



Effect of Environment on Entrepreneurial Culture with mediating role of Opportunity Creation

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Abstract

The role of entrepreneurial culture in reducing socio-economic issues of a country is emphasized by policymakers and academics alike, but the effect of the environment to promote entrepreneurial culture is scarcely studied in literature. Furthermore, a focus on the mediating role of opportunities in developing such a culture is missing in entrepreneurship literature. The current study addresses this gap by examining the potential influence of environment on entrepreneurial culture with mediating role of opportunity creation. For this research, data was gathered through questionnaire from 200 micro level enterprises in Peshawar using random sampling. Then the Structural equation modeling (SEM), a statistical technique, was used for analyzing this data. The findings of this analysis reveal a positive effect of the environment on facilitating an entrepreneurial culture. Our findings additionally reveal that opportunity creation also serves as a significant driver in enhancing an entrepreneurial culture. In this vein, environment was found to also have a significant effect on opportunity creation. Finally, as per our findings opportunity creation fully mediates the relationship between environment and entrepreneurial culture. Therefore, this research holds that friendly business environment creates opportunities, which leads to the development of entrepreneurial culture in a society. The researchers also provided future directions and various limitations in this study.

Key words: Entrepreneurship, Environment, Opportunity Creation, Entrepreneurial culture

I. Introduction

Entrepreneurship has always been considered as a driving force for economic development by playing a vital role in the growth of modern economies. Some scholars also claim that the world is now viewing entrepreneurship as an effective tool for sustainable development (Ali et al., 2011; Johnson & Schaltegger, 2020). Reynolds *et al.* (2001) stated that society's attitude is the most critical socio-cultural aspect that supports entrepreneurship and is considered as a major element in enhancing entrepreneurship related human actions. They further stated that countries with limited values to support entrepreneurship have little appreciation for entrepreneurial approaches like self-reliance, self-confidence, locus of control, and personal drive. Also, a culture of risk taking also affect entrepreneurship related activities in a country (Reynolds, *etal*, 2001). According to Liikanen (2004), entrepreneurial culture provides benefits to overall society even beyond their implication to economic activities. Therefore, personal qualities relating to entrepreneurship, such as the spirit of initiatives, innovation and creativity, can be useful to everyone in their routine lives and working activities. The Development of entrepreneurial culture among citizens of any country, particularly its youth, will lead to a situation where majority of people will adopt entrepreneurship as a career and will consider entrepreneurship as a better alternative to job employment (Gibb, 2003). In present scenario, countries are encouraging an entrepreneurial culture as a mean to reduce unemployment among young generation (Ahmed AlGarf, 2021).

According to prior literature, various factors can aid in promoting an Entrepreneurial culture in a society e.g. internal factors of university (Moosivand et al., 2017), creativity, self-efficacy and openness to change (Danish et al., 2019), risk-taking behavior, empowerment, creativity and innovation (Hassan, Lashari & Basit, 2021) etc. In fact, some studies have pointed out the importance of a conducive environment of a society for developing an entrepreneurial behavior among its individuals. Such a specific environment of the society's individuals generally consists of individual backgrounds (family, education, social network and demographic variables), as well as the external environment (political, legal, economic, and cultural). Similarly, some studies reveal that the particular environment where individuals live significantly influences their entrepreneurial tendencies. Prior studies also revealed an indirect effect of the external environment on these entrepreneurial tendency through evoking individuals' entrepreneurial attitude (Drnovsek and Erikson, 2005). According to Bernhofer and Han (2014), individuals have different entrepreneurial tendencies in different contextual settings and that university students are more likely to select entrepreneurship as a career, when their environment supports entrepreneurship. An entrepreneurial environment creates

entrepreneurial opportunities due to changes in consumer preferences, technology, industry context, or other market elements (Shane & Venkataraman, 2000; Kirzner, 1973; Drucker, 1985). These Opportunities are formed through individuals' perception and are effectuated by the interactions of individuals and their environments (Alvarez & Barney, 2007; Aldrich & Kenworthy, 1999). Thus, environmental dynamism creates possibilities for nascent entrepreneurs to construct images of market potential opportunities which will lead them further to initiate new entrepreneurial activities, such as startups.

