through sustainable entrepreneurship, they are more likely to have a strong determination to actively seek out chances in the environmentally friendly industry (Piperopoulos & Dimov, 2015). The relationship between these components is crucial in shaping the framework of green entrepreneurship and facilitating positive contributions towards environmental sustainability (Thelken & De Jong, 2020).

Attitude refer to the combination of facial expression, posture, gesture, and mood (Norasmah & Siti, 2017). Attitude may also be described as the extent to which a person is willing to evaluate conduct (Arshad et al. 2016). The Global Entrepreneurship Monitor”(2010) defined attitude towards entrepreneurship (ATE) is the degree of convenience that an individual thinks to exploit opportunities for starting a new business venture. In prior literature, ATE was described as a function of someone’s beliefs on those qualities that are linked with entrepreneurial activities through a favorable or unfavorable attitude (Adefokun et al., 2018). In general, the attitude of individuals to be involved in entrepreneurial activities is influenced by multiple factors categorized as push factors and pull factors (Agbonna et al., 2022). The push factors consist of all the social forces, including culture, religion, opportunities, economic conditions, and political conditions surrounding the environment. In contrast, pull factors are psychological or cognitive factors that influence the personality of an entrepreneur. Furthermore, there are only three vital fundamentals of attitude towards entrepreneurship: first, the ability of an individual to “recognize opportunities” second, the ability of one’s to “exploit those opportunities”.

As it goes one step ahead, the third foundation may be “creation of those opportunities”. The attitude towards entrepreneurship (ATE) is a key factor that influences entrepreneurial intention (EI) (Ajzen, 1991). Attitude has established, significantly, a vital role in determining individual entrepreneurial intention (Arshad et al., 2016). Many scholarly investigations have been conducted to analyze the correlation between individuals' attitudes towards entrepreneurship and their inclination to engage in entrepreneurial endeavors, employing the Theory of Planned Behavior (TPB) as a theoretical framework (Sampene et al., 2023). But there is limited research that expressly focuses on combining the relationship of green entrepreneurial self-efficacy, attitude toward entrepreneurship, innovative work behavior and entrepreneurial intention. Pakistan is classified as a developing nation among the leading global textile manufacturers. However, it confronts several environmental obstacles, including water and air contamination as well as energy inefficiency (Baeshen et al., 2021). The small and medium enterprises (SMEs) sector has around 5.2 million micro, small, and medium firms (Najeeb, 2021). These firms
undoubtedly contribute to pollution and give birth to additional environmental difficulties akin to the worldwide scenario. According to reports, small and medium-sized enterprises (SMEs) are accountable for over 80% of the harmful environmental issues in industries worldwide and over 60% of the garbage produced (Aghelie, 2017; Hillary, 2004). The impact of small firms in Pakistan is insufficiently researched and examined. The study of innovative work behavior and small companies is contingent upon the regional context in which these small organizations operate. Hence, it is crucial to examine green entrepreneurial self-efficacy (GESE) as the catalyst for innovative work behaviors (IWB) and entrepreneurial intentions (EI).

- The primary objective of this study is to bridge the gap between existing literature by developing the relationship between green entrepreneurial self-efficacy (GESE) and its outcomes (i.e., IWB and EI), with a special emphasis on employees (IWB) and (EI).
- The secondary objective of this research is, to recognize the mediating effect of the attitude towards entrepreneurship (ATE) with the help of the framework of “theory of planned behavior” (TPB).

**THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT**

According to the study of Pedrini et al. (2017), the desire to launch a business is driven with attitudes, subjective norms, and perceived behavioral intention. Researchers already examined the impact of the Theory of Planned Behavior (TPB) on entrepreneurial intentions (Tendai Douglas Svotwa et al., 2022). But, questions have been raised about the extent to which the TPB influences entrepreneurial intention (Garca-Rodriguez et al., 2015). In order to reveal the connection between the other related variables (innovative work behavior (IWB) and attitude towards entrepreneurship (ATE)) of the field of entrepreneurship and the individual entrepreneurial process, the author in plans to apply the Theory of Planned Behavior (TPB) in this study (Tendai Douglas Svotwa et al., 2022). The theory of planned behavior (TPB) provides a comprehensive structure for recognizing the influence of several aspects, such as personality characteristics, risk-taking behavior (Al-Mamary, et al., 2020).

Boonroungrut and Huang (2021) concluded that the Theory of Planned Behavior (TPB) is a well-recognized theory for understanding behavioral change. They extend its influence of (TPB) beyond the scope of only psychology and broader socio-psychological domain of research. Since McClelland’s seminal 1961 publication, “Entrepreneurial Behavior and Personal Characteristics,” the primary focus of scholarly discussion on entrepreneurship has been on entrepreneurial behavior and individual traits. According to Kao (1991), activity-based research is the path that entrepreneurship research should take going forward. As a result, an entrepreneurial approach places a strong emphasis on the acquisition of opportunities and resources. This empirical study was motivated by the realization that behavioral and cognitive elements, as opposed to personality traits, are more credible in establishing an entrepreneurial orientation's validity (Tendai Douglas Svotwa et al., 2022). Intention is said to be the proximate cause of behavior by the TPB, as stated by Boonroungrut and Huang (2021). They came to the conclusion that cognitively engaged behavior is favorably appraised and is primarily determined by attitudes, subjective norms, acceptable social view, perceived behavioral control, and positive or negative behavior evaluation.
Green entrepreneurial self-efficacy was a novel idea which is applied to the field of entrepreneurship and viewed as a pretty continuous component of an entrepreneur's psychological capital giving value to environment (Jiangru Wei et al., 2022). GESE is an abbreviation for "Green Entrepreneurial Self-Efficacy," which measures the level of confidence that business owners have in their skills to undertake various entrepreneurial activities, specifically emphasizing environmental conservation. The notion suggests that entrepreneurs have the capacity to alter their surroundings and attain success via activities that are in line with these alterations (Jiangru Wei et al., 2022). Liu et al. (2019) have shown that the concept of green entrepreneurial self-efficacy is a valuable theoretical framework for comprehending the process of entrepreneurial intention formation and subsequent decision-making. This paradigm largely concerns an individual's belief in their ability to effectively conduct a specific task or achieve a particular objective within the context of entrepreneurship. This phenomenon has persisted due to the concept of self-efficacy, which refers to the conviction in one's competence to successfully complete a task or achieve a certain objective.

