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Social capital and entrepreneurial intention: empirical evidence from rural community of Pakistan



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Abstract

Understanding the antecedents of the entrepreneurial intentions is vital in development of entrepreneurship in a region. Entrepreneurship is considered as one of the important elements of local economic development which can be used to address the issues of poverty and scarcity of livelihood opportunities in rural areas of the world. This study investigates the influence of social capital on entrepreneurial intentions in rural area of Pakistan. For this purpose, a representative sample of 325 respondents has been selected from rural community in Gilgit-Baltistan. The constructed model has been estimated using the partial least square method and the results show that social capital has significant positive impact on entrepreneurial intentions by forming perceived desirability, perceived self-efficacy, and perceived social norms towards entrepreneurship. This study recommends rural community of Pakistan should be given awareness about the potential of entrepreneurship opportunities and such awareness programs have unique advantages to various segments of rural community. Women, unemployed individuals, and younger generations in particular may get the maximum benefits as people in mountainous regions have already limited earning options. In such a case, developing entrepreneurial intentions of the mountain community in Gilgit-Baltistan leads to understandings of benefits of initiating their own ventures, get economic advantages, and contribute to households' income.

Keywords: Rural community, Local economic development, Entrepreneurial behavior

Introduction

In today's world, entrepreneurship is considered an important attribute in the dynamics of modern economics as it is major source of creating new jobs which in turns reduce poverty in rural setting of the world. Many small- and medium-size businesses also cause creating new valuable products which have gained considerable importance in the competitive market of the world. Korsching and Allen (2004) and Walzer (2011) are of the view that in the case of marginalized rural communities, entrepreneurship programs are important elements of local economic development programs that are meant to cope with poverty and scare livelihood opportunities. Entrepreneurship has also gained significant growth over the last 30 years and this rapid growth of entrepreneurship is attributed to socio-economics development of the country. It plays an important role in fostering up the local economic development and the local economic



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development is considered as one of the basic pillar of community development (Nel & McQuaid, 2002; Walzer, 2011).

Entrepreneurial activity is a social process entrenched in networks of interpersonal relationships (McKeever, Anderson, & Jack 2014) and these social networks support it by supporting the endeavors of entrepreneurs in starting new business ventures (Hampton, Cooper, & McGowan 2009). Scholars like Rauch and Hulsink (2015) identify that creation new entrepreneurial activities takes place as a consequence of the entrepreneurial intension and thus, Krueger, Reilly, and Carsrud (2000) consider that entrepreneurial activities are actually an intentionally planned behavior. However, entrepreneurial intentions of individuals can be influenced by many factors and among the various factors, social capital is considered as one of the key factors that have greater influence on entrepreneurial attitude of the individuals (Klyver & Schøtt, 2008).

Social capital refers to the features of social life like reciprocity, norms, and social trust which facilitate mutual benefits (Putnam, 2000). A system of community dealings and connections enabling persons to perform mutually to follow joint objectives is known as social capital. In social sciences, the concept of community capital is used extensively to examine personal communication and dealings among each other, and promotes positive progress in society. Social capital is a common source which affects the society's performance. According to Bourdieu and Wacquant (1992), community social capital is as "sum of resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition."

Social capital importance to entrepreneurial intentions has gained attention in literature (Anderson & Miller, 2003; Myint et al., 2005; Ullhoi, 2005; Yli-Renko et al., 2001). Cognitive social capital and its relationship with entrepreneurship have been also analyzed (Liao & Welsch, 2005). Social capital plays vital role in the start-up process of any business and which is also supported by economic units. A strong social tie in the context of specific locality enables individuals to gain more opportunities and get success in setting new ventures. This also enables individuals to build confidence and form critical networks to open new business. Moreover, a stable social setting increases the likelihood that individuals tend to leave their jobs and move towards entrepreneurship opportunities and this is why new entrepreneurs normally start new businesses in the same place where they have lived since long time (Aldrich & Zimmer, 1986; Aldrich, 1999). These social capital perspectives of entrepreneurship affirm that specific features of a locality are considered as strong tie between economic and social element, and social networks are the most influence actors in the development of new business ventures (Porter, 1998).