Pakistan is also witnessing raising interest in the field of entrepreneurship in government policies, academic research, as well as amongst business leaders. So, it is important to study the entrepreneurial culture in Pakistani context. According to prior literature, various factors can aid in promoting an Entrepreneurial culture in a society. In fact, some studies have pointed out the conducive environment of a society very important for developing an entrepreneurial behavior among its individuals (Drnovsek and Erikson, 2005). Similarly, Hill and Villa, (1997) and Qing (2006) discussed the effect of environment on entrepreneurial tendency. However, its effect on entrepreneurial culture has largely gone unaddressed in the literature, which is direly needed for research. From discovery school point of view, environmental changes create various opportunities, and scholars have discussed it in different perspective like individuals' environment and entrepreneurial opportunities (Shane, 2003; Kirzner, 1973; Drucker, 1985), climate change and opportunities etc. (Crecente, et al., 2021). Moreover, Drnovsek and Erikson (2005) and Niammuad, Napompech and Suwanmaneepong (2014) discussed the indirect effect of opportunities creation in entrepreneurship literature. However, its effect as mediator has not be addressed in the relationship between environment and entrepreneurial culture. Therefore, this study is carried out to fill the current research gap by analyzing the effect of environment on entrepreneurial culture with mediating role of opportunity creation.

II. Literature Review

Entrepreneurial culture is considered as an informal institution consisting of its specific entrepreneurial norms, values, and a certain code of conduct that supports entrepreneurial initiatives that carry a higher societal recognition and assist in generating high level of self-employment (Andersson and Koster, 2011; Beugelsdijk, 2007; North, 1994; Wyrwich, 2012; Kibler et al., 2014; Baumol, 1990). According to Wong (2014), entrepreneurial culture is one where risk taking is encouraged, failure is tolerated, and creativity (new idea) is generated. Cabar (2006), pointed out that

those societies are very prosperous which contain an entrepreneurial culture. Fortin (2004) highlighted that entrepreneurial culture is strongly influenced by individual values, beliefs, and an economic and socio-cultural environment. Similarly, Bygrave-Minniti (2000) highlighted that socio-cultural environment has a direct effect on entrepreneurial attitude.

2.1 Environment and Entrepreneurial Culture

Environment is the social, physical, cultural, economic, and biological elements of where people live, build, and maintain relationships as they further interact with each other. In the context of entrepreneurship, environment is a structure (social and dynamic) that influences individuals' entrepreneurial tendencies (positive or negative), when they are in mutual interaction with entrepreneurship related activities (Durak, 2011). If the environment (individual family and the surrounding where they are working or living) is entrepreneurially supportive, then individuals will have entrepreneurial traits and would reveal these traits (Tulunay, 2010). Further, that political, economic, social, cultural, and similar other factors may create threats and opportunities in the environment where entrepreneurs operate (Lee & Peterson, 2000).Covin and Slevin (1989) consider environmental factor an important element and recommended its evaluation before starting any kind of business. Similarly, Aldrich and Wiedenmayer (1993) claimed the socio-political environment as a responsible factor for entrepreneurial success or failure in any societies.

Similarly, various studies in literature demonstrated that environmental changes influence entrepreneurial activities (Sine & David, 2003; Martins & Perez, 2020). Some scholars stated that environmental factors influence entrepreneurial processes, which lead to new business establishment, and survival and development across industries (Reynolds & White, 1997; Kirchoff, 1994) and across countries (Bosma, et al., 2008). Similarly, Bernardino et al., 2015) highlighted that environments strongly influence entrepreneurship. According to Wagner and Sternberg (2004), entrepreneurial environments create business opportunities for potential entrepreneurs, which further effect entrepreneurial tendencies among individuals. In a study, Bernhofer and Han (2014) analyzed the career choice intention among Chinese students and found perceived entrepreneurial environment to be beneficial for creating new business ventures and that it directly influences students' entrepreneurial tendencies. Liñán (2008) also analyzed environmental influences on entrepreneurial tendencies of individuals and found that the higher-level environmental support creates higher level entrepreneurial tendency among individuals. He highlighted that favorable or unfavorable entrepreneurial environment directly affects individuals' entrepreneurial tendency in a situation to

choose their careers. Simply, better entrepreneurial environment will lead toward creation of entrepreneurial tendencies among members of a society. Therefore, we hypothesize;

