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## MULTIDIMENSIONAL APPROACH FOR NEW VENTURE CREATION: EMPIRICAL STUDY OF UNIVERSITIES STUDENTS

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# ABSTRACT

Entrepreneurship is a major economic indicator for development. Under developing countries are facing the problem of unemployment, poverty and low level of entrepreneurial activities among young generation. Universities students are more interested about their career selection choice. Under developing countries students have low level of entrepreneurial intentions and activities. After review of prior literature in domain of entrepreneurship authors find a research gap regarding a research question why some peoples are entrepreneurs' and others don't? The main purpose of this study was to frame a multidimensional model of new venture creation on the bases of different approaches. Such type of approaches is answering the question about affecting factor of entrepreneurial intentions among universities students. Researchers proposed a multidimensional conceptual model on the bases of behavioural, contextual and psychological approaches. The empirical study framed three approaches with eight variables as independent and entrepreneurial intentions as dependent variable. Study employed survey base method and quantitative technique through close ended questionnaire. Respondents of current study was under graduate and master students of different public sector universities of Pakistan. Total n= 418 sample were analysed through SPSS 21.0 version for window and smart PLS version 2. The findings of study revealed that behavioural approach (perceived behavioural control, attitude to behavior and subjective norms) positively related with student's intention to become an entrepreneur. Secondly, contextual approach found education support and structural support insignificant with entrepreneurial intentions of students. Thirdly, psychological approach was hypothesized and found innovativeness and risk taking positively whereas, locus of control negatively. The results of study confirms that theory of planned behavior (TPB) is positively associated to perform any certain behavior. In addition, contextual support is major influencing factor. In this way, personal psychological characteristics plays very important role for developing entrepreneurial intentions of students. Further, study will guide to policy maker, course developer, parents and students regarding new multidimensional model of entrepreneurial intentions.

Keywords: Multidimensional approach. New venture creation. Entrepreneurial intentions. Students

## Introduction

Under developing economies are facing the problem of unemployment, poverty, lack of entrepreneurial activities and low level of economic growth. Entrepreneurship is considered as an authentic tool for economic empowerment, poverty alleviation, innovation, economic growth and economic sustainability (Tkachev & Kolvereid, 1999; Autio et al., 2001; Torres et al., 2017). Entrepreneurship is a business activity with innovative ideas (Huang and Chen, 2021). Entrepreneur is the person who manage all resources to initiate new venture for sake of profit (Eisenmann, 2013). Entrepreneur is a driver of economic engine. According to Adam Smith (1776) entrepreneur is organizer of all factors of productions. Entrepreneurs can produce, circulate and exchange the wealth (Samulson, 1970; Thaler, 2016). Under developing countries have very low level of entrepreneurial activities among young generation (Eijdenberg et al., 2018). Previous research discussed, many factors to answering the question why some peoples are entrepreneurs and while others don't (Linan and Santos, 2007; Gird and Bagraim, 2008). The central theme of discussion was either entrepreneur born or made (López-Núñez et al., 2020; Feng et al., 2022). Majority of researchers proved that to be an entrepreneur is a multidimensional approach (Obembe et al., 2014; Saleh et al., 2021). It is mixed combination of personal, psychological, contextual, financial, and political factors (Saeed et al., 2013; Malebana, 2014; Valencia et al., 2016). But what are the more important factors to be an entrepreneur is still unclear. The reason behind confusion is complexities and unclear situation in the literature. The development of entrepreneurial intentions is primary step for new venture creation. Young generation like, universities students are more inclined and curious about their career choice. Why students are not interested to be an entrepreneur in under developing countries. What are the influencing factors to be an entrepreneur? In this relation, according to theory of planned behaviour (TPB) Aizen (1991) to perform certain behaviour is directly connected with person cognitive and social combination. The theory of planned behavior is proposed that perceived control behavior (PBC), attitude towards behavior (ATB) and subjective norms (SN) are major determinant to perform any certain behavior. Behavioral approach is directly connected with intentions development (Agu, 2021; Wach et al., 2021; Al-Ajlouni., 2021). In this way, personal psychological characteristics plays important role for decision about new venture creation. Psychological characteristics are primary factors for involvement of entrepreneurial activities (Bennett, 2006; Zapkau et al., 2015; Hockerts, 2017; Qudus, 2022). It is proved that innovativeness (IN), risk taking (RT) and locus of control (LC) are basic characteristics of an entrepreneur (Ferreira 2012; Ahmed et al., 2022). Further, contextual support is strengthening the intentions. Rules regulation structural support (SS) and policies of government about ease of doing business impacts on students' intentions. Educational support (ES) with universities course and environment about entrepreneurship promotion is directly associated with students' intentions development. Structural support and educational support are main source of formation of entrepreneurship intentions (Hartshorn, 2001; Histrich et al., 2010; Munir et al., 2021). Behavioral, psychological and contextual approaches are main determinant for entrepreneurial intentions. Therefore, current study addresses the research problem to develop perfect model about new venture creation. The main objective of study is to answering the research question about development of entrepreneurial intentions among universities students. Developed model of study shows direct relation among dependent and independent variables. The multidimensional model of the study shows association of three approaches with development of entrepreneurial intentions. Behavioral, psychological and contextual approaches is tested with entrepreneurial intentions.

