

**EFFECTS OF PERCEIVED PSYCHOLOGICAL BARRIERS
ON ENTREPRENEURIAL INTENTIONS:
MEDIATING ROLE OF THEORY OF PLANNED BEHAVIOUR**

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ABSTRACT

Perceived obstacles to entrepreneurial intentions have been the subject of several research. However, considering the theory of planned behaviour, it's not clear how perceived barriers influence entrepreneurial intentions. As a result, the purpose of this study is to close this gap by constructing an integrated model based on theory of planned behaviour. This study applied quantitative approach, using Smart PLS 3.0. The data were collected from university business graduates both at undergrad and postgraduate level. 351 sample size was taken using purposive sampling. Partial Least Square Structural equation modelling (PLS-SEM) was employed to determine both outer and inner model. Findings revealed that all the direct hypothesis proposing direct effect of risk aversion, stress avoidance and fear of failure on entrepreneurial intentions were unsupported. Risk aversion affected entrepreneurial intentions indirectly through entrepreneurial attitude and perceived behavioral control. Mediating role of entrepreneurial attitude between stress avoidance and entrepreneurial intentions was insignificant whereas significant for perceived behavioral control. Similarly, mediating role of entrepreneurial attitude between fear of failure and entrepreneurial intentions was significant whereas insignificant for perceived behavioral control. The study's implications include the need for students to accept failure as a necessary component of learning through cultivating an entrepreneurial mindset. Entrepreneurial mindset aids in the development of a favourable attitude toward entrepreneurship, and entrepreneurial personality and attributes aid in the development of increased self-efficacy. Through a good attitude toward entrepreneurship and self-efficacy, such measures can help university students overcome psychological hurdles, particularly risk aversion.

KEYWORDS

Theory of planned behavior, Fear of failure, Stress avoidance, Risk aversion, PLS-SEM, Entrepreneurial intentions

1. INTRODUCTION

In current era, many studies have pointed out the importance of entrepreneurship for promotion of social (Galindo and Méndez, 2014), economic development, job creation (Song and Winkler, 2014) and innovation (Hathaway et al., 2014). Entrepreneurial orientation enhances the financial performance of the businesses (Tajeddini and Mueller, 2018). It is an essential constituent in globalized markets (García et al., 2015; Lindh and Thorgren, 2016). It plays crucial part in developing economic growth for not only developing and developed (Kuratko, 2005) but also emerging economy (Manolova et al., 2010) like Pakistan. Policy makers and researchers have shown enormous interest in entrepreneurship because of its applied nature (Paul et al., 2017).

Large stock of studies have been conducted analyzing student's entrepreneurial intentions using different dimensions like using theory of planned behavior, personal and psychological traits, entrepreneurship education and programs, contextual and institutional factors, through entrepreneurial process (Liñán and Fayolle, 2015). Majority of these studies were conducted in the developed economies like United States (Krueger et al., 2000), Norway (Kolvereid, 1996), Spain (Guerrero et al., 2008), Hong Kong (Koh, 1996), United Kingdom (Henderson and Robertson, 1999), Singapore (Wang and Wong, 2004), New Zealand (Gnoth, 2006), Puerto Rico (Veciana et al., 2005). Barriers faced by potential entrepreneurs in a developed and emerging economy differ because of differences in culture, context, social setting which ultimately shape entrepreneurial intentions of the students. Developed countries have more favorable environment like entrepreneurial culture, entrepreneurship education system and programs designed to develop entrepreneurial behavior rather than just intentions that leads to reducing barriers to entrepreneurship. Therefore, there exists contextual gap in the literature as far as PPB are concerned.

Many of the studies considered intentions, motives and perceived barriers to entrepreneurship together across different cultures i.e. Turkey and America (Şeşen and Pruett, 2014) and among different samples of Asian, American and European students (Giacomin et al., 2011). One of the studies investigated by (Sandhu et al., 2011) measured entrepreneurial inclination of the Malaysian postgraduate students against perceived barriers. Theoretical framework was developed by researchers consisted of independent and dependent constructs. Most of the independent constructs were intrinsic in nature. Another recent study was conducted by Kebaili et al., (2017) in Qatar for analyzing barriers to entrepreneurship. Theoretical framework consisted of different barriers considered as exogenous constructs and entrepreneurial inclination as endogenous construct. One study was found based on measuring entrepreneurial intentions of business graduates in Pakistan through two extrinsic factors (Financial and Environment) which were contextual factors and three of the constructs were related to personality characteristics (Aslam and Hasnu, 2016). The study's findings revealed that while MBA students wanted to start their own business, many were hampered by perceived hurdles and restraints (Unsupportive environment and Government policies) refrained them from entering entrepreneurship field. However, this study employed comprehensive approach by considering intrinsic barriers to develop integrated model using theory of planned behavior (TPB) as mediating variables (mechanism) to fill this gap in the literature. This study explored the role of cognitive factors (TPB) between

perceived psychological barriers (PPB) and entrepreneurial intentions (EI). TPB as mechanism nullify the negative effects of PPB on EI. This study included undergraduate and postgraduate university students from various districts of Punjab, as well as public and private institutions, in order to fill a gap in the literature. As suggested by (Liñán and Fayolle, 2015) in systematic literature review, the impact of perceived barriers on entrepreneurial intentions is an underdeveloped area.