H1: Environment significantly affects the entrepreneurial culture

2.2 Environment and Opportunity creation

Fatima et al. (2011) has quoted opportunity identification as a main element at the preliminary stage of entrepreneurship. Entrepreneurial opportunity is a situation where new organizing methods, products (goods/services), and raw material can be introduced for sale in a market at more than the cost of production. Opportunities can also be known as identifying and meeting customer needs by creative combination of available resources to deliver superior value to customers (Ardichvili, Cardozos & Ray, 2003; Casson, 1982; Kirzner, 1973; Schumpeter, 1934). Opportunity is a way of generating profit by creating new product (goods/services), process, adding value or using new technology (Ardichvili et al., 2003). This concept has two well-known perspectives i.e. (1) discovery viewpoint and (2) creation (enactment) viewpoint. The discovery viewpoint consists of the external environmental conditions e.g. changes in technology, product-market fragmentation and emergence, and competitive intensity. On other hand, creation viewpoint consists of internal cognitions of individual society members, and is affected by their entrepreneurial attitude, beliefs, and values (Russell, 2012; Vaghely and Julien, 2010; Hills et al., 2005). Numerous efforts have been made by entrepreneurship scholars, through various perspectives, towards understanding the entrepreneurial opportunity concept by analyzing opportunities itself and the process of opportunity identification, discovery, recognition or exploitation, and/or creation (George et al., 2016). Existing models and theories regarding opportunity recognition suggest three different phases; (i) perceiving or sensing market requirements and underemployed resources, (ii) discovering or creating a fit among market need and resources and (iii) creating a new fit in the shape of business startups (Singh, 2000; Hansen et al., 2016; Gaglio and Katz, 2001; Bhave, 1994; Ardichvili et al., 2003).

Many scholars claim that entrepreneurs perceive environment through connections with their various stakeholders (Sarasvathy, 2001; Alvarez & Barney, 2007). Krueger, (2000) posits that external factors indirectly influence entrepreneurial intentions through entrepreneurial attitude. From discovery school point of view, scholars also suggest that a change in an environment (regulatory and technological changes) leads towards creation of opportunities that entrepreneurs identify (Shane, 2003, Kirzner, 1973; Drucker, 1985). In other words, discovery theory claim that entrepreneurs systematically scan their environment to spot these opportunities to produce new services or products (Alvarez & Barney,

2007). Both these perspectives suggest the relationship between perceived opportunities and the objective environment. Edelman & Yli-Renko (2010) reported that uncertainty in the environment effects attribution processes, which leads towards perception of opportunities. More clearly, the perception of nascent entrepreneurs regarding market opportunities arise from environmental changes. Prior literature provides four major environmental factors which are financial, socio-cultural, governmental, and non-financial factors. Change in these environmental factors influence the individuals to search, identify, and evaluate new market opportunities to get sustainable competitive advantage (Tang, 2008). Besides, Tang et al. (2014) revealed that opportunity identification is significantly influenced by the perceived degree of uncertainty of the entrepreneurial environment. Therefore, we hypothesize;

H2: Environment significantly affect opportunity creation

2.3 Opportunity Creation and Entrepreneurial Culture

Entrepreneurial opportunity is perceived as a positive and favorable situation that leads towards entrepreneurial actions and is considered as an important area in the entrepreneurship literature (Shane et al. 2010; Aldrich and Cliff, 2003; Eckhardt and Shane, 2003). Opportunity is the key factor towards a new resource combination and further leads towards generating new products or services as well as creates new methods of production, new raw materials, and new markets (Schumpeter, 1934). From economic point of view, each business opportunity contains a different value. In literature, scholars claim that entrepreneurs favor to identify and avail opportunities with greater market potential. They also claim that an opportunity has the potential to influence the entrepreneurial processes (Shane et al., 2003). Nicolaou, et al. (2009) in a study investigated the covariation between opportunity recognition and tendency to become an entrepreneur. Shrestha (2015) collected data from Nepalese entrepreneurs and examined the relationship between business opportunity recognition and development process. Similarly, Riuttanen, et al. (2015) pointed out that opportunity recognition significantly affects market perception of entrepreneurs. Therefore, we hypothesize;

H3: Opportunity creation significantly affect entrepreneurial culture

2.4 Mediating role of opportunity creation

As stated before, prior research has shown that environment significantly influences the creation of entrepreneurial opportunities. Further, if potential entrepreneurs will realize better entrepreneurial