## Literature review

Entrepreneurs are main asset of any economy. New venture creations are positive indicator for economic growth and development (Baumol, 2002; Bosma, 2010; Khyareh, and Amini, 2021). More entrepreneurs in an economy show that economic activities are increasing positively (Campbell, 1996; Carree and Thurik, 2002). The majority of economists believe that entrepreneurial activities are best source of

employment maximization (Lee et al., 2005; Santarelli et al., 2009). It can emerge new ways of productions on bases of innovative ideas. The major or central concept of entrepreneurship are related with innovativeness. Innovations are tiers of economic sustainability (Linan and Chen 2009). The key elements of entrepreneurship process are innovation, discoveries and new opportunities (Shane and Venkataraman, 2000). Definition of intentions was given by the (Bird 1989) "the entrepreneur's states of mind that direct attention, experience, and actions toward a business concept". In the view of Ratten and Ratten (2007) "the fundamental belief of social cognitive theory is that individuals can influence their own actions.

Building of entrepreneurial environment is necessary element for new venture creation process. The willingness or inclination towards become an entrepreneur remained major debate among economists and cognitive psychologists. Central theme of debate is either entrepreneur born or made. Why some peoples are more tending to be an entrepreneur while others are less. Lot of previous research suggests that intentions play fundamental role to start-up of any new firm (Autio et al., 2001; Pittaway et al., 2007). It is proved by the scholars that intentions are initial step for new venture creations (Thaler and Sunstein, 2008; Ramoglou et al., 2016). The findings of study proved that major reason behind selection of career choices is many but specifically human psychology like, inner qualities, personality traits, selfconfidence, creativity, innovativeness plays central role (McStay, 2008). Become an entrepreneur is purely economic decision of an individual. The influence of social cognition, contextual easiness, psychological and behavioral approaches are strongly associated with development of entrepreneurial intentions (McMullen and Shepherd, 2006; Gurol and Atsan, 2006; Dej, 2007; Samydevan et al., 2015). In this way, what are the major affecting factors for initial phase of new venture creation. Many previous researchers argued in the favor of human psychology. They believe that cognitive psychology like, selfconfidence, innovativeness, propensity to taking risk, need for achievement, ambiguity and locus of control are major affecting factor (Koh, 1996; Gurol & Astan, 2006; Dinis et al., 2013; Sharahiley., 2020). Whereas, some studies provide strong evidences in the favor of behavioral theories. Theory of planned behavior (TPB) presented by Ajzen (1991) is proved to be strong indicator for perform any particular behavior. Three major elements are mentioned in the theory. 1) Attitude to behavior 2) Perceived control behavior and 3) subjective norms (Ajzen, 1975; Gibb and Ritchie, 1982; Kirkley, 2016). "Entrepreneurial behavior is generally and commonly defined as the discovery, evaluation, and exploitation of entrepreneurial opportunities" (Bird, 1988 pp- 13). Planned behavior is primary initiate to build or create any new firm. Such type of behaviors creates strong intentions to perform certain behavior (Krueger et al., 2000; Shook et al., 2003).