Entrepreneurs may increase their green entrepreneurial self-efficacy by consistently being immersed in an entrepreneurial setting, which is impacted by individual and environmental factors (Gist and Mitchell, 1992; Barz et al., 2015). This enables entrepreneurs to obtain, adapt, and augment their entrepreneurial aptitude. Furthermore, people may improve their performance by leveraging their creativity, resourcefulness, and other inherent abilities (Jiangru Wei et al., 2022). According to Scott and Bruce (1994), individuals need to actively seek help, establish collaborations, and develop prototypes or models in order to participate in IWB. This approach ultimately culminates in the creation of novel products or services. In their study, Kang et al. (2016) provide a precise definition of innovative work behavior (IWB) as a methodical approach where individuals produce original ideas or solutions by identifying and analyzing difficulties, seeking help, recognizing their own capabilities, and putting these ideas into practical action. Innovation is a multifaceted process that involves the creation, dissemination, and implementation of novel ideas (Kazadi et al., 2016).

According to Beaver and Prince (2002), Integrated Business is present at many stages of planning, organizing, executing, and managing in the sphere of entrepreneurship. According to Barakat et al. (2014), IWB and entrepreneurial innovation are inextricably linked. Both IWB and entrepreneurial innovation are supported and constrained by a range of factors, including perception, motivation, knowledge, ability, and belief. On the other hand, a number of behaviors, including as opportunity detection, learning from mistakes, and entrepreneurship-related creativity, have been shown to be connected with GESE (Dempsey and Jennings, 2014). These correlations have been established through research. The goal and self-concordance theory states that people who establish self-concordant goals are more likely to succeed in achieving them because they are more likely to continuously engage in actions that advance their entrepreneurial skills (Sheldon and Elliot, 1999). In other words, the attainment of self-concordance positively influences goal achievement when individuals possess a comprehensive comprehension of their own selves. Previous research on self-concordance has established a direct association between goal-specific efficacy and autonomous motivation, identifying it as a crucial prerequisite for achieving goals (Downes et al., 2016). This association was made when the researchers found that goal-specific efficacy
was directly associated with autonomous motivation. Entrepreneurs typically recognize internal branding as a critical initiative and goal. GESE is a component of an entrepreneur’s psychological wellbeing that can have a variety of different consequences on IWB. It has been shown that entrepreneurs with high GESE have higher innovative performance when it comes to their psychological well-being (Jiangru Wei et al., 2022). Secondly, people with high GESE are better equipped to accept reality, which is important because the process of innovation is fraught with risks and uncertainties (Mcgee and Peterson, 2017). As a result, individuals with elevated levels of green entrepreneurial self-efficacy (GESE) tend to hold greater expectations for desired outcomes compared to individuals with lower levels of GESE, who exhibit a preference for adopting a cautious approach when establishing goals and implementing innovative strategies (Caines et al., 2019).

This stands in opposition to individuals with lower levels of GESE, who exhibit diminished levels of self-efficacy and hence possess reduced expectations towards the attainment of desired results. In other words, entrepreneurs with a strong GESE exhibit greater confidence in their ability to accomplish their objectives and are more inclined to surmount obstacles encountered during the process of creation. As a consequence of this, they are more willing to advocate the modification and strengthening of GESE. People who have low GESE, on the other hand, typically have worries about their ability for innovation. As a consequence of this, they are more likely to shy away from problems or even give up when they do (Neumeyer et al., 2018). Therefore, it is possible to formulate a hypothesis that:

**H1.** GESE is positively associated with IWB.

When one thinks about entrepreneurship, the first things that spring to mind are other people and the behavioral processes that they go through. As a consequence of this, those who have more extensive GESE beliefs have a greater likelihood of being business owners. GESE belief can be defined as an individual’s perspective of their own capacity to be an entrepreneur as well as their confidence in effectively carrying out the duties and responsibilities of entrepreneurship (Jiangru Wei et al., 2022). GESE believe is sometimes referred to as green entrepreneurial self-efficacy. The concept of green entrepreneurial self-efficacy serves as a factor that differentiates entrepreneurs from individuals who do not engage in entrepreneurial activities.

It plays a crucial role in assessing the strength of an individual’s intention to pursue entrepreneurial action and the likelihood of this intention being translated into actual entrepreneurial actions (Markman and Baron, 2003). This belief determines the strength of the entrepreneurial intention and the likelihood that this intention will materialize into entrepreneurial activity. A high GESE is one of the requirements for people who want to be entrepreneurs. People who have a low self-efficacy regard the business world as being full of barriers rather than opportunities, in contrast to those who have a high self-efficacy who see the business environment as being full of opportunities. The study conducted by Wei et al. (2022) reveals that perceived self-efficacy exerts an influence on feasibility and ultimately culminates in the formation of intention. Ajzen (1991) was the one who initially presented the concept of the planned behavior theory. This hypothesis suggests that the reason a person has for engaging in a given behavior has an effect on the likelihood that the behavior will be shown. It’s easy to generalize someone else's
motivations based on how they feel about themselves. According to Sharma et al. (2011), one of the factors that goes into assessing whether or not an attitude is present is an evaluation of how probable it is that a certain action would have the intended results, as well as an evaluation of whether or not those outcomes are acceptable in light of the social norms of a reference group and whether or not those outcomes are desirable. Studies have shown that those who hold a GESE belief are more likely to have an interest in launching their own company. In a study involving 140 employees, for example, research has revealed a significant and positive correlation between individuals' impression of green entrepreneurial self-efficacy and their entrepreneurial desire. This view encompasses several entrepreneurial skills such as marketing, invention, management, and financial control, along with risk-taking propensity. This association included entrepreneurial abilities such as marketing, innovation, management, and financial control.