At the contextual level, this study made contribution to the literature by investigating the psychological barriers. Emerging economy context is different from developed countries where most of the theories have been developed (Fayolle and Liñán, 2014) on the bases of different criteria like economic and environment factors (Paul et al., 2017) which can influence differently between the relationship of TPB and EIs. EIs were found to be different in three countries on the basis of economic development, gender, psychological and socioeconomic factors (Sánchez-Escobedo et al., 2014). A meta-analysis conducted showed difference of effects of subjective norms and perceived desirability on entrepreneurial intentions in different contexts (Schlaegel and Koenig, 2014). Possible reasons mentioned were differences of economic, culture and social norms in different contexts. It was suggested to conduct in depth analysis of contextual differences responsible for developing entrepreneurial intentions. This recommendation was also endorsed by Kebaili et al., (2017) to undertake contextual based approach research on perceived entrepreneurial barriers to entrepreneurial intention in Middle Eastern countries. Recently, Munir et al., (2021) found that perceived barriers negatively affected entrepreneurial intentions in Pakistan and China.

Unique findings of this study made contribution to the stock of exiting literature. Theoretically, most of the studies empirically showed direct significant negative association between PPBs and EIs (Kebaili et al., 2017; Sandhu et al., 2011). This study indicated positive relationship between barriers (psychological) and entrepreneurial intentions in the presence of determinants of theory of planned behavior. Extant literature review reflects use of widely acceptable theory of planned behavior (Kautonen et al., 2013). Few of them making use of Entrepreneurial Event Model (EEM) to determine entrepreneurial intentions of the university students in both sectors private and public (Canever et al., 2017). A few of the studies made use of Theory of planned behavior with Entrepreneurial event model (Schlaegel and Koenig, 2014). Direct negative relationships have been already established between PPBs and EIs in the previous literature (Ferreira et al., 2014; Kebaili *et al.*, 2017; Sandhu et al., 2011; Solesvik *et al.*, 2013). Indirect effects of the PPBs on EIs through TPB has not been explored yet as per author's knowledge. TPB nullifies the negative effects of PPBs. PPBs affects AE of the university students. If they perceive them high, their AE would be low and would ultimately affect EIs. Similarly, if university students perceive psychological barriers high, their PBC would be reduced and finally impacts on EIs. Previous literature have used TPB as mediation for investigating the effects of socioeconomic, cultural and psychological factors on EIs (Ahmed et al., 2019; Kautonen et al., 2015; Munir et al., 2019; Peng et al., 2012; Rosique-Blasco et al., 2018; Xu et al., 2016; Zapkau et al., 2015).

Global Entrepreneurship Monitor (GEM) report of 2007 showed that all of the countries who scored more than 80% in the early stage adoption of entrepreneurship were developed countries like Spain, Italy. Majority of the entrepreneurs who will choose

entrepreneurship as career path will be from developed country (Bosma et al., 2008). As per last survey conducted in Pakistan (GEM) reported that students have low EI as compared to other countries and one of the main reasons was fear of failure. Pakistan has been ranked 136 in ease of doing business in the world (World Bank, 2018) which shows existence of number of barriers to start a business in Pakistan. These facts strongly support evidence to conduct research regarding barriers to EI.

Table 1
Entrepreneurial Characteristics

Female to male TEA ratio	1 to 17.6
Perceived capability to carry out Entrepreneurship	49%
Fear of failure	31%
Entrepreneurial Intentions	25%

Source: GEM 2012

Following were the objectives of the study

- i. To investigate the negative influence of different PPBs in predicting EIs of the university students.
- ii. To determine the mediation effects of TPB in predicting EIs of the university students.

The structure of the rest of the paper is as followed: next section starts with explaining the theories applied in the field of entrepreneurship and specifically TPB which develops theoretical base of the paper. Next section of methodology mainly discusses the data collection procedure, sampling strategy and measures used for this paper. Results have been explained using PLS-SEM. In addition, the study concludes with a discussion and conclusion that covers the study's implications, limitations, and future research directions.