Studies on social capital consider the importance of social context where business ventures are established (Liao & Welsch, 2005) and the influence of cultural and social elements in forming entrepreneurs (McKeever et al., 2014). Since the term social capital has been discussing in literature for many years, there is still lack of common definition of social capital among scholars (Adler & Kwon, 2002; Inkpen & Tsang, 2005). Many scholars define it as relationship with social networks as the social networks seem crucial in forming social capital (Cruickshank & Rolland, 2006; Lin, 2005) and thus, social capital is the result of social relationships which is being created via interactions (McKeever et al., 2014; Anderson, Park, & Jack, 2007). It also involves information sharing among the networks' members and solidarity benefits (Kwon & Adler, 2014),

shared values and norms, the real and expected resources, and benefits that a person can get avail because of social networking and social relationships (Nahapiet & Goshal, 1998).

Social Capital has an influential role in explaining the entrepreneurial career of individuals (Ali, Ahsan, & Dziegielewski, 2017) through one's exposure to role models of entrepreneurship which may have significant impact on the creation of entrepreneurial intensions (Kwon & Adler, 2014; De Carolis et al., 2009; Klyver & Schøtt, 2008; Dohse & Walter, 2012). As Arenius and Minniti (2005) argue that these role models of entrepreneurships tend to increase the chances of becoming some nascent entrepreneurs. Singer, Amorós, and Moska (2015) explain the individuals who work in assembling and organizing resources which are necessary and needed for establishing new business venture.

In recent times, entrepreneurship has gained much attraction but entrepreneurship in rural areas has remained one of the under researched areas in academia and policy industries. Since the characteristics of local community may have significant influence on entrepreneurship in rural areas as Weiss, Anisimova, and Shirovoka (2019) argue that regional social capital influence the entrepreneurial intention to a greater extent. Thornton (1999) is of the view that traditional approaches to entrepreneurship failed to consider the social capital context, whereas in the present era, no one can deny from the importance of social capital in the process of start-up of new venturing. However, there exists little empirical evidence on it especially in rural areas of the Pakistan and thus, this area needs to be investigated in the context of rural communities. This study aims to fill this gap in literature by considering community social capital and its possible influence on entrepreneurial intentions (EI). This study provides how community social capital influences entrepreneurship intention in a rural setting and results from this study will also guide us about how to promote entrepreneurship which ultimately helps to reduce poverty and unemployment in the region.

This study has been conducted in District Hunza of Gilgit-Baltistan. The purpose of selecting district Hunza is manifold. Firstly, the fact that Hunza is rural setting area with the population of around sixty thousand and this region has limited livelihood opportunities but small business sector is considered as the main source of livelihood of the individuals. Secondly, for the last 3 years, the inflow of tourists to Hunza region has significantly increased as 1.72 million tourists have visited this region during the year 2017 and the inflow of tourist in the year 2018 is about 2 million. Such inflow of tourist to this region has expanded the market of local businesses and people in this region tend to set up new ventures to gain maximum benefits from tourism.

Thirdly, district Hunza is the gateway to the mega project China-Pakistan Economics Corridor (CPEC) and it is expected that CPEC will provide huge business opportunities to the people of this region. Since the inflow of tourists to the region has significant impact on the socio-economic condition of the communities living in the region and in rural setting, the social capital is generally considered to be strong. Therefore, evaluating the influence of social capital on starting up new business is crucial to know how social bindings affect new business setups. Findings from this study will be helpful for policy makers to device effective polices to

promote entrepreneurship opportunities in the region. Thus, the main objectives of this study are the following:

- i. To examine the influence of social capital within a rural community on the intentions of individuals of rural community to engage in entrepreneurship.
- ii. To suggest policy recommendations for the policy makers to facilitate the entrepreneurs in the region.