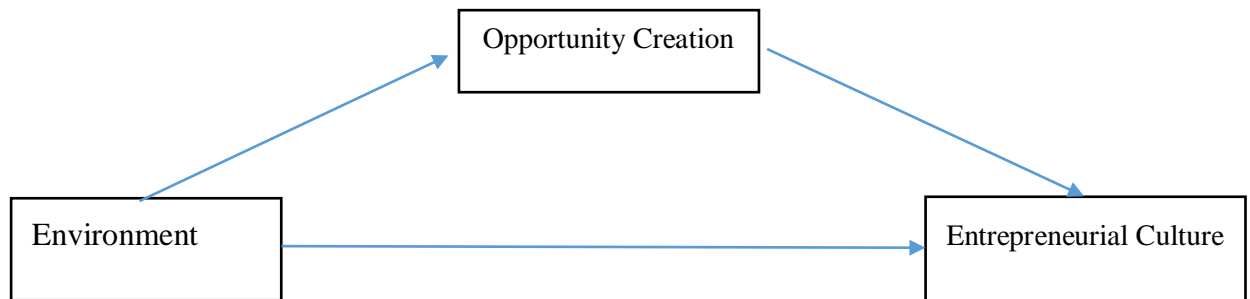
opportunities, they will easily be prepared to avail them and start new businesses. From discovery school point of view, scholars suggested that change in environment (regulatory and technological changes) lead toward creation of opportunities that entrepreneurs identify (Shane, 2003, Kirzner, 1973; Drucker, 1985). Edelman & Yli-Renko (2010) reported that uncertainty in the environment effect attributional processes which leads towards the favorable perception of opportunities. More clearly, the perception of nascent entrepreneurs regarding market opportunities arise from environmental changes. As nascent entrepreneurs perceived greater level of environmental changes, they are more likely to identify unfulfilled customer demands and create the possibility to challenge industry incumbents. The stronger perception makes a stronger intention toward new venture creation and nascent entrepreneurs will put more energy to start a new firm. Thus, environmental changes give a favorable chance to nascent entrepreneurs for analyzing and identifying new market opportunities, thus, leading entrepreneurs to initiate and proceed new startup activities.

In a broad sense, changes in the environment where individuals work or live create opportunities. These changes lead to disequilibrium in the environment that individuals can exploit (Cohen and Winn 2007; Holcombe, 2003). According to Schumpeterian view, individuals generally exploit demographic, social, regulatory and political opportunities which create favorable and positive circumstances leading toward new startups (Saemundsson and Holmén, 2011; Casson, 2005). Sambasivan et al. (2009) empirically and theoretically justified the mediating role of opportunity recognition, with a positive effect on firm business performance. They further pointed out that the better the opportunity the better the result of venture will be in terms of sales volume and business growth. Hashim (2017) examined the influence of entrepreneurship education on entrepreneurial career option with mediating role of opportunity recognition among business students. Similarly, Ekpe et al. (2010) investigated the effect of micro credit on women entrepreneurs' performance, with the mediating role of entrepreneurial opportunity. Furthermore, Wang, et al. (2019) investigated the network embeddedness effect on social entrepreneurial intention among university students with mediating role of opportunity identification efficacy and found partial mediation. Therefore, we hypothesize;

H4: Opportunity creation significantly mediates the relationship between Environment and Entrepreneurial Culture

2.5 Conceptual framework

Discover theory considered environmental changes as a source of opportunities and has been tested empirically with entrepreneurial activity (Sine & David, 2003). Further, opportunity creation has been linked empirically with entrepreneurial tendency (Nicolaou, et al. (2009) and has been tested as mediator between incubation resources and human capital (Niammuad, et al., 2014). Keeping in view the literature and objectives of the study, a conceptual framework has been developed to examine the effect of environment on entrepreneurial culture with mediating role of opportunity creation. The conceptual framework of this research is mentioned below;



III. Methodology

The universe for the present study consisted of all micro level enterprises that were registered with Trade of Chamber and Commerce (Peshawar). This research study was cross sectional and quantitative in nature. Two hundred (200) entrepreneurs as Unit of analysis were selected randomly. To gather data, technique of survey through structured questionnaire was adopted. Questionnaire was used as a primary research instrument. Questionnaire was adopted from previous studies. Entrepreneurial culture questions were adapted from (Stephan, 2009) with 24 items, opportunity creation from Bergmann (2011) with 9 items and environmental support was adapted from Miller and Friesen (1982), Chandler and Hanks (1994) and Brown and Kirchhoff (1997) with 13 items. All variables were measured on five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). SEM was employed in the research to assess the measurement model as a whole and analyze the relationship between the latent variables and their measures (Hair et al., 2010).