According to the findings of the research conducted by Chen et al. in 1998, those who had a higher level of self-efficacy were better able to evaluate the prospects of being an entrepreneur and forecast positive outcomes. In a manner analogous to this, it was asserted that one's capacity for self-evaluation has a direct bearing on the process of beginning a firm (Chandler and Hanks, 1994). The results of a study involving 272 individuals indicated significant and positive correlations between various aspects of green entrepreneurial self-efficacy, including uncertainty and risk administration, creativity and advancement of products, relationships between individuals and network oversight, identification of opportunities, searching for resources, developing and maintaining of the creative business setting, and entrepreneurial intention. According to Wang et al. (2021), having confidence in one's capacity to accomplish ecologically sustainable entrepreneurial activities, known as green entrepreneurial self-efficacy, might increase the likelihood of having intents to start enterprises that are focused on sustainability or "green" practices. This idea relates to an individual's self-assurance in their ability to successfully tackle environmental difficulties while establishing and overseeing a firm that implements sustainable practices. Individuals who possess a strong sense of green entrepreneurial self-efficacy have a firm belief in their abilities to tackle environmental issues via entrepreneurial endeavors. Their belief in their ability to solve problems drives them to start long-lasting company concepts. Individuals who possess a strong sense of self-efficacy in environmental matters are more likely to have confidence in their ability to provide sustainable solutions. This self-assurance motivates individuals to cultivate innovative and ecologically sustainable company ideas, resulting in increased intentions to engage in environmentally aware entrepreneurship.

H2. GESE is positively associated with EI.

The connection between beliefs and attitudes and intentional and volitional conduct has been shown in previous research (Elfving, 2008). Examining an individual's attitude towards entrepreneurship can provide insights into the underlying reasons for this connection. Ajzen (1991) defines an individual's attitude towards a certain conduct as their thorough evaluation of the benefits and drawbacks connected with engaging in that particular action. An attitude may be described as a "acquired inclination to consistently react in a positive or negative manner towards a specific object." According to Eagly and Chaiken (1993), attitudes are psychological tendencies that are expressed through the appraisal of a particular thing, with different levels of liking or disliking. The
definition of attitudes offered here bears similarity to the one proposed by Souitaris et al. (2007). The research defined "attitude towards self-employment" as the difference in people's evaluations of the desirability of engaging in self-employment compared to being employed by an organization. According to Fini et al. (2012), "attitude towards behavior" refers to the degree to which an individual holds a positive or negative evaluation of the conduct being studied. Entrepreneurship Initiative (EI) is a dynamic area that requires additional research in order to comprehend and manage the many tools for beginning a new firm, such as internships and business incubators (Anjum et al., 2020). The tendency for individuals to engage in entrepreneurial activity provides a vital foundation for the launch of new businesses. Individuals who have the aspiration to found new firms in the future can be inspired to do so by adopting an entrepreneurial mindset and conducting themselves in an entrepreneurial manner.

On the other hand, they have a propensity to have a wage-earning mentality and an unhealthy reliance on the government's ability to generate employment opportunities. According to Sieger et al. (2014), this mindset has the potential to stifle entrepreneurialism as well as innovative and creative practices. In a separate but related study, the researchers discovered that people's attitudes and EI improved in proportion to the amount of information they possessed regarding creative temperament. Feldman and Bolino (2000) came to the realisation that creative people have a higher propensity to be self-employed as a result of their findings. In a similar vein, Anjum et al. (2021) suggest that creative intelligence may have a significant bearing on how people go about beginning a new enterprise. The present study conducted by Karimi et al. (2017) examined the associations between individual/psychological characteristics and entrepreneurial success.

The researchers specifically focused on the mediating roles of perceived behavioral control (PBC) and attitude towards entrepreneurship (ATE), and included them as important components in their analysis. The efficacy of both the Attentional Control and the Perceived Behavioral Control constructs was assessed in order to examine their potential as mediators in the association between Emotional Intelligence (EI) and personality traits. Numerous studies have consistently demonstrated the positive impact of ATE and PBC on EI. Furthermore, it may be argued that individuals would experience a sense of confidence in their possession of essential entrepreneurial abilities, hence fostering a favorable perception of the entrepreneurship concept (Karimi, 2019). This would enable individuals to effectively launch a new enterprise. A previous investigation conducted by Luthje and Franke (2003) revealed that many personal and contextual factors, including attitudes towards entrepreneurship, personality traits, and the social milieu, exerted influence on entrepreneurial intention (EI). As a result of this, it is likely that ATE serves as a more direct predictor and mediator in the relationship between GESE and IWB.

**H3.** ATE mediates the relationship between GESE and employees’ IWB.

Ajzen (1991) defined attitude as the degree to which an individual possesses a favorable or unfavorable assessment of a conduct. Entrepreneurial attitude pertains to an individual's cognitive and emotional disposition towards entrepreneurship. Behavioral attitudes can be categorized into affective and instrumental. Affective attitude pertains to an individual's perception of whether an activity is pleasurable or not. Instrumental
attitude, in contrast, pertains to whether the activity is advantageous or detrimental. The sense of desirability, which influences entrepreneurial intention, is significantly influenced by the attitude towards entrepreneurship. Santos et al. (2016) and Liñán et. al. (2011) has found that ATE has a beneficial effect on EI.