Theoretical framework

Following the studies of Onyx and Bullen (2000) and Roxas and Azmat (2014), this study also considers four facets of community social capital which have been recognized as valid and reliable measures of social capital at community level. These four facets are family and friends' connection (FFC), participation in local community (PLC), neighborhood connection (NC), and feeling of trust and safety (FTS). In this study, entrepreneurial intention (EI) has been measured in the context of theory of planned behavior which states that human behavior is planned, preceded by intention towards that behavior (Ajzen & Fishbein, 1980). Entrepreneurial intention shows overall intention to start a new venture (Krueger et al., 2000). Entrepreneurial intentions indicate the conscious and voluntary decision to start a business and by following Roxas and Azmat (2014); this study also examines EI by looking at three main variables, i.e., perceived desirability of entrepreneurship (PDE), perceived social norm towards entrepreneurship (PSNE), and perceived self-efficacy (PSE). PDE shows an individual's perception about positive and negative outcomes of commencement of a business (Fayolle, 2005). PSNE measures the existing social pressures exhaling from one's perception of what people or groups think of someone who engages with business, and PSE indicates one's perception of the feasibility of commencement of a business in such a way that he/she thinks that she/he can or cannot continue the process of setting up such business (Krueger et al., 2000).

As suggested by Roxas and Azmat (2014), PDE, PSE, and PSNE tend to mediate the influence of social capital on entrepreneurial intention, as social capital does not necessarily directly increase entrepreneurial interest to start a new venture. It is further argued positive attitudes towards entrepreneurship, individual's perception of social norms, and one's personal belief in entrepreneurial engagement have greater influence on the entrepreneurship intentions. It is also discussed that these three factors affected by social capital within one's immediate community and therefore, the mediating role between social capital and entrepreneurial intention is played by PDE, PSE, and PSNE. This study thus considers that EI is formed by an individual's PSNE, PSE, and PDE as suggested by Krueger and Carsrud (1993) and Roxas and Azmat (2014).

Methodology

Sample and data collection

A questionnaire is developed with the help of past studies (Likert, 1932; Krueger et al., 2000; Onyx & Bullen, 2000; Chen, Greene, & Crick, 1998) that has variety of questions to determine the exact objectives of the study. Personal information needs to start process the respondents age, education, gender, business experience (no. of years), and present source of income or livelihood. The linkage between community social capital

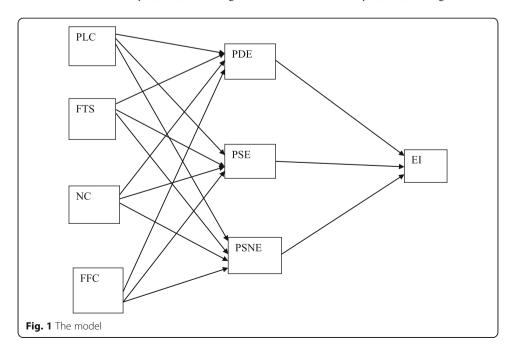
and entrepreneurship examined through eight main variables having three to four subquestions that ask to examine the people opinions rated towards given options. Each question is based on 5-point Likert-type response scales, i.e., (1) strongly disagrees, (2) disagree, (3) neutral, (4) agree, and (5) strongly agree. The intensity of response to questions can be captured by the Likert scaling which is widely used in previous studied like Krueger et al. (2000) and Onyx and Bullen (2000). A survey questionnaire was administrated to 350 respondents in the local community and the useful response rate found at 93% to the survey and thus data collected from 325 respondents using simple random sampling technique which was conducted through randomization progress. The simple random sampling process was employed; first, the population and target population were defined and then identified its specific sampling elements. Next, we create an accurate sampling frame and we then use a true random process to pick elements from the sampling frame.