2. LITERATURE REVIEW

2.1 Entrepreneurial Intentions

It's been noticed that entrepreneurship is considered as preferred career choice among students regardless of their fields (Kolvereid, 1996). Specifically, entrepreneurial intentions have been conceptualized as one of the vital subsequent determinant to starting your own business. According to (Bird, 1988), "entrepreneurial intentions has been defined as state of mind directing a person's attention (experience and action) toward a specific object (goal) or a path in order to achieve something (means)" (p. 442). Previous studies in the literature determined EIs of the university students. Liñán and Fayolle (2015), provided 5 different categories of study determining EIs. These 5 categories were the following: first category dealt with core EI model (Liñán and Chen, 2009; Zhao et al., 2005). Second category evaluated the impact of individual factors on EI (Gupta et al., 2009; Wilson et al., 2007). Third category assessed the effects of Entrepreneurship Education (EE) on EI (Franke and Lüthje, 2004; Souitaris et al., 2007). Fourth category noticed impacts of institutions and context on EI (Engle et al., 2010; Veciana et al.,

2005). Fifth category focused on effects of entrepreneurial process on EIs (Kolvereid and Isaksen, 2006; Nabi et al., 2006). Rasool et al., (2018) conducted systematic literature review for determining entrepreneurial intentions of university students. Recently,

2.2 Theory of Planned Behavior (TPB)

Going all the way back to the beginning of EI literature, two essential components gave rise to EI. One was from social psychology, which dealt with cognitive processes and the analysis of people's behaviour in general. The most commonly used theory in this field is (Ajzen and Fishbein, 1980), which became Theory of Planned Behavior (TPB). Second main contribution came from the entrepreneurship field expert (Shapero, 1985). These two individuals made significant contributions to the psychology-based EI research. TPB was used as a reference theory in a research article by Krueger and Carsrud (Krueger and Carsrud, 1993). TPB's application in the entrepreneurial area was made possible by two important contributions by (Kolvereid, 1996).

The theory that supports in predicting entrepreneurial intentions is “Theory of Planned Behavior (TPB)” which was presented by Icek Ajzen in 1991. The Theory of Planned Behavior (TPB) is not only the theory of social psychology but influential one for the human behavior. This theory shows empirically that human intentions are the best predictors of human behavior (Ajzen et al., 2009). This theory supports entrepreneurial intentions in the field of entrepreneurship as this phenomenon is rare to be found. TPB is influenced by three independent factors which are perceived behavioral control, subjective norms and attitudes towards behavior. Two components of this theory have been included in the conceptual framework which are mentioned in upcoming part. A study undertaken by (Krueger et al., 2000) have shown utility of TPB in predicting entrepreneurial intentions.

Attitude can be defined as “degree of evaluation of a specific behavior whether it's positive or negative” (Ajzen, 1991). It can be considered as how one evaluates positive or negative about venture creation (Kyvik, 2018). It explains an appeal towards a specific behavior. Previous researchers have found attitude as an important determinant as it relates to personal perceptions of an individual (Olson and Bosserman, 1984). The link between entrepreneurial attitude and entrepreneurial intentions has been proven in several researches (Ahmed et al., 2019; Gieure et al., 2019; Munir et al., 2019; Thomas et al., 2014; Watchravesringkan et al., 2013). Results of these studies have been reinforced by review paper written by Lortie and Castogiovanni, (2015) who found 16 studies showing positive link between AE and EIs.

Perceived behavioural control can be called as perceived controllability. According to Bird, (2015, p. 154), it can be defined as “perceptions of the respondent that he/she can execute specific behaviour”. Perceived controllability explains the degree of perception of a person that how much a specific action can be influenced by him (Ajzen, 2002). It also refers to one's own assessment about dealing with ability to overcome barriers, intellectual capability and skills. Individuals tends to behave in such activities which can be controlled by them. Many studies have indicated that PBC is strong predictor of EI (Ahmed et al., 2019; Gieure et al., 2019; Munir et al., 2019; Shook et al., 2003). Subjective norm was not taken in the study as it shows weakest link in determining intentions among the components of theory of planned behavior (Krueger et al., 2000).

2.3. Stress Avoidance (SA)

First psychological barrier was stress avoidance. A study found that students who did not show EIs were stress averter in nature (Henderson and Robertson, 1999). Uncertainty avoidance might vary across countries due to socio and legal requirements, punctuality and tolerance for ambiguity (Hofstede, 1980). Starting a new business can be stressful as it involves uncertainty which leads towards anxiety in some people and restlessness (Sandhu et al., 2011). This stress relates to extra working hours and workload attached to it. It also involves negative effects on health (Kebaili *et al.*, 2017). Therefore, university students may avoid taking such stress and have shown negative impact on EIs (Henderson and Robertson, 1999; Kebaili *et al.*, 2017; Sandhu et al., 2011). We hypothesize:

H1: SA negatively influences EIs.