IV. Data Analysis

4. Analyses and Results

4.1 Descriptive Analysis

Table 1 presents the breakup of respondents on the basis of Age, Education, Income and Experience. In the frequency table, the respondents' age is divided into three categories. The table shows 35 respondents for the age up to 30 years with 17.5 percent, 125 respondents have the age 31-45 years with 62.5 percent, and 40 respondents have 46 & above years of age with 20 percent. The table shows that majority respondents are from the category having age 31 - 45 years. Similarly, respondents are also divided into three categories on the basis of education. The table shows that 115 (57.5%) respondents have SSC/FA/FSc or below level education, 55 (27.5%) respondents have Bachelor level and 25 (25%) respondents have master level education. Further, respondents are distributed on income basis into three levels. The frequency table shows that 50 (25%) respondents have income up to Rs.40000, 100 (50%) respondents have 41000-80000 and 50(25%) respondents have income 81000 and above. Furthermore, respondents are also distributed on experience basis into three level. Frequency table shows that 50 (25%) respondents have experience 7 years or below, 110(55%) respondents have 8-15 years' experience and 40 (20%) respondents have 16 Years and above experience.

Table 1: Breakup of respondents and frequency distribution on the basis of Age, Education, Income and Experience

Criteria	Category	Frequency	Percentage	Cumulative Percent
Age	Up to 30 Years	35	17.5	17.5
	31-45 Years	125	62.5	80
	46 Years & above	40	20	100
	Total	200	100	
Education	SSC/FA/FSc or Below	115	57.5	57.5
	Bachelor	55	27.5	85
	Master & above	30	15	100
	Total	200	100	

Income	Up to 40000	50	25	25
	41000-80000	100	50	75
	81000 and Above	50	25	100
	Total	200	100	
Experience	Up to 7 Years	50	25	25
	8-15 Years	110	55	80
	16 Years and above	40	20	100
	Total	200	100	

4.2 Reliability and Validity Analysis

Cronbach's alpha value for each variable was calculated to confirm internal reliability. Authors suggested that Cronbach's alpha value above 0.70 for any variable is considered satisfactory (Malhotra and Birks, 2007). In table 2, the Cronbach's alpha value for all variables (Environment = 0.91, Opportunity creation= 0.96 and Entrepreneurial Culture =0.93) are greater than 0.70, hence fulfilling the standards of internal consistency.

Convergence validity for each variable was calculated by examining the values of factor loading, AVE and CR. In table 2, all the values of factor loadings are greater than the standard value of 0.4 suggested by Hair et al. (2013). Similarly, the values of AVE for all variables (Environment = 0.664, Opportunity creation= 0.731 and Entrepreneurial Culture =0.560) are greater than the standard value of 0.5 (Hair et al. (2014). Furthermore, the value of CR for all variables (Environment = 0.962, Opportunity creation= 0.960 and Entrepreneurial Culture =0.967) are greater than the threshold value of 0.7 suggested by Hair et al. (2014), hence confirmed the convergence validity.

Table:2 Reliability and Validity of Scales

	Factor Loading	A	AVE	CR
<i>Environment</i>				
Env1	0.847	0.91	0.664	0.962
Env2	0.889			
Env3	0.857			
Env4	0.83			
Env5	0.803			
Env6	0.867			
Env7	0.827			
Env8	0.842			
Env9	0.829			
Env10	0.774			
Env11	0.863			
Env12	0.846			
Env13	0.402			
<i>Opportunity Creation</i>				
Oppcre1	0.849	0.96	0.731	0.960
Oppcre2	0.957			
Oppcre3	0.878			
Oppcre4	0.885			
Oppcre5	0.833			
Oppcre6	0.805			
Oppcre7	0.829			