**H4.** ATE mediates the relationship between GESE and EI.

**H5.** ATE and EI sequentially mediates the relationship between GESE and IWB.

![Conceptual Framework](image)

**Figure 1.**
Conceptual Framework

**METHODOLOGY**

The purpose of this study is to develop the relationship between the GESE and its outcomes (that is, IWB and EI), with a special emphasis on employees IWB and EI. Therefore, the study opted for the descriptive-causal research design as the most suitable approach to accomplish its aims. Hsu et al. (2019) did a study using a descriptive-causal research technique to examine how self-efficacy affects EI. The sample was obtained from small and medium-sized enterprises (SMEs) in Pakistan. Following consultations with senior executives and HR experts, we have decided to extend an invitation to all First level managers and their corresponding supervisors to participate in our survey. The data was obtained from two sources, with a time lag of two months. Previous studies indicate that receiving endorsement from top-level executives might potentially enhance the response rate by capturing the interest of prospective participants (Dillman, 2000). Hence, the company’s CEO conveyed his endorsement of the research and urged employees to participate in both the company-wide meetings conducted one month and one day before to the first survey distribution.

Subsequently, questionnaires assessing self-perceived levels of green entrepreneurial self-efficacy, entrepreneurial intention, and attitude towards entrepreneurship were handed to the 509 workers during their working hours. We have received a total of 413 questionnaires that were deemed acceptable, resulting in a response percentage of 81.1%. Following a two-month gap from the first survey, we sent supervisors rated IWB forms to 413 respective supervisors to rate their subordinate IWB. We had a total of 329 valid replies, resulting in a response rate of 79.66%. Ultimately, we successfully paired employees’ responses with supervisors, resulting in a total of 312 valid survey data. Five responses were excluded to guarantee the data’s normality. For data analysis, a total of 307 responses were used. In order to maintain the privacy of the information provided,
participants were instructed to place their completed survey in a securely sealed envelope and personally send to the researcher at the designated location. The questions were encoded to facilitate subsequent matching of accurate employee-supervisor pairs. For the purpose of this research project, which was conducted in Pakistan, SMEs of five different cities including Lahore, Islamabad, Faisalabad, Multan, and Bahawalpur were selected to act as data collection locations. Because this was an investigation of entrepreneurship, 307 employees from SMEs were selected to take part in the study and evaluate the IWB and EI (Ali et al., 2017). The sample size for this investigation was determined using the methodologies outlined by Krejcie and Morgan (1970). The researchers utilized proportionate stratified random sampling, following the method suggested by Krejcie and Morgan (1970). Rahi et al. (2019) indicate that in proportionate stratified random sampling, the sample size for each division is determined based on the size of the division's population.

Demographic Profile

Prior research on innovative behavior indicates that the demographic characteristics of employees may explain the differences in their innovative behavior, which might impact the outcomes of the proposed relationship in this study. Hence, we accounted for the influence of employees' gender, age, and education level (Lee, Schwarz, Newman, & Legood, 2017). The responders were 67.1% male, 32.9% female and most responders (60%) were under 30 years of age. The education level were, 53.1% of this population's has at least a bachelor's degree, while 41% are master's degree holders and 5.9% are PhD researchers. In addition to this, 65.10 percent of the employees have no prior experience of self-employment, whereas 20.8 percent of the employees come with previous experience of self-employment.

Measures

Data was collected using a scale that has previously been verified as reliable and valid. Data was collected using a five-point Likert scale, where 1 represents strongly disagree and 5 represents strongly agree. The De Jong and Den Hartog (2010) scale consisting of six items was used to gather data pertaining to innovative work behavior. The sample item is: "I am willing to do whatever it takes to become an entrepreneur." The measurement of entrepreneurial intention was conducted using a scale consisting of six items, which was designed by Lián and Chen (2009). The sample item is "What is the frequency of acquiring new skills in your workplace?". The measurement of attitude towards entrepreneurship was conducted by Lián and Chen in 2009. The sample item is "I would love to start a business if I had the chance to do so and the resources to do so". In addition, the level of confidence in green entrepreneurship was assessed using six questions sourced from Wilson et al. (2007). One of the elements is "I am able to make decisions in business-related matters".

ANALYSIS AND RESULTS

Confirmatory Factor Analysis

In order to determine the discriminant validity of the four-component model in Mplus 7, we performed confirmatory factor analysis (CFA), while considering the small size of our sample. The assessment of model fit was performed using several indicators as suggested
by Li et al. (2010). The indices comprised the comparative fit index (CFI), Tucker-Lewis index (TLI), standardized root mean square residual (SRMR), and root mean square error of approximation (RMSEA). To assess the appropriateness of a model's fit to the data, it is suggested that the Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) should surpass the threshold of 0.90, as given by Chi and Qu (2008). Additionally, it is advised that the Root Mean Square Error of Approximation (RMSEA) value should be lower than the acceptable level of 0.08, as specified by Browne and Cudeck (1992). The proposed measurement model underwent testing, in which the indicators were evaluated for their correlation with each predicted latent construct, namely GESE, IWB, EI, and ATE. The results suggest that the proposed four-factor model (referred to as Model 1) demonstrated a reasonable level of compatibility with the gathered data. The statistical study produced a chi-square value of 264.87, with 224 degrees of freedom. In addition, the comparative fit index (CFI) had a value of 0.99, the standardized root mean square residual (SRMR) had a value of 0.03, the Tucker-Lewis index (TLI) had a value of 0.99, and the root mean square error of approximation (RMSEA) had a value of 0.03.