Model of the study

This study used structural equation modeling (SEM) for theoretical framework and for the estimation of the model, partial least square method is used. The partial least square method can manage many independent variables, even when the econometric problem of multi-collinearity exists in the model (Akintimehin et al., 2019) and this method can be applied as a regression model, which predicts one or more dependent variables from a set of one or more independent variables. Also, this technique (partial least square) can associate with the set of independent variables to multiple dependent variables (Khoi 7 Van Tuan, 2018).

The following model (Fig. 1) has been constructed for this study based on the theoretical framework

Where social capital has been measured through the four aspects, i.e., participation in the local community (PLC), feelings of trust and safety (FTS), neighborhood



connections (NC), family and friends' connection (FFC), and the effect of social capital on entrepreneurial intention (EI) is being mediated by three variables namely PDE, PSE, and PSNE.

Results

Table 1 shows the demography information of respondents, i.e., age, education, gender, and business experience and source of income or livelihood. It shows that majority of respondents (35.7%) are in between the age of 26 and 30 years followed by the age group of 31–40 which accounts for 31.4%.

In terms of qualification, majority (27%) of the respondents have completed bachelor-level education (BS/BSc) and 20% respondents have masters-level education. These statistics show 47% respondents have bachelor and above-level education. Table 1 further indicates that the study sample consists of 66% male and 34% female which shows a significant number of female are respondents of this study. In terms of business experience, majority of the respondents have business experience of less than 1 year; also, the majority of the respondents depend on full-time employment as their source of income.

The descriptive statistics of the variables used in the study are given in Table 2. It reveals that the mean value of participation in the local community (PLC) is 3.7391 with

Table 1 Frequency table

S/No.	Characteristics	Frequency	Percentage				
1.	Age						
	18–25	58	17.8				
	26–30	116	35.7				
	31–40	102	31.4				
	41–50	35	11.00				
	51 and older	14	4.3				
2.	Education						
	No formal education	18	5.5				
	Elementary level	65	20.00				
	College level (BA/BSc)	200	26.9				
	Graduate (masters)	42	20.6				
3.	Gender						
	Male	215	66				
	Female	110	34				
4.	Business experience (no. of years)						
	None	67	21.0				
	Less than 1	155	48.0				
	1–5 years	62	19				
	6–10 years	32	10				
	Over 10 years	9	2.7				
5.	Present source of income or livelihood						
	None	49	15.0				
	Part-time employment	43	13.1				
	Full-time employment	137	42.5				
	Own business	96	29.4				

Table 2 Descriptive statistics

	PLC	FTS	NC	FFC	PDE	PSE	PSNE	El
Mean	3.73	4.15	3.97	3.99	3.72	3.58	3.65	3.68
SD	.73	.620	.46	.60	.71	.63	.62	.95

the standard deviation of .73989. It indicates that the majority of the respondents tend to agree with the questions asked about participation in the local community. Since questions have been scaled in 5-point Likert way starting from 1 for strongly disagree to 5 for strongly agree, the mean value tends towards "agree" option. Therefore, it indicates that majority of the respondents have greater participation in the local community in their respective area. The value of standard deviation indicates that there is little variation among the responses of the respondents about the participation in the local community.

The mean value of variable "feeling of trust" is 4.1516 which falls in agree and strongly agree side of the options indicating that greater part of the respondents agree with the questions asked about feeling of trust. Likewise, all other variables namely NC, PDE, PSE, PSNE, and EI have mean value of greater than three showing the tendency of responses towards agreement side of the scale.

Reliability and validity

This study also tests for the reliability and validity of the measurement of the different variables. According to Leech et al. (2005), the reliability of a variable is an indicator of the extent to different measures and items which are consistent with each other. Zumbo (2005) considers measurements scale validation as a process by which one provides support to the meaningfulness, appropriateness, and usefulness of the concern inference driven from the scores about individuals in a given context. In this connection, Cronbach's alpha is considered to be the most appropriate measure of reliability. Nunnally (1978) is of the view that the common threshold level is 0.7 for the newly constructed measures. On the other hand, the discriminant validity can be tested by looking at the correlations between the factors.