Oppcre8	0.774			
Oppcre9	0.872			
Entrepreneurial Culture				
EntCul1	0.799			
EntCul2	0.706			
EntCul3	0.826			
EntCul4	0.729			
EntCul5	0.812			
EntCul6	0.869			
EntCul7	0.815			
EntCul8	0.808			
EntCul9	0.257			
EntCul10	0.815			
EntCul11	0.677	0.93	0.560	0.967
EntCul12	0.664			
EntCul13	0.847			
EntCul14	0.741			
EntCul15	0.657			
EntCul16	0.792			
EntCul17	0.827			
EntCul18	0.691			
EntCul19	0.836			
EntCul20	0.859			
EntCul21	0.712			

EntCul22	0.572			
EntCul23	0.617			
EntCul24	0.773			

4.3 Hypotheses Testing

4.3.1 Direct Path of Environment and Opportunity creation

Hypothesis 1 predicted environment as significant driver of opportunity creation. The results of SEM analysis i.e. Chi square = 161.635, (df) = 170 with p-value = 0.000, CFI = 1.00 (1.00 ≥ 0.90), TLI = 1.003 (1.003 ≥ 0.90), GFI = 0.94 (0.94 ≥ 0.90), RMR = 0.042 (0.042 < .5), and RMSEA = 0.000 (0.000 < 0.08) declared the model as overall fit. Similarly, the RMR = 0.042 and RMSEA = 0.000 is also less than cutoff limit of 0.08 considered as rule of thumb (Browne and Cudeck, 1993). Moreover, the coefficient path indicated that environment has positive significant influence on opportunity creation ($\beta = 0.408$, P = 0.000). Hence, H1 is accepted.

Path	Estimate	S.E.	C.R.	P	Label
Oppcre <---Env	0.408	0.076	5.376	0.000	

4.3.2 Direct Path of Opportunity creation and Entrepreneurial Culture:

Hypothesis 2 predicted Opportunity creation as significant driver of entrepreneurial culture. The results of SEM analysis i.e. Chi square = 389.730, (df) = 442 with p-value of 0.000, CFI = 1.00 (1.00 ≥ 0.90), TLI = 1.012 (1.012 ≥ 0.90), GFI = 0.90 (0.90 ≥ 0.90), RMR = 0.049 (0.049 < .5), and RMSEA = 0.00 (0.0 < 0.08) declared the model as overall fit. Similarly, the RMR = 0.049 and RMSEA = 0.000 is also less than cutoff limit of 0.08 considered as rule of thumb (Browne and Cudeck, 1993). Moreover, the coefficient path indicated that Opportunity creation has positive significant influence on entrepreneurial culture ($\beta = 0.135$, P = 0.025). Hence, H2 is accepted.

Table 4: Coefficients					
Path	Estimate	S.E.	C.R.	P	Label
EntCul <---Oppcre	0.135	0.060	2.247	0.025	

4.3.3 Direct Path of Environment and Entrepreneurial Culture:

Hypothesis 3 predicted Environment as significant driver of entrepreneurial culture. The results of SEM analysis i.e. Chi square = 439.452, (df) = 556 with p-value of 0.000, CFI = 1.00 ($1.00 \geq 0.90$), TLI = 1.023 ($1.023 \geq 0.90$), GFI = 0.90 ($0.90 \geq 0.90$), RMR = 0.057 ($0.05 < .5$), and RMSEA = 0.00 ($0.0 < 0.08$) declared the model as overall fit. Similarly, the RMR= 0.057 and RMSEA= 0.00 is also less than cutoff limit of 0.08 considered as rule of thumb (Browne and Cudeck, 1993). Moreover, the coefficient path indicated that environment has positive significant influence on entrepreneurial culture ($\beta = 0.087$, $P = 0.027$). Hence, H3 is accepted.

Table 5: Coefficients					
Path	Estimate	S.E.	C.R.	P	Label
EntCul <---Env	0.087	0.040	2.247	0.027	

4.3.4 Path Model indicating Mediating effect of Opportunity creation between Environment and Entrepreneurial Culture

Hypothesis 4 predicted that Opportunity creation has significant mediating effect on environment and entrepreneurial culture relationship. The findings of SEM model fit indices i.e. Chi-square, $\chi^2 = 690.004$; $df = 875$; $p < .000$; CFI= 0.99; and GFI= 0.90; TLI= 1.027 & RMSEA= 0.000 indicates that model is overall fit. Similarly, the findings (Table 6) showed that total effect between Environment and Entrepreneurial Culture is ($\beta = .173$ $p=0.05$) significant. Furthermore, the two-tailed significance test showed that indirect effect is significant ($\beta = 0.179$, $p=0.001$) with lower (.068) and upper (.329) limit respectively and does

not contain zero. However, no direct effect ($\beta = -0.006$, $p=0.909$) was found between variables. Therefore, H4 confirmed that opportunity creation fully mediates between environment and entrepreneurial culture.