2.4 Risk Aversion (RA)

Second barrier relates to risk aversion which may refrain university students from taking an entrepreneurial initiative. Risk taking for a person was defined as decision making against uncertain conditions (Koh, 1996). Risk aversion for university students may be due to the job insecurity and unstable source of income which may be caused by economic and market situation (Pruett et al., 2009). Previous literature have shown inclusive results regarding the relationship between RA and EIs. Busenitz, (1999) found insignificant association between those constructs whereas few studies showed only modest support for risk taking (Begley and Boyd, 1987). Most of the previous studies have indicated relationship between RA and EI (Solesvik et al., 2013; Sandhu et al., 2011; Kebaili et al., 2017; Ferreira et al., 2014). Hence, we hypothesize:

H2: RA negatively affects EIs.

2.5 Fear of Failure (FF)

Third psychological barrier faced by potential entrepreneurs. As per report of GEM (2012) in Pakistan, 25% of students had EI but 31% feared failure. Fear of failure can be the biggest cause of not going for a business. It may be perceived negative to fail in business in a society which rates high on uncertainty avoidance. Several studies in previous literature have shown FF linked negatively to EI (Henderson and Robertson, 1999; Kebaili et al., 2015, 2017; Singh Sandhu et al., 2011). Consequently, we hypothesize:

H3: FF negatively influences EIs.

2.6 Mediation Analysis

Direct negative relationships have been already established between PPBs and EIs in the previous literature (Solesvik *et al.*, 2013; Sandhu et al., 2011; Kebaili *et al.*, 2017; Ferreira et al., 2014). Indirect effects of PPBs on EIs through TPB has not been explored yet as per author's knowledge. TPB nullifies the negative effects of PPBs. PPBs affects AE of the university students. If they perceive them high, their AE would be low and would ultimately affect EIs. Similarly, if university students perceive psychological barriers high, their PBC would be reduced and finally impacts on EIs. Previous literature

have used TPB as mediation for investigating the effects of socioeconomic, cultural and psychological factors on EIs (Xu et al., 2016; Ahmed et al., 2019; Rosique-Blasco et al., 2018; Kautonen et al., 2011;). Therefore, we hypothesize as:

H4: AE mediates between SA and EIs.

H5: PBC mediates between SA and EIs.

H6: AE mediates between RA and EIs.

H7: PBC mediates between RA and EIs.

H8: AE mediates between FF and EIs.

H9: PBC mediates between FF and EIs.

3. RESEARCH METHODOLOGY

3.1 Data Collection Procedure and Sampling Recruitment

Quantitative approach was used for this study. Survey questionnaire was used for data collections purposes. Only business graduates were considered for this study. University students are considered most relevant for determining EIs. They have to decide whether to go for job or business (Fitzsimmons and Douglas, 2011; Krueger et al., 2000). Survey questionnaires were provided to the faculty members teaching at different universities. Teachers provided awareness regarding the objective and background of the research taking place. Students were informed about confidentiality of their responses. Pilot study was conducted using a sample size of 40 students consisting of 20 from undergrad and 20 from postgrad programs. No major issues were found as students use English as medium of their studies. Prior permission was granted by the faculty members before taking response from the students. These faculty members got these questionnaires filled from the students during their classes. Researcher collected those questionnaires from those faculty members by himself.

For this purpose, students from different academic levels (Undergraduate and Postgraduate), both sectors (Public and Private), both genders (Males and Females), different geographical locations (Faisalabad, Gujrat, Lahore, Sialkot, Sargodha) were considered in order to ensure robustness of the results. 4 universities from public and 4 from private sector were chosen for this study that presents true reflection of the sample. Names of these universities include University of Agriculture, National University of Modern Languages, both from Faisalabad city, University of Central Punjab (UCP) and Superior University, from the Lahore city, University of Lahore and University of Gujrat, from Gujrat city, University of Management and Technology, from Sialkot city, University of Sargodha, from Sargodha city. Total 375 survey questionnaires were distributed among the undergrad and postgrad university students. 24 were discarded due to improper, incomplete response or filling without any attention. So, response rate for current study was 93.6% which is due to that fact that questionnaire were filled in the presence of respective faculty members, if students had any ambiguity, then could clarify it at the spot. Purposive sampling was used for the selection of universities based on researcher's judgment that can provide maximum accurate data from diversified geographical locations within a country and keeping a balance between number of public and private sector universities. Purposive sampling was utilized for approaching those

faculty which were serving in different universities in researcher's social network and could assist in this study. According to (Hair et al., 1995), minimum of 5 observation and 20 observations maximum for each independent variable is recommended. This study consists of 3 independent and 2 mediating variables that makes total of 5 variables. So, desired number of respondents for this should be 100. Sample size of 351 was considered for this study in order to have high level of explanatory power. Out of 16,497 observations, 247 were found to be missing. As these values are less than 5%, therefore missing value analysis was not employed. Partial Least Square Structural Equation Modeling (PLS-SEM) approach was used using Smart PLS 3.0 was used for data analysis. Smart PLS 3.0 was specifically used for non-normal data (Hair et al., 2017) and complex model having two mediators (Nitzl et al., 2016).