On the above discussed condition of reliability (Cronbach's alpha value should be greater than 0.7), this study reveals that the value of Cronbach's alpha ranges from 0.722 to 0.879 (Table 3) which fulfils the condition of reliability and thus, it is safe to conclude that the survey of this study declared to be reliable.

Table 3 Reliability test

Variable	Cronbach's alpha
PLC	.75
FTS	.73
NC	.72
FFC	.70
PDE	.73
PSE	.74
PSNE	.79
El	.87

Table 4 Correlation matrix

VAR	PLC	FTS	NC	FFC	PDE	PSE	PSNE	EI
PLC	1							
FTS	.86*	1						
NC	.68*	.65*	1					
FFC	.77*	.75*	.437*	1				
PDE	.343*	.122	.35*	.236*	1			
PSE	.240*	.20	.34*	.106	.408*	1		
PSNE	.374*	.27*	.18	.149	.263*	.308*	1	
El	.537*	.69*	.78*	.43*	.48*	.440*	.38*	1

*Correlation coefficient is significant at the 0.05 levels (two-tailed)

N = 325

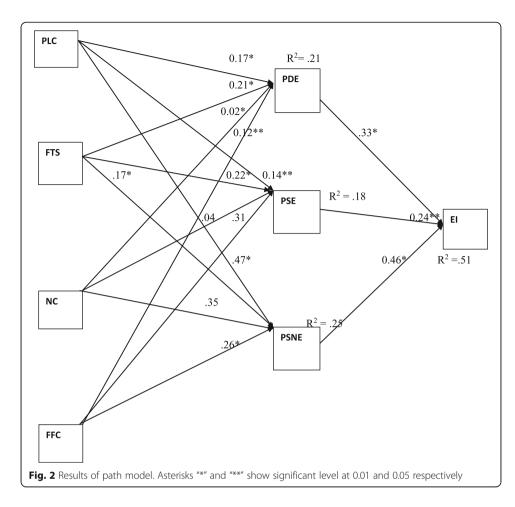
The results of correlation test are given in Table 4 which indicates that all the components of social capital, i.e., PLC, FTS, NC, and FFC have strong and positive correlation with their own contract than with other ones. Thus, this analysis confirms the validity of the measurement of the variables.

Following the recommendations of Shook et al. (2004), we report the values of chi-square and its associated *p* value, goodness of fit index (GFI), root mean square error approximation (RMSEA), incremental fit index (IFI), Tucker–Lewis index (TLI), comparative fit index (CFI), and root mean square residual (RMR). By following the general guidelines from Baumgartner and Homburg (1995) and Shook et al. (2004), the value of chi-square should be insignificant to confirm that there is good model fit; the value of CFI, IFI, TLI, and CFI should be above 0.9; the values of RMR should be less than 0.10; and RMSEA values should be less than 0.05 and these values are generally considered and interpreted as indications of good model fit. The results of measures of fit for the structural equation model are reported in Table 5, and these results indicate that all the values of the diagnostics tests fall in the normal ranges and thus, it is safely concluded that the structure equation model is statistically adequately and sufficient fit to data.

The constructed model has been estimated using partial least square technique and the results are reported in the Fig. 2. It shows that the majority of coefficients are statistically significant and the estimated model shows that 55% of the variance in entrepreneurial intention has jointly been explained by perceived desirability of entrepreneurship (PDE), perceived social norm towards entrepreneurship (PSNE), and perceived self-efficacy (PSE).