Table 6: Coefficients

Path	Direct effect	Indirect effect	Total effect	Lower-Upper level
Env---Oppcre-- EntCul	($\beta = -0.006$, $p=0.909$)	$\beta = 0.179$, $p=0.01$	($\beta = .173$ $p=0.05$)	0.068---0.329

V. Discussion and Conclusion

5.1 Conclusion

The prime motive behind this study was twofold. First, to examine the direct effect of (i) environment on entrepreneurial culture (ii) environment on opportunity creation and (iii) opportunity creation on entrepreneurial culture. Second to examine the mediation effect of opportunity creation between environment and entrepreneurial culture. Various scholars have studied the effect of environment on entrepreneurship in different context (Sine & David, 2003; Bernardino et al., 2015), however, its effect is missing on entrepreneurial culture in literature which is direly needed for research. Moreover, the opportunity creation role as mediator has not been studied between environment and entrepreneurial culture.

The findings of this studied described positive effect of environment on entrepreneurial culture (H1). This is in line with previous studies which indicate that environmental changes influence entrepreneurial activity (Sine & David, 2003; Martins & Perez, 2020). Bernardino et al.(2015) highlighted that environment strongly influence entrepreneurship. The results also indicate that favorable environment lead toward opportunity creation (H2). This is in line with Tang (2008) who indicated that environmental factors are critical to opportunity recognition. Similarly, Shane, 2003 stated that environmental dynamics (technological or regulatory) create opportunities that potential entrepreneurs can then recognize. The results showed that opportunity creation serves as significant driver in enhancing entrepreneurial culture (H3). This is in accordance with previous study of Shane et al. (2010) who reported that entrepreneurial opportunities lead towards entrepreneurial action. Similar type of study was conducted by Nicolaou, et al., (2009) who reported a significant covariation between opportunity recognition and entrepreneurial tendency. The findings indicated that opportunity creation significantly mediates between environment and entrepreneurial culture (H4). This is in accordance with previous study of Sambasivan et al. (2009) who reported significant

mediating effect of opportunity recognition on firm performance. Moreover, Ekpe, et al., (2010) also confirm the mediating effect of opportunity in their theoretical framework between entrepreneurial activity on micro credit and women entrepreneurs' performance. The findings of the study justify the significance of discovery theory which suggests that environmental changes create opportunities that potential entrepreneurs can then identify (Shane, 2003; Kirzner, 1973; Drucker, 1985). This research evaluates the effect of environment on entrepreneurial culture with mediating role of opportunity creation.

5.2 Recommendations of the study

Our finding showed that Supportive entrepreneurial environment creates entrepreneurial opportunities and effect the entrepreneurial culture in the country, therefore the government should initiate certain schemes/programs to create an entrepreneurial environment in a society which could lead towards entrepreneurial culture. The government of Pakistan should also provide technical and professional skills to enhance the abilities of majority of the population to avail opportunities. Moreover, the policy makers, professional and academicians should concentrate and work on developing societal norms in a way to make entrepreneurship an attractive career-oriented choice. In this way, positive perception regarding entrepreneurship will be create among population which ultimately will lead toward entrepreneurial culture in society.

5.3 Limitation and future direction

This study carries several implications and guidelines for academicians and policy makers. This study has not covered all aspects; however, it has suggested certain future direction. For example, population of this study includes micro level enterprisers, however, researchers can focus on academic scholars and teachers in future. Furthermore, it was a cross-sectional study and has no concern to investigate entrepreneurial culture on time-line basis. It is suggested to focus on longitudinal base studies in future. This study has investigated the effect of environment on entrepreneurial culture taking opportunity recognition as mediator. Such type of researches can be conducted on national level by including certain variable in the current model such as entrepreneurial education, higher education institutions support, trade unions, opinion leaders and role of media particularly social media to promote entrepreneurial culture. This model can further be used in comparative studies in emerging and developed markets.

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