Table 1. Measurement Model

<table>
<thead>
<tr>
<th>Measurement model</th>
<th>$X^2$</th>
<th>df</th>
<th>$\Delta X^2$</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>CFI</th>
<th>TLI</th>
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<tbody>
<tr>
<td>1. 4 factor measurement model</td>
<td>264.87</td>
<td>224</td>
<td>.03</td>
<td>.99</td>
<td>.99</td>
<td>.99</td>
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<tr>
<td>2. 3 factor measurement model</td>
<td>784.78</td>
<td>227</td>
<td>210.05***</td>
<td>.09</td>
<td>.06</td>
<td>.88</td>
<td>.87</td>
</tr>
<tr>
<td>3. 3 factor measurement model</td>
<td>998.83</td>
<td>227</td>
<td>352.82***</td>
<td>.11</td>
<td>.07</td>
<td>.78</td>
<td>.76</td>
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<tr>
<td>4. 2 factor measurement model</td>
<td>1320.80</td>
<td>229</td>
<td>446.75***</td>
<td>.13</td>
<td>.09</td>
<td>.12</td>
<td>.12</td>
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<tr>
<td>5. Single factor measurement model</td>
<td>1821.41</td>
<td>230</td>
<td>953.41***</td>
<td>.15</td>
<td>.11</td>
<td>.68</td>
<td>.65</td>
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Note. N=307. GESE = green entrepreneurial self-efficacy, ATE = attitude towards entrepreneurship, IWB = innovative work behavior, EI = entrepreneurial intention. In model 2 GESE and ATE were merged. In model 3 EI and IWB were merged. In model 4 EI and ATE and IWB and GESE were merged.

*p < .05, **p < .01, ***p < .001

In addition, we conducted tests on four alternative models in order to assess whether a more concise model yielded a comparable level of fit (Ng and Feldman, 2012). When comparing the alternative models, it is evident that they exhibit much poorer fit compared to the four-factor model. The indices used to evaluate the fit of these models did not meet the recommended standards, as seen in Table 1. Therefore, it was determined that the four components exhibited significant differentiation.

Common Method Bias Control

It is crucial to acknowledge the possible existence of common method variance (CMV) due to the use of self-report data in the measuring scales employed in the study. The occurrence of this phenomenon may be ascribed to several factors, including social desirability and consistency, as highlighted by Williams et al. (2003). The ongoing investigation has rigorously adhered to the principles of secrecy and voluntariness in order to reduce bias in the study design, thereby serving as a procedural safeguard. In order to mitigate the influence of common method bias, we employed a time-lag strategy to gather data (Podsakoff et al., 2003, 2012). In addition, we utilized multisource data, meaning that outcome data were obtained from the respective supervisor, in
order to minimize common method bias (CMB) (Podsakoff et al., 2003, 2012). Furthermore, we conducted statistical analyses employing the methodologies employed by Liang et al. (2007) to evaluate the extent of severity of CMV. Carlson and Kacmar (2000) utilized Harman's single component analysis approach in the first stage of their investigation to identify possible concerns. According to the study done by Podsakoff et al. (2003), it is generally agreed upon that the potential influence of common technique variance can be considered insignificant when numerous factors are identified and the amount of variation explained by the first factor is less than 40%. The results obtained from the Harman single factor test indicated that the four factors identified by principal component analysis explained an initial variation of 18.59%. This suggests that the possibility of common method variance (CMV) considerably influencing our findings is improbable. To assess the measurement model, it is necessary to determine the validity of content, convergent, and discriminant (Bock et al., 2005). Content validity was evaluated by considering the theoretical background, doing a literature study, and examining published research.

The reliability test employed Cronbach's alpha, a coefficient that assesses the intercorrelation among indicators (Cronbach, 1951). In this investigation, a threshold of 0.70 (Nunnally and Bernstein, 1994) was used instead of 0.60 (Bagozzi and Yi, 1988). Cronbach a values are 0.91–0.92, matching the reliability requirement. Dillon-Goldstein’s (Joreskog’s) pc is a more reliable indicator for internal consistency of latent variables than Cronbach a, which assumes equal importance of indicators (Vinzi et al. 2010). This indicator accounts for differences between indicators of a latent variable. CR is composite reliability. The minimum threshold for CR is set at CR ≥ 0.70, based on structural modelling and psychometric theories (Nunnally and Bernstein 1994) and other research (Bock et al. 2005; Xue et al. 2011). Some researchers used 0.50, while others used 0.60 (Bagozzi and Yi 1988). The composite reliability requirement is met since the measurement model (CR) composite reliability values vary from 0.88 to 0.91.

To assess convergent validity, we employed the average variance extracted (AVE) as proposed by Hair et al. (1998, 2010). The AVE quantifies the proportion of variation that a latent variable in a structural model shares with other latent variables. We will utilize the existing body of research on Structural Equation Modeling (SEM) and adhere to the minimal criterion of 0.5 for Average Variance Extracted (AVE > 0.5). The AVE ranges from 0.56 to 0.62, which fulfills the initial criterion for convergent validity as stated by Hair et al. (1998). We proceeded to examine the factor loading of all indicators on their respective latent variables to assess their reliability and convergent validity. Certain studies establish the threshold at 0.7, whilst others ignore values lower than 0.4, acknowledge values ranging from 0.4 to 0.7, and favor values of 0.7 or above (Hulland 1999). One of the factors in our measuring model that contributes to entrepreneurial intention has a loading value of 0.698, whereas the remaining 22 items in our structural model have loading values over 0.7 (p < 0.01). Discriminant validity was assessed using Fornell-Larcker. This criteria requires a latent variable's square root of AVE to be greater than its correlations with other latent variables (Fornell and Larcker 1981). Matching discriminant validity. In addition, in the cross-loading's matrix, each latent variable shares more variance with its own indicators than with others. The Cronbach's alpha values range from 0.91 to 0.92, satisfying the dependability requirement (α > 0.70). The composite reliability (internal consistency) condition is satisfied as the CR values range from 0.88 to 0.91, which is
greater than or equal to the threshold of 0.70. The convergent validity condition is satisfied as the AVE values range from 0.56 to 0.62, which is more than or equal to the threshold of 0.5.