Table 5 Measures of fit for the structural equation model

Test	Statistics
Chi-square (p value)	0.178
GFI	0.921
TLI	0.952
IFI	0.931
CFI	0.908
RMSEA	0.0025
RMR	0.029



The components of social capital alone explain 18% of the variance in perceived self-efficacy of entrepreneurship, 21% of the variance in perceived desirability of entrepreneurship towards entrepreneurship, and 25% of the variance in perceived social norm towards entrepreneurship. The results of partially least square further show that the influence of social capital on perceived desirability of entrepreneurship (PDE) has been fully validated or corroborated (as all components of social capital found to be significant at 0.05 and 0.01 level); however, the influence of social capital on perceived social norm towards entrepreneurship (PSNE) has been partially corroborated as two components of social capital found to be statistically significant. Also, the influence of social capital on perceived self-efficacy (PSE) has been fully confirmed. It is further revealed from Fig. 2 that the influence of PDE, PSNE, and PSE on entrepreneurial intention has been fully corroborated.

Discussion

Literature shows that actual behavior of individuals is determined by intention of people towards a particular behavior (Krueger & Brazeal, 1994; Krueger et al., 2000). The process of new ventures may begin when a person intents to do so which means before searching out any business opportunity, the entrepreneurial intention causes entrepreneurs. The self-belief that one can perform task efficiently and effectively (self-efficacy) has the central role in the promotion of perceived feasibility of the business and thus, intentions of new ventures are influencing by believing one own abilities to

perform various tasks (Zampetakis & Moustakis, 2006). The investment in human relationships results social capital and it makes it possible to access information, facilitated decision-making in groups, and by coordination of activities, it also reduces transaction cost (Grootaert & van Bastelaer, 2001). Social capital also allows to access human capital (Coleman, 1988). Social capital may be accumulated in use and it also depreciated (Svendsen & Svendsen, 2004). Like many other studies, the results of this study confirmed that social capital has significant role in forming entrepreneurial intentions of the individuals.

The findings of this study show that the four factors of community social capital (CSC) have strong positive effects on an individual's perceived self-efficacy (PSE), and perceived desirability of entrepreneurship (PDE) which in turn have positive effects on entrepreneurial intention (EI). It suggests that participation in local community (PLC) tends to have a stronger influence on perceived desirability of entrepreneurship (PDE); if people make participation in local community, then they understand the feelings of the community towards entrepreneurship. Social networks inside the society can provide a possible entrepreneur with entrepreneurial knowledge, such as business opportunities, markets, and access to resources. Through these networks can also provide the possible entrepreneurs with hidden signals regarding the capability, achievability, and attractiveness of an entrepreneurial idea, which finally helps them to achieve social approval and authority. So due to these factors, the desirability increases towards entrepreneurship and has strong influence on entrepreneurial intentions. Participation in local community also influences on perceived self-efficacy (PSE); if local community increases their selfefficacy towards entrepreneurship, then it reduces unemployment and poverty in turn which strongly influences on entrepreneurial intentions. Moreover, if there exist feeling trust and safety (FTS) in local society, then without any hurdle, their desirability for entrepreneurship raises so it also strongly influences entrepreneurial intentions (EI). Analysis shows that if they are having neighborhood connection (NC), then they know each other in community so positively influence on perceived desirability of entrepreneurship (PDE) which has positive effect on entrepreneurial intention (EI) and these results are in line with the results of Ali, Ahsan and Dziegielewski (2017); Roxas and Azmat (2014); Lee (2009); and Liao and Welsch (2005).

This study found that rural social capital supports the entrepreneurial intentions in rural individuals of community which in turn benefits the rural local economic development of the region. Thus, rural economic development driven by entrepreneurship program may consider social capital as one of the fundamental blocks in building and promoting the sense of personal capability and desirability of local rural community to engage in entrepreneurial activities. The training related to entrepreneurship programs in rural setting should consider modules which help the community to know the existing social norms that support perceived desirability of entrepreneurship, perceived self-efficacy, and perceived social norm towards entrepreneurship. In the case of rural areas of Pakistan, such approach would reduce the psychosocial barriers and facilitate the development of entrepreneurial intention. It should also be considered that social networking is not a natural process but it should be constructed through interactions of people with each