On the other hand, contextual support like, educational support and structural support are directly associated with entrepreneurial activities. The policies of government are also impacts on development of entrepreneurial intentions (Karimi, et al., 2012; Kothar, 2013; Sánchez and Sánchez, 2014; Touzani et al, 2015). The rules regulations, business policies, taxation system, political stability foreign policy, peace and ease of doing business are also strong factors for entrepreneurship progress. The support of governmental institutions is strongly and positively connected with choice of career selection. The majority of under developing countries and middle-income countries are facing high level of institutional inefficiency. Universities are unable to produce highly effective entrepreneurs (Co, 2004; North; 2005). The policies of new firms, loans, taxation system, micro finance, security are big challenges to start any new venture creations (Fitzroy et al., 2012; David, 2013). All mentioned problems are discouraging entrepreneurial activities. Young generation and university students have low intentions towards entrepreneurship (Bruce & Mohsin, 2006; Hansson, 2012; Amoros et al., 2014). According to prior studies lot of factors are working together to perform any certain behavior like, behavioral, contextual, structural, psychological, social, cultural, political and environmental (Fitzroy et al., 2012; David, 2013). It is very clear that intentions are initial phase for start-up of any new venture. Prior studies proved that intentions are key factor of entrepreneurial process. Study developed a multidimensional model of entrepreneurial intentions.

## Model and hypothesis

A multidimensional model is developed after review of prior literature. The aimed to investigate defined conceptualized model on the bases of hypothetical relations. Mentioned model are based on three different approaches. Multidimensional model of current study contains on behavioral, psychological and contextual approaches. The dependent variable of study is entrepreneurial intentions. And the independent variables of defined models are categorized in three different approaches. The mentioned approaches are: behavioral, psychological and contextual. Firstly, behavioral approach has three sub factors namely: attitude towards behavior, subjective norms and perceived behavioral control. Secondly, psychological approach has three sub factors namely: propensity to take risk, innovativeness and locus of control. Thirdly contextual approach has two sub factors namely: educational support and structural support. All approaches have eight independent variables (IV) and one dependent variable (DV). On the bases of tentative assumptions following conceptual model and hypotheses were framed.



## **Hypotheses**

H1: There is a positive relationship between perceived behavioral control and entrepreneurial intentions.

H2: There is a positive relationship between personal attitude and entrepreneurial intentions.
H3: There is a positive relationship between subjective norms and entrepreneurial intentions.
H4: There is a positive relationship between innovativeness and entrepreneurial intentions.
H5: There is a positive relationship between locus of control and entrepreneurial intentions.
H6: There is a positive relationship between propensity to risk and entrepreneurial intentions.
H7: There is a positive relationship between educational support and entrepreneurial intentions.
H8: There is a positive relationship between structural support and entrepreneurial intentions.

# **Research methodology**

This study is based on conceptual model developed by the researchers. The hypothetical model of study contains on dependent and independent variables. The relations of hypotheses are directly associated with defined variables. Therefore, study employed quantitative technique. Five-point likert scale questionnaire adapted after piloting of the study. Deductive approach and positivist approach were used. The previous researchers like, (Sunadras 2009; Bryman & Bell, 2015) also employed same methodology

in domain. Random sampling technique was used for data collection.

## **Research instrument**

Research instrument of study was adapted from previous studies in domain of entrepreneurial intentions. For knowing the association among defined variables quantitative type of investigation was used. Therefore, five-point likert scale research instrument was adapted after piloting of study. Likert scale ranges from 1 strongly agree to 5 strongly disagree. Total eight independent one dependant variable were framed. First seven items from section (A) were associated with control variable, like, gender, age, marital status, education, number of dependants, experience and subject. Part (B) of research instrument related with main factors of study like, entrepreneurial intentions (DV) 6 items (Linan and Chen 2007, Paco et al., 2013). And the eight independent variables (IV) perceived behavioural control, six items, attitude towards behavior five items, subjective norms six items, locus of control seven items, propensity to take risk six items, innovativeness five items, educational support five items structural support seven items (Kooh 1996: Kennedy 2003: Turker & Selcuk, 2009 & Gelard, & Saleh, 2011).