3.2 Measures

Different constructs of barriers, theory of planned behavior and entrepreneurial intentions were taken from different authentic sources. Sources from where these questions were adopted are following: five items of stress avoidance, three item of fear of failure and four items of risk avoidance were adopted from (Sandhu et al., 2011), entrepreneurial intention's six items, perceived behavioral control and attitude towards entrepreneurship were adopted from a study conducted by (Liñán and Chen, 2006). Five points Likert scale was employed for recording response. As all the subjects in a university are taught in English, therefore students did not find it difficult to understand questions.

4. RESULTS

4.1 Demographics and Common Method Bias (CMB)

46.3% of the respondents were female and 53.7% were males. 58.5% of the respondents were in the age bracket of 22 to 25. 59% university students have already taken entrepreneurship subject. 34.6% students have already completed bachelor's degree.

Common Method Bias (CMB) is a common issue in self-administrated, self-reported survey quantitative research. It can be controlled through procedural remedies and reported through Harman's single factor analysis (Podsakoff et al., 2003; Schwarz et al., 2009). Procedural remedies included proper consent was taken and anyone can withdraw at any time. Social biasness, confidentiality and anonymity of the respondents were also warranted. Exploratory Factor Analysis (EFA) was performed through Statistical Package for Social Sciences (SPSS). Findings of EFA revealed that first factor variance explained 21.46% which was less than 50% ensuring absence CMB (Babin et al., 2016).

4.2 Measurement Model

For evaluating internal consistency reliability, composite reliability was used for the evaluation of reflective measures. As a replacement, preceding literature has suggested to use composite reliability (Hair et al., 2012). Table 3 indicates that there was no problem with reliability, since composite reliability values were more than 0.70 (Hair et al., 2011). As value for AE was 0.807, for EI was 0.897; for FF was 0.746; for PBC was 0.843; for RA was 0.761 and for SA was 0.802. So, high level of internal consistency was observed

in all reflective latent variables. For examining Convergent Validity (CV), Average Variance Extracted (AVE) values of all latent variables AE, EI, FF, PBC, RA, SA and factor loadings of all items were evaluated. Table 3 shows that all AVE values were greater than 0.5. So, it was confirmation of CV(Bagozzi and Yi, 1988). Items loadings needs to be above 0.70. Factor loading levels between 0.40 and 0.70, on the other hand, can be maintained if the AVE value for that construct is equal to or greater than 0.50 (Hair *et al.*, 2017). AE1, PBC6, SA1, SA2 and RA1 were deleted from the model due to low factor loadings and to improve the validity (AVE) and reliability (CR) of the constructs included in this study.

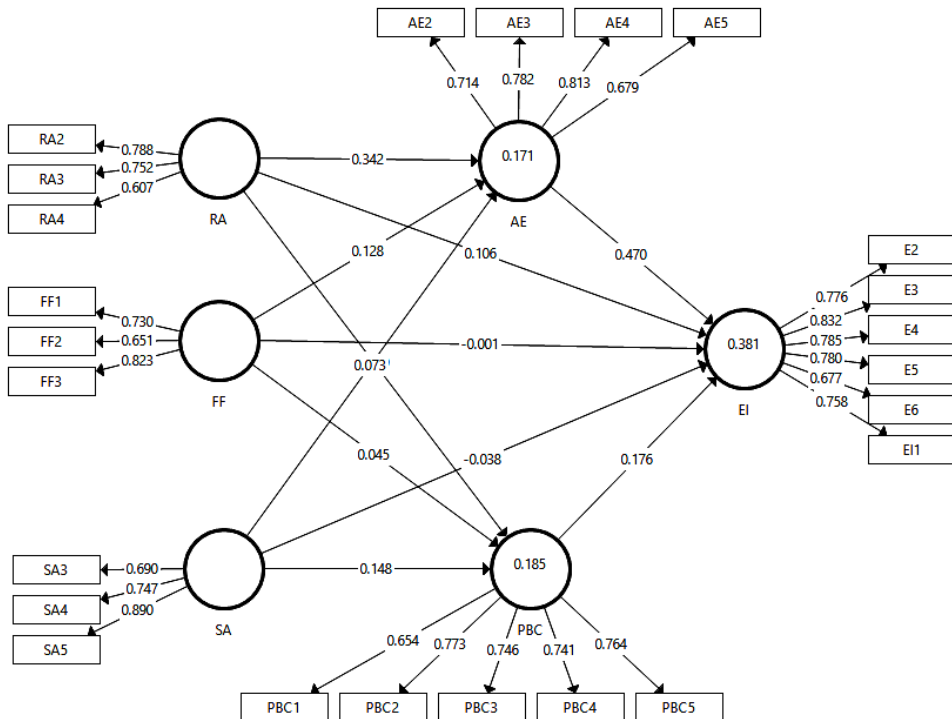


Figure 1: Measurement Model

Heterotrait-Monotrait (HTMT) correlation ratio was used for measuring Discriminant Validity (DV) which is considered more robust way to evaluate DV. Table 4 showed that all values were below 0.90 showing presence of DV (Henseler *et al.*, 2015).