Table 2.
Factor loading, average variance extracted and composite reliability

<table>
<thead>
<tr>
<th>Variable</th>
<th>Items</th>
<th>Factor Loading</th>
<th>AVE</th>
<th>Composite Reliability</th>
<th>Cronbach α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green entrepreneurial self-efficacy</td>
<td>ESE1</td>
<td>.770</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ESE2</td>
<td>.747</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ESE3</td>
<td>.726</td>
<td></td>
<td>.57</td>
<td>.89</td>
</tr>
<tr>
<td></td>
<td>ESE4</td>
<td>.762</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ESE5</td>
<td>.741</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ESE6</td>
<td>.761</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATE1</td>
<td>.758</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATE2</td>
<td>.756</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude towards entrepreneurship</td>
<td>ATE3</td>
<td>.776</td>
<td>.60</td>
<td>.88</td>
<td>.92</td>
</tr>
<tr>
<td></td>
<td>ATE4</td>
<td>.780</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATE5</td>
<td>.792</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EITC1</td>
<td>.795</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EITC2</td>
<td>.758</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial intention</td>
<td>EITC3</td>
<td>.754</td>
<td>.56</td>
<td>.88</td>
<td>.92</td>
</tr>
<tr>
<td></td>
<td>EITC4</td>
<td>.756</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EITC5</td>
<td>.727</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>EITC6</td>
<td>.698</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IWB1</td>
<td>.792</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IWB2</td>
<td>.733</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IWB3</td>
<td>.770</td>
<td></td>
<td>.62</td>
<td>.91</td>
</tr>
<tr>
<td>Innovative work behavior</td>
<td>IWB4</td>
<td>.820</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IWB5</td>
<td>.782</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IWB6</td>
<td>.811</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fornell-Larcker was utilized to evaluate the discriminant validity. The square root of the average variance extracted (AVE) for each latent variable exceeds its correlations with other latent variables, hence confirming discriminant validity (Fornell and Larcker, 1981). Based on the cross loadings matrix, each latent variable exhibits greater variability with its own indicators compared to those of other latent variables.

**Descriptive Statistics and Correlations**

In this study, data analysis was performed using SPSS 22.0 and Mplus 7 statistical software. The findings of the analysis, including descriptive statistics and correlation analysis of the variables, are presented in Table 3. The study revealed a statistically significant link between GESE and IWB, with a correlation coefficient of 0.52 (p < 0.01). In addition, it is worth noting that there was a substantial and positive correlation between GESE and ATE (r = 0.61, p < 0.01), and ATE had a strong correlation with IWB as well (r = 0.46, p < 0.01).
The correlation between the independent variable, GESE, and the dependent variable, IWB, was found to be statistically significant. This provides first evidence for all the proposed associations as provided in Table 3. There is no substantial correlation between any control variable and the criterion variable, which is IWB. In accordance with Becker’s (2005) suggestion for hypothesis testing, we have excluded the control variables from the Mplus analysis. This decision was made since these control variables were deemed "ineffective" as they led to biased parameter estimates by inflating the degrees of freedom and providing no added value for hypothesis testing. Previous research used the same guideline for deciding whether to include or exclude control variables (Arain et al., 2021; Hussain et al., 2021).

**HYPOTHESIS TEST**

The regression coefficient for GESE and IWB was (0.57, p < 0.001), and this showed that GESE had a statistically significant positive effect on the IWB. With a 1-unit increase in GESE, IWB increased by 0.57 units. We hypothesized that GESE positively related to IWB, and thus Hypothesis 1 was supported.

Similarly, we also found a statistically significant positive impact of GESE on EI (0.67, p < 0.001), and this supported our Hypothesis 2. GESE was also positively and significantly (0.66, p < 0.001) related to ATE. Furthermore, Table 4 showed the indirect effect of GESE on IWB through the mediation of ATE. Our results presented that the ATE significantly mediated this relationship by 0.15 (95% CI (0.59, 0.73). Thus, Hypothesis 3 was supported. Furthermore, ATE was also significantly mediated the relationship between GESE and EI (Estimate = .33 with 95% CI (0.59, 0.73)). Supported the hypothesis 4.
Table 4. direct and indirect effect

<table>
<thead>
<tr>
<th>Relationships</th>
<th>Estimates</th>
<th>SE</th>
<th>95% CI</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>GESE › IWB</td>
<td>0.57***</td>
<td>0.04</td>
<td>(0.48, 0.65)</td>
<td>Supported H1</td>
</tr>
<tr>
<td>GESE › EI</td>
<td>0.67***</td>
<td>0.04</td>
<td>(0.50, 0.72)</td>
<td>Supported H2</td>
</tr>
<tr>
<td>GESE › ATE</td>
<td>0.66***</td>
<td>0.04</td>
<td>(0.58, 0.73)</td>
<td></td>
</tr>
<tr>
<td>GESE › ATE › IWB</td>
<td>0.15**</td>
<td>0.05</td>
<td>(0.59, 0.73)</td>
<td>Supported H3</td>
</tr>
<tr>
<td>GESE › ATE › EI</td>
<td>0.33***</td>
<td>0.04</td>
<td>(0.59, 0.73)</td>
<td>Supported H4</td>
</tr>
<tr>
<td>GESE › ATE › EI › IWB</td>
<td>0.14***</td>
<td>0.04</td>
<td>(0.06, 0.21)</td>
<td>Supported H4</td>
</tr>
</tbody>
</table>

**p < 0.01, ***p < 0.001; GESE = green entrepreneurial self-efficacy, ATE = attitude towards entrepreneurship, IWB = innovative work behavior, EI = entrepreneurial intention.

Moreover, ATE and EI were also sequentially mediated the relationship between GESE and IWB (Estimate = .14 with 95% CI (0.06, 0.21)). Supported the hypothesis 5.