other and in this regard, community-based entrepreneurship exchange program should be introduced in rural setting where rural people will have the opportunities to build linkages with those outside their immediate community. Rural people will learn new venture ideas in addition to the conventional ones. In the case of Gilgit-Baltistan, where local people have tremendous entrepreneurship potential owing to the increasing flow of tourism in the region and expected venture opportunities to be generated by CPEC, such entrepreneurship exchange programs are highly desirable in order to gain maximum benefits from the expected entrepreneurship opportunities in the region which in turn helps in enhancing the rural economic development.

Social capital and entrepreneurial intentions are essential for the development of entrepreneurial activities in a region and thus, policy makers and entrepreneurship managers should take into account social capital in the view of the specific context. For instances, people in mountain areas of Pakistan are more cooperative, friendly, hospitable, and welcoming and in such cases, the programs for awareness about entrepreneurial intention should design accordingly. People of Gilgit-Baltistan tend to migrate to another region/country due to limited earning options in their region and such migration has a lot of negative consequences in the development of the region such as shortage of laborers in rural area which leads to socio-economic difficulties in the rural agro-economy which in turn hinders development of the region. Such migration may be prevented if the people of Gilgit-Baltistan are given awareness and training session about the entrepreneurship and entrepreneurial potential of the region. Interestingly, Gilgit-Baltistan has the potential to export dry and fresh fruits, minerals, and handicrafts but due to lack of technical expertise, this potential has never been materialized in true spirit. Policy makers should consider these opportunities and train the local people accordingly.

Conclusion

This study has examined the role of social capital in explaining the entrepreneurial intention of in rural setting of Pakistan where responses of 325 respondents have taken through thorough field surveys. Descriptive and inferential statistical tools have been used to analyse the data and it is found that social capital has significant positive impact on the entrepreneurial intentions of the rural people. This study recommends that the rural communities in Pakistan should be versed with the awareness of entrepreneurship opportunities to reduce the poverty and increase more likelihood opportunities. The project China-Pakistan Economic Corridor (CPEC) will provide many business opportunities to the people of Hunza region; government should provide training and awareness sessions about entrepreneurship opportunities in order to gain maximum economic advantage from CPEC. Such awareness programs will have unique advantages to various segments of rural community. Women, unemployed individuals, and younger generations in particular will get the maximum benefit as people in mountainous regions have already limited earning options and the available earning options (e.g., ecosystem services) are also vulnerable to climate change. In such a case, developing entrepreneurial intention (EI) of the mountain community in Gilgit-Baltistan will lead to their understandings of benefits of initiating their own businesses and get economic advantages. Likewise, developing EI in women will lead to starting up women enterprises in the regions which ultimately lead to women empowerment (Ali, Bano, & Dziegielewski, 2016), gender equality, and increase in households' income. Developing higher EI in the younger generations will also help the younger generation to prevent from many social crimes such as violence and drugs.

Abbreviations

El: Entrepreneurial Intension; CPEC: China–Pakistan Economic Corridor; GB: Gilgit-Baltistan; FFC: Family and friends connection; PLC: Participation in local community; NC: Neighborhood connection; FTS: Feeling of trust and safety; PDE: Perceived desirability of entrepreneurship; PSNE: Perceived social norm towards entrepreneurship; PSE: Perceived self-efficacy; CSC: Community social capital; BA: Bachelor of Arts; BSc: Bachelor of Science

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Authors' contributions

Mr. Amjad Ali has worked in conceptualization of the research, design of research methodology, data analysis, and overall supervision of the study. Mrs. Sania has worked in the literature review part, data collection, and also give her input in drafting the paper. Both the authors have read the final draft and approved for submission.

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Availability of data and materials

The authors declare that they have the survey data collected from field and used in this study.

Competing interests

The authors declare that they have no competing interests.

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