Table 3
Reliability and Validity

<i>Constructs and Items</i>	<i>Factor Loadings</i>	<i>CR</i>	<i>AVE</i>
Fear of Failure (FF)		0.781	0.545
FF1	0.730		
FF2	0.651		
FF3	0.823		
Risk Aversion (RA)		0.761	0.518
RA2	0.788		
RA3	0.752		
RA4	0.607		
Stress Avoidance (SA)		0.822	0.608
SA3	0.690		
SA4	0.747		
SA5	0.890		
Perceived Behavioral Control (PBC)		0.856	0.543
PBC1	0.654		
PBC2	0.773		
PBC3	0.746		
PBC4	0.741		
PBC5	0.764		
Attitude towards Entrepreneurship (AE)		0.836	0.561
AE2	0.714		
AE3	0.782		
AE4	0.813		
AE5	0.679		
Entrepreneurial Intentions (EI)		0.897	0.592
EI1	0.758		
EI2	0.776		
EI3	0.832		
EI4	0.785		
EI5	0.780		
EI6	0.677		

Table 4
Discriminant Validity

<i>Constructs</i>	<i>AE</i>	<i>EI</i>	<i>FF</i>	<i>PBC</i>	<i>RA</i>
AE					
EI	0.723				
FF	0.308	0.206			
PBC	0.573	0.502	0.232		
RA	0.598	0.503	0.448	0.604	
SA	0.160	0.118	0.199	0.259	0.266

4.3 Structural Model

Figure 2 shows the results of measurement model. Variance Inflation Factor (VIF) values were taken into account for assessing multi-collinearity of given constructs. VIF levels of less than 5 should be maintained (Hair et al., 2017). There was no multi-collinearity in the VIF values, which varied from 1.029 to 1.370. R square values were used to determine the explanatory power of exogenous constructs (Hair et al., 2017). Cohen et al., (1988) segregated R square values of, and 0.26, 0.13 and 0.02 as substantial, moderate, weak respectively. 17.1% variation in AE, 18.5% in PBC, 38.1% was brought by all exogenous constructs. Values for AE and PBC were moderate whereas for EI, it was substantial.

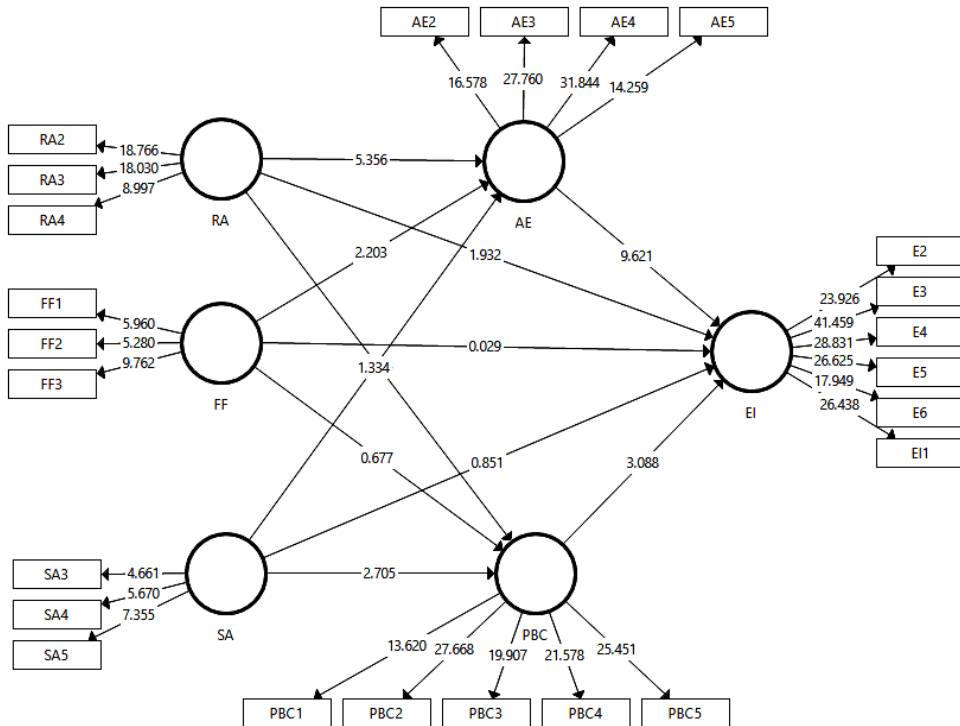


Figure 2: Structural model

Table 5
Direct Effects

Relationships	Beta	T value	P value	LL	UL	Decision
FF -> EI	-0.001	0.029	0.977	-0.094	0.092	Unsupported
RA -> EI	0.106	1.932	0.053	-0.002	0.213	Unsupported
SA -> EI	-0.038	0.851	0.395	-0.127	0.049	Unsupported