DISCUSSION

The ideas of green innovation are often regarded as advantageous. However, small organizations may have difficulties in implementing these strategies. This is due to the fact that small firms have limited comprehension of green initiatives and insufficient financial resources to support them. Hence, the acquisition of knowledge, skill development, practical experience, effective communication abilities, and cognitive aptitude are essential prerequisites (Baeshen et al., 2021; Khan et al., 2021). However, it is crucial for small businesses to embrace green entrepreneurial self-efficacy due to their significant contribution of around 70% to industrial pollution and their relatively lower concern for environmental protection (Singh et al., 2020). Furthermore, there has been persistent demand from stakeholders, including governmental entities and corporations, to use green innovation concepts and practices in business operations and create innovative goods and technologies (Jun et al., 2021).

Thus, it is essential for small and medium businesses (SMEs) to embrace novel and innovative technical advancements in order to fulfil market requirements (Pilar et al., 2018), leading to a competitive edge (Pilar et al., 2018). By taking a detailed look at the ways in which GESE influences IWB and EI, this work has provided a theoretical contribution. To begin, this study is one of the very few empirical investigations that has been conducted to this day that simultaneously investigates the impact that GESE has on IWB and EI. This study examines the impact of green entrepreneurial self-efficacy (GESE) on the innovative work behavior (IWB) and entrepreneurial intention (EI) by considering the traits of entrepreneurs. It emphasizes the importance of entrepreneurs' psychological quality, drawing on empirical evidence gathered from Pakistan. The focus of our study revolved around the nation of Pakistan. The results of our study support the notion that green entrepreneurial self-efficacy (GESE) has a positive influence on various entrepreneurial activities (Barz et al., 2015). The results of our study indicate that the green entrepreneurial self-efficacy of individuals is a factor that has an impact on their entrepreneurial intention and entrepreneurial identity (Ahlin et al., 2013).
Our research contributes to the existing body of knowledge in the fields of GESE and IWB by shedding light on the mediating function that ATE plays. This is done from the perspective of the cognitive process through which GESE influences behaviors. According to Luthans and Ibrayeva (2006), a positive attitude or feeling may be one effective strategy that GESE can utilize to alter IWB and EI through ATE, which can increase our understanding of how GESE works. Despite the fact that the ATE of entrepreneurs has not been given a great deal of attention in earlier studies. Because of this, the psychological experience and ATE are going to be the primary focuses of this essay. Studies that have been done on the ATE in the past have shown that employees who have higher ATE scores also have higher IWB and EI scores (Anjum et al., 2021). Our study reveals that ATE has a positive effect on entrepreneurs' EI and IWB, increasing their general knowledge that positive attitudes or feelings might drive desired behavior (Anjum et al., 2021). This was one of the main findings of our study. The findings of this conclusion are in line with those of studies conducted in the field of organizational behavior.

This study does have some implications for businesses in the real world, and it is also relevant to professionals in the field. This study begins by providing some actionable recommendations for enhancing IWB for individuals who have an interest in entrepreneurship. In particular, individuals should cultivate their sense of self-assurance in carrying out activities connected to entrepreneurship by continuously studying, actually doing, and reflecting on their experiences. When this is done, their psychological well-being will be improved even further, and a positive feedback loop will be created between GESE and IWB (Chen et al., 1998) and EI. Second, an entrepreneur who is going to be successful needs to be able to enhance their psychological well-being and effectively manage the stress that comes with their line of work. The positive psychological cognition of entrepreneurs is the key to transforming their existing psychological attributes into competitive advantages, and putting one's attention on increasing one's ATE is an excellent technique for changing one's GESE into IWB. According to the findings of research, cultivating and supporting GESE can contribute to an increase in ATE. In addition, because it can be challenging for business owners to de-stress on their own, the supportive role that other organizations play is also very important (Powell and Eddleston, 2013).

Friends and family members have the potential to enhance their belief in and provide greater backing for entrepreneurs, so mitigating the psychological strain and emotional fatigue that entrepreneurs encounter as a consequence of their business endeavors. The need to establish equilibrium among familial, social, and entrepreneurial commitments is crucial for the effective execution of entrepreneurial endeavors. Given that universities and government entities play pivotal roles in the provision of entrepreneurship education, it is incumbent upon them to not only provide guidance and resources to entrepreneurs, but also to prioritize the cultivation of psychological attributes and emotional acumen among business proprietors. Nevertheless, it is worth noting that this literature serves as a valuable resource for a diverse range of entrepreneurs and sectors across different cultural contexts. The concept of green entrepreneurial self-efficacy is closely linked to the capacity to adapt and may be viewed as a cognitive framework for effectively navigating a dynamic and unpredictable environment, particularly within the context of a fast expanding entrepreneurial landscape (Pan and Sun, 2017). The concept of GESE (Emotional Self-Efficacy) is closely linked to the notion of adaptive capacity, since it may
be regarded as a cognitive strategy for effectively navigating a dynamic and unpredictable context. According to Zhou et al. (2019), ATE can assist individuals in managing the stress associated with becoming an entrepreneur, integrating resources, and putting into action successful initiatives. People who have such knowledge might be encouraged to focus more on the positive elements of things rather than the negative parts, and it might also make them more eager to share information, which would encourage and sustain innovative behaviors.

PRACTICAL IMPLICATIONS

The ideas of green innovation are seen as advantageous. However, implementing these strategies may pose challenges for corporations, particularly for small-scale businesses. This is due to the fact that small firms have limited comprehension of green initiatives and insufficient financial resources to support them. Hence, the acquisition of knowledge, skill development, practical job exposure, effective communication abilities, and cognitive aptitude are essential prerequisites (Baeshen et al., 2021; Khan et al., 2021). However, it is essential for small businesses to embrace green entrepreneurial self-efficacy due to their significant contribution of around 70% towards industrial pollution, coupled with their relatively lower concern for environmental protection (Singh et al., 2020). Furthermore, there has been persistent demand from stakeholders, including the government and enterprises, to use green innovation concepts and practices in business operations and create novel goods and technologies (Jun et al., 2021). Hence, it is essential for Small and medium businesses (SMEs) to embrace novel and inventive technical advancements in order to fulfill market requirements (Pilar et al., 2018), thereby gaining a competitive edge (Pilar et al., 2018).