# **Piloting of the study**

It is very important step to test reliability of adapted research instrument. There are two major reasons for checking of reliability. 1) Cultural context. 2) Difference of time. In this context, study tested Cronbach alpha coefficient reliability test. It shows the internal consistency among items (Sakran 2003; Hair, 2006). Cronbach alpha coefficient reliability test is generally checking the psychometrics properties of research instrument. Initially n= 85 questionnaires were sent for interview from under graduate students to conduct piloting of research instrument. Total 55 questionnaires were returned with response rate (64%). Suggested values more than .60 is accepted, .70 good and above .80 excellent (Haire et al. 2006; Tabanich 2009). The result of Cronbach alpha coefficient test shows that research instrument is highly reliable. The ranges of values were highly consistent. Table 1 shows the result of piloting study.

| Table 1. Cronbach alpha |      |
|-------------------------|------|
| 1. EI                   | .727 |
| <b>2. PBC</b>           | .602 |
| 3. ATB                  | .721 |
| 4. SN                   | .740 |
| 5. IN                   | .667 |
| 6. LC                   | .788 |
| 7. PR                   | .596 |
| 8. ES                   | .686 |
| 9. SS                   | .791 |
|                         |      |

Table (1) and (2). shows the values of each variable.

| Total N | Total itama | Cronbooh's |
|---------|-------------|------------|
| TOTALIN | Total nems  | CIOIDACIIS |
|         |             | -11        |
|         |             | aipna      |
|         |             |            |

| 55 | 53 | .906 |  |
|----|----|------|--|
|    |    |      |  |

## **Population and Sample Size**

The unit of analysis of study was under graduate and master students of public sector universities of Pakistan. Five public sector universities were chosen for data collection. Karachi University, Punjab University, Baluchistan University, Peshawar University and Quaid-Aizam University Islamabad were chosen. As per size of population Krejuice and Morgan (1978) formulae were used. According to number of population size, required sample size was 384.

| Table 3. Population size          |                                                |  |  |
|-----------------------------------|------------------------------------------------|--|--|
| Name of university                | Number of enrolled students                    |  |  |
| Karachi university                | 41,000                                         |  |  |
| Punjab university                 | 33,258                                         |  |  |
| Peshawar university               | 14,060                                         |  |  |
| Baluchistan university            | 9689                                           |  |  |
| Quaid -Aizam university Islamabad | 13000                                          |  |  |
| Total                             | 111007                                         |  |  |
| Source- Wikipedia Note-           | Mentioned numbers are estimated not confirmed. |  |  |

For determination of sample size Krejuice and Morgan (1978) sampling formula were employed. According to sample size formula total n = 418 sample were collected from mentioned participants. The respondents of study were under graduate and master students in different public sector universities of Pakistan. Below given table 4 were used for determination of sample size. **Table 4. Sample Size** 