Effect size (f^2) needs to be reported in the structural model for determining the effect on exogenous on endogenous constructs (Hair et al., 2014). Values of and 0.35, 0.15, 0.02 denote and high, moderate, low effects respectively (Cohen, 1988). F square values ranged from 0.000 showing no effect and 0.265 as moderate effect. Q^2 was considered for evaluating predictive relevance of the constructs (Hair et al., 2017). As per suggestions provided by Richter et al., (2016), value greater than zero indicates presence of predictive relevance. For this purpose, blindfolding procedure was used. Q^2 values for AE was 0.067, 0.116 for EI and 0.062 for PBC. Therefore, it indicates that model has sufficient predictive relevance.

Bootstrapping procedure was used for testing the significance of the hypothesis using t statistics, beta and bias corrected confidence interval. As indicated, 10,000 subsamples were used (Hair et al., 2016). Table 5 depicted the constructs' direct linkages. First hypothesis showed that SA was found to have insignificant effect on EI (Beta = -0.038; T value = 0.851; LL = -0.127; UL = 0.049). So, H1 was not supported. RA had significant impact on EI (Beta = 0.106; T value = 1.932; LL = -0.002; UL = 0.213). Therefore, H2 was supported. FF did not affect EI (Beta = -0.001; T value = 0.029; LL = -0.094, UL = 0.092). Therefore, H3 was not supported.

Table 6
Specific Indirect Effects

<i>Relationships</i>	<i>Beta</i>	<i>t- values</i>	<i>p-values</i>	<i>LL</i>	<i>UL</i>	<i>Decision</i>
SA -> AE -> EI	0.035	1.311	0.190	-0.032	0.080	Not supported
SA -> PBC -> EI	0.026	1.875	0.061	0.004	0.058	Supported
RA -> AE -> EI	0.161	4.487	0.000	0.094	0.235	Supported
RA -> PBC -> EI	0.065	2.622	0.009	0.023	0.120	Supported
FF -> AE -> EI	0.060	2.118	0.034	0.000	0.112	Supported
FF -> PBC -> EI	0.008	0.621	0.535	-0.017	0.035	Not supported

Preacher and Hayes guidelines were followed for testing mediation. A statistically significant specific indirect effect was considered as an evidence for mediation (Memon et al., 2018). Findings of the study found that AE did not mediate between SA and EI as values shown (Beta = 0.035; T value = 1.311; LL = -0.032, UL = 0.080). Hence, H4 was not supported. The findings of the study found that PBC was found to mediate between SA and EI as values shown (Beta = 0.026; T value = 1.875; LL = 0.004, UL = 0.058). Hence, H5 was supported. Outcomes of the study revealed that AE was found to mediate between RA and EI as values shown (Beta = 0.161; T value = 4.487; LL = 0.094, UL = 0.235). So, H6 was supported. Similarly, outcomes of the study indicated that PBC was found to mediate between RA and EI as values shown (Beta = 0.065; T value = 2.624; LL = 0.023, UL = 0.120). So, H7 was also supported. Results of the

study showed that AE mediated between FF and EI as values shown (Beta = 0.060; T value = 2.118; LL = 0.000, UL = 0.112). So, H8 was supported. Results of the study showed that PBC did not mediate between FF and EI as values shown (Beta = 0.008; T value = 0.621; LL = -0.017, UL = 0.035). So, H9 was not supported.

5. DISCUSSION

Hypothesis of our study showed that FF affects negatively EI directly. This relationship was not significant statistically. This finding of the study is inconsistent with various studies. In an empirical study conducted using Malaysian postgraduate students found significant negative relation between EIs and FF (Sandhu et al., 2011). Many previous studies have shown negative association between EIs and FF (Henderson and Robertson, 1999; Kebaili et al., 2017; Wong and Lee, 2005). Possible reason for this insignificant relation can be the right AE which reduces fear of failure among graduates of the university. Students do not fear failure because they have decided to become entrepreneur one day and failure is a pre-requisite to success for every entrepreneur.