Moreover, the report provides policymakers with recommendations to improve the growth, sustainability, and profitability of small businesses in Pakistan, leading to increased economic activity and improved business performance. Training centers, organizational development, universities, and research institutes may be used to enhance these strategic resources (GESE). These groups provide training classes, programs to promote self-confidence, and programs to develop entrepreneurial skills. Knowledge enrichment workshops focusing on innovative work behavior (IWB) and environmental protection might be organized specifically for small enterprises. Small entrepreneurs should comprehend the adverse consequences that their firm may produce and learn how to mitigate them. Additionally, they must possess an understanding of the advantages they get from creating cutting-edge goods and services, as well as their thoughts and insights on innovative work behavior (IWB).

LIMITATIONS AND FUTURE RESEARCH

As a result of reading this study, we now have a better knowledge of how GESE successfully influences IWB and EI in SMEs; yet, there are still a number of deficiencies that need to be addressed. This study has discovered a mechanism between GESE and its results (IWB and EI), and according to the Theory of Planned Behavior, this mechanism connects GESE and its results. However, other alternative processes may also exist. The investigation into the link between GESE and behaviors pertinent to entrepreneurship requires extra route analysis as well as multilevel research. It is my hope that other mechanisms for mediating conflicts can be researched.
According to Smith and Lohrke (2008) and Powell and Eddleston (2013), two other aspects that could be explored further to give business owners with useful psychological feedback are trust and the support of family and friends. The Pakistani startup community is widely recognized as one of the most innovative in the global globe. All of the people that participated in the study were SMEs from Pakistan. A comparison of the cultures of eastern and western nations, in addition to the viability of the cognitive technique in a variety of cultural contexts, has sparked new ideas for potential areas of research in the future. In addition, given that the data are cross-sectional, it is impossible to conclude that a link is caused by one another. Despite the fact that GESE's effects on IWB and EI are time-based, relatively little consideration was given to the time slot when the questionnaire was being filled out. According to Piperopoulos and Dimov (2014) and Kasouf et al. (2015), an entrepreneur's education and experience in entrepreneurship may have a potential long-term effect on the GESE of the entrepreneur. As a consequence of this, longitudinal tracking studies have the potential to be utilized in subsequent study to collect samples and data from a variety of time periods.

CONCLUSION

IWB is generally regarded as an essential component of the potential and competitive edge that developing enterprises possess. Now, in order for business owners to eventually realize their full potential, it is imperative that they successfully stimulate and expand IWB. Because of this, scholars and businessmen are paying attention to determine whether or not GESE has a positive impact on IWB and how to successfully enforce the role of GESE. Many entrepreneurs who are highly enthusiastic about their firms decide to quit up in the middle, which prompts academics and businesspeople to pay attention. We still lack information of the cognitive transitions from GESE to IWB and EI, as well as relevant empirical studies (Dempsey and Jennings, 2014). This is despite the fact that GESE has a positive impact on a wide range of entrepreneurial activities. The theory of planned behavior was used as a behavioral lens in this study so that we could investigate the relationship between GESE and its effects, specifically IWB and EI, as well as the function that ATE plays in mediating that relationship. In order to carry out empirical research, this study distributed questionnaires in various organizations of 10 cities and collected a total of 307 replies from employees.

The results of this study provide initial evidence indicating that there may be beneficial outcomes associated with environmental sustainability education (GESE) in relation to individuals' attitudes and behaviors towards sustainable practices, specifically in the context of innovative work behavior (IWB). In the study Brockner et al. (2004) claim that the entrepreneurial process is commonly perceived as a purpose-driven endeavor aimed at achieving progress. This discovery provides support for the conclusions drawn by the authors. However, there is a lack of sufficient understanding regarding strategies to enhance entrepreneurs' internal well-being (IWB) specifically in relation to the psychological variables involved with entrepreneurship. This inquiry has provided empirical data indicating that entrepreneurial support ecosystems (GESE) have a positive influence on the promotion of innovation and business growth (IWB) among entrepreneurs. This finding aligns with the research conducted by Chen and Zhou (2017). Second, there is a positive influence that GESE has on EI. In a manner comparable to that of IWB, a comparatively small amount of research has been done to investigate how
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GESE influences EI. The results of this research showed that GESE contributed to EI in a positive way. Thirdly, it has been hypothesized that ATE is a substantial mediator between GESE and its results (both IWB and EI) as a result of the findings of this investigation. GESE is an essential psychological characteristic of entrepreneurs, and it not only affects their goals, attitudes, and behaviors, but also their self-assurance and their expectations for the outcome of their innovative endeavors. This study adds to the existing body of evidence with regard to Pakistan, as previous research (REF) has reached the conclusion that generalized self-efficacy has a considerable impact on academic task effectiveness (ATE). In addition, the findings of the research indicate that ATE might, to some extent, modify the connection between GESE and the effects it produces (IWB and EI). Compared to typical employees, business owners who have a higher sense of their own self-efficacy report higher levels of ATE, which refers to a healthier mental state characterized by lower levels of strain and emotional exhaustion. This leads to improvements in both IWB and EI. To put it another way, entrepreneurs with higher GESE, which is a psychological feature, gain psychological support and affirmation from clients as a result of better ATE. This serves as a motivator for them to continue working on EI and innovation, which is a positive feedback loop.

DECLARATIONS

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Conflicts of interests: The authors declare no conflict of interest.
Consent to Participate: Yes
Consent for publication and Ethical approval: Because this study does not include human or animal data, ethical approval is not required for publication. All authors have given their consent.

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