| Ν  | Ν  | Ν   | n   | Ν   | n   | Ν    | n   | Ν       | n   |
|----|----|-----|-----|-----|-----|------|-----|---------|-----|
| 10 | 10 | 100 | 80  | 280 | 162 | 800  | 260 | 2800    | 338 |
| 15 | 14 | 110 | 86  | 290 | 165 | 850  | 265 | 3000    | 341 |
| 20 | 19 | 120 | 92  | 300 | 169 | 900  | 269 | 3500    | 346 |
| 25 | 24 | 130 | 97  | 320 | 175 | 950  | 274 | 4000    | 351 |
| 30 | 28 | 140 | 103 | 340 | 181 | 1000 | 278 | 4500    | 354 |
| 35 | 32 | 150 | 108 | 360 | 186 | 1100 | 285 | 5000    | 357 |
| 40 | 36 | 160 | 113 | 380 | 191 | 1200 | 291 | 6000    | 361 |
| 45 | 40 | 170 | 118 | 400 | 196 | 1300 | 297 | 7000    | 364 |
| 50 | 44 | 180 | 123 | 420 | 201 | 1400 | 302 | 8000    | 367 |
| 55 | 48 | 190 | 127 | 440 | 205 | 1500 | 306 | 9000    | 368 |
| 60 | 52 | 200 | 132 | 460 | 210 | 1600 | 310 | 10000   | 370 |
| 65 | 56 | 210 | 136 | 480 | 214 | 1700 | 313 | 15000   | 375 |
| 70 | 59 | 220 | 140 | 500 | 217 | 1800 | 317 | 20000   | 377 |
| 75 | 63 | 230 | 144 | 550 | 226 | 1900 | 320 | 30000   | 379 |
| 80 | 66 | 240 | 148 | 600 | 234 | 2000 | 322 | 40000   | 380 |
| 85 | 70 | 250 | 152 | 650 | 242 | 2200 | 327 | 50000   | 381 |
| 90 | 73 | 260 | 155 | 700 | 248 | 2400 | 331 | 75000   | 382 |
| 95 | 76 | 270 | 159 | 750 | 254 | 2600 | 335 | 1000000 | 384 |

# Results

Collected data was analysed through two widely used software's namely, statistical packages for social science SPSS software 21.0 version for windows and smart partial least square PLS version 2. All required steps were taken for accuracy of analysis. Therefore, three main steps were employed for data analysis. 1) Screening of data. 2) Normality and linearity of data. 3) Relationship identification. The research instrument of study consists of two part 1) control variable or demographic information of participants 2) main part of study.

# **Response rate**

According to Pearce and Zahara, (1991) and Anderson et al., (2000) 50% is highly effective response rate for social survey. Below given table (5) are showing response rate of current study.

| Table 5. Response rate |          |        |  |
|------------------------|----------|--------|--|
| Sent                   | Received | % Rate |  |
| 826                    | 431      | 57.38% |  |

Total 13 cases were removed from main analysis due to un willingness, missing issues and outliers' detections.

# Demographic detail

Study used six control variables for knowing the demographic detail of participants. Below given table

(6) are showing demographic statistic of participants.

| Table 6. Demographic detail |           |         |  |  |
|-----------------------------|-----------|---------|--|--|
| 1. GENDER                   | Frequency | Percent |  |  |
| Male                        | 283       | 67.7    |  |  |
| Female                      | 135       | 32.3    |  |  |
| Total                       | 418       | 100.0   |  |  |
| <b>2. AGE</b>               |           |         |  |  |
| 20-29                       | 381       | 91.2    |  |  |
| 30-39                       | 37        | 8.9     |  |  |
| 40-49                       |           |         |  |  |
| 50 above                    | 0         | 0       |  |  |
| Total                       | 418       | 100.0   |  |  |
| 3. MARITAL STATUS           |           |         |  |  |
| Single                      | 370       | 88.6    |  |  |
| Married                     | 42        | 10.0    |  |  |
| Widow/ Divorced             | 6         | 1.4     |  |  |
| Total                       | 418       | 100.0   |  |  |
| 4. EDUCATION LEVEL          |           |         |  |  |
| Bachelor                    | 312       | 74.4    |  |  |
| Master                      | 106       | 25.6    |  |  |
| Total                       | 418       | 100.0   |  |  |
|                             |           |         |  |  |
| 5. PREVIOUS EXPERIENCE      |           |         |  |  |
| None                        | 370       | 88.5    |  |  |
| 1-5 years                   | 48        | 11.5    |  |  |
| 6-10 years                  | 0         | 0       |  |  |
| 11-15 years                 | 0         | 0       |  |  |
| Total                       | 418       | 100.0   |  |  |
| 6. NO OF DEPENDENTS         |           |         |  |  |
| None                        | 334       | 79.9    |  |  |

| 1-3        | 51  | 12.2  |
|------------|-----|-------|
| 3-6        | 29  | 6.9   |
| 7 or above | 4   | 1.0   |
| Total      | 418 | 100.0 |