Hypothesis did not support relationship between RA and EI which is aligned with the outcomes of preceding literature (Sandhu et al., 2011; Koh, 1996), but contradicts with results of study conducted (USA) using dental students (Zhang and Cain, 2017). Differences of the results may be attributed to study design that considered only direct relationship. This study not only considered direct but also indirect relationship and also in a better position to address net effect of risk aversion of university students.

AE mediates between RA and EI of university students at both undergraduate and postgraduate level. Findings of this study affirms with (Zhang and Cain, 2017). Their study showed a significant but negative effect between RA and EIs. It may be due to the adaptable nature of this trait (Sitkin and Weingart, 1995) and may be due to different circumstances (Levitin, 2014). If a strong risk averter student interacts with successful entrepreneurs in his social circle. It can change his risk aversion attitude to risk taking attitude.

Similarly, hypothesis explained mediating role of PBC between EI and RA. If the students have gained positive AE, mitigating effects of RA. There are chances that this social interaction with their class mates, with successful entrepreneurs, their parents running businesses successfully can enhance their abilities to start own business.

SA was found to be insignificant for direct and indirect relationships. For direct effects, outcomes of this study are not in line with previous studies that took place in different countries i.e. United Kingdom, Malaysia, Qatar respectively (Henderson and Robertson, 1999; Kebaili et al., 2017; Sandhu et al., 2011). For indirect effects, SA is not considered a major perceived barrier by the students. The fact that university students are used to rigorous labour can be used to explain the study's discrepancy, taking stress, working continuously for long hours during their studies. Hence, such stress do not affects their EIs negatively.

6. CONCLUSION

6.1 Summary

The main objective of the study is here to determine the effects of PPBs (Fear of failure, Risk aversion, Stress Avoidance) barriers on EIs. Additional support was taken from TPB to mediate the relationship between barriers and entrepreneurial inclination. Two components of planned behavior theory were considered (AE, PBC) as mediating variables. For achieving research objectives, various hypotheses were developed. Path analysis was employed using Smart PLS 3.0 for acceptance or rejection of proposed hypothesis.

Summing up the results of this study depicts that all of the PPBs did not affect EIs directly rather influenced through mediating effects of determinants of TPB. Overall, TPB played a positive vital role in predicting EIs of university students. Barrier's negative effects got transformed into positive attitude and perceived behavioral control that relates to cognitive factors. This conclusion reflects the importance of cognitive factors that needs to be focused by the educationists and policy makers to strengthen university student's attitude and PBC which ultimately affects EIs. EIs are expected to be converted into entrepreneurial actions.

6.2 Implications and Suggestions

Cognitive factors play vivacious role in nullifying the negative effects of PPBs. AE has emerged as an important indicator for developing EIs in university students (undergrad and postgrad). These attitudes can be influenced by many players mostly through social interactions with role models, policy makers and educationists. For educationists, content or curriculum should be designed in such a way that it affects cognitions of the students who wants to pursue entrepreneurship as career. Frequent use of case study exercises and narratives of successful entrepreneurs in the class room can boost entrepreneurial inclination of the university students. Policy makers and government can play their role by funding innovative feasible ideas given by university students at different entrepreneurial platforms. They can assist students by providing mentorship.

PBC was also found to be a strong determinant of EIs. It has implications for educators and public policy makers. As far as policy makers are concerned, they can provide resources or funding to the students in such a way that increases their PBC (Wong and Lee, 2005). For educationists, entrepreneurial trainings can be provided to the students having entrepreneurial ideas. Such training sessions can aid the students in solving real problems faced or would be faced by them in the upcoming future.

PPBs becomes a hindrance for university students in order to take an entrepreneurial initiative. Academics can assist in mitigating these barriers. Entrepreneurship education must be provided by the universities to the all disciplines of life including social sciences, engineering, and medical students. Real time simulations can be included as part of entrepreneurship curriculum to develop entrepreneurial mindset of the students. By establishing an entrepreneurial attitude, they must accept failure as a necessary part of learning. Entrepreneurial mentality aids in the development of a favourable attitude toward entrepreneurship, while entrepreneurial personality and qualities aid in the

development of increased self-efficacy. Positive AE and PBC can help university students overcome psychological obstacles, particularly risk aversion.

6.3 Limitations and Future Avenues

Following limitations were found which provides future avenues for researchers. Larger sample size and more geographical coverage can be used for ensuring robustness of the theoretical model. More disciplines or fields can be included in this study. Other constructs like subjective norms, business climate, entrepreneurial skills and training can also be considered across different cultures. Integrated model consisting of TPB and EEM can be employed to determine EIs of the university students. High school students can also be taken into account as target population of the study. Impact of formal institutions like government support and lack of social networking can be considered by future researchers. However, unique findings of this study call for in depth interview analysis using qualitative approach to better understand how these psychological barriers do not directly affect EIs of the university students but through components of TPB as mechanism.

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