### 1) Screening of data

Data cleaning is a preliminary step of primary data (Qassim, 2001). All collected data were properly checked and cleaned by employing two methods 1) Missing analysis. 2) Outlier's detection. At initial stage all variables were coded properly. Mentioned variables were coded with English alphabet. Below given table (7) are showing codes of defined variables.

|    | Table 7. Codi                | ng  |
|----|------------------------------|-----|
| 1. | Entrepreneurial Intention    | EI  |
| 2. | Perceived Behavioral Control | PBC |
| 3. | Attitude Towards Behavior    | ATB |
| 4. | Subjective Norm              | SN  |
| 5. | Innovativeness               | IN  |
| 6. | Locus of Control             | LC  |
| 7. | Propensity to take Risk      | PR  |
| 8. | Educational Support          | ES  |
| 9. | Structural Support           | SS  |

#### Missing data

Missing data is a serious statistical problem (Graham, 2009; Hair *et al.*, 2010). The reason of missing value is unwillingness of participants to give answer about particular question. Below given are detailed table (8) of missing cases.

| Missing pattern (case with missing values) |         |           |           |  |
|--------------------------------------------|---------|-----------|-----------|--|
| Count                                      | Case ID | # Missing | % Missing |  |
| 1                                          | 6       | 2         | 3.8       |  |
| 2                                          | 44      | 1         | 1.9       |  |
| 3                                          | 42      | 1         | 1.9       |  |
| 4                                          | 130     | 1         | 1.9       |  |
| 5                                          | 160     | 2         | 3.8       |  |
| 6                                          | 189     | 1         | 1.9       |  |
| 7                                          | 317     | 1         | 1.9       |  |
| 8                                          | 331     | 3         | 4.2       |  |
| 9                                          | 228     | 1         | 1.9       |  |
| 10                                         | 227     | 1         | 1.9       |  |
| 11                                         | 211     | 1         | 1.9       |  |
| 12                                         | 306     | 1         | 1.9       |  |
| 13                                         | 68      | 1         | 1.9       |  |
| 14                                         | 278     | 1         | 1.9       |  |
| 15                                         | 416     | 1         | 1.9       |  |
| 16                                         | 392     | 3         | 4.2       |  |

| Table 8. | Missing | cases |
|----------|---------|-------|
|----------|---------|-------|

According to suggested values of Cohen & Cohen (2013) less than 5% missing cases are not any serious problem. Results of missing analysis shows that there is no any case have above 5% missing.

#### 2) Outliers' detection

According to (Hawkins, 1980), an outlier is an observation that diverges from an overall pattern on a sample. Outliers are unique values from rest of data. Below given graph (1) are showing missing cases of data. Generally, two methods are employing for outliers' detections 1) Univariate 2) Bivariate (Tabachnick, 2010). This study used both methods for screening of data. Below given box plot graph shows the detected outliers cases.



Results of box plot did not find any serious problem in outliers' detections. Therefore, all cases were retained for further analysis.

## Linearity of data

Linearity of data refers the degree of relationship among defined variables. The linearity can be tested through scatter plot and Pearson correlation (Field 2009). Current study used Pearson correlation test scatter plot for knowing linear relationship of data. Below given table (9) are showing Pearson correlation test results.

| Table 9. Pearson Correlation (Pakistan) |        |        |        |        |    |    |    |    |    |
|-----------------------------------------|--------|--------|--------|--------|----|----|----|----|----|
|                                         | EI     | PBC    | ATB    | SN     | IN | LC | PR | ES | SS |
| EI                                      | 1      |        |        |        |    |    |    |    |    |
| PBC                                     | .574** | 1      |        |        |    |    |    |    |    |
| ATB                                     | .692** | .584** | 1      |        |    |    |    |    |    |
| SN                                      | .586** | .613** | .583** | 1      |    |    |    |    |    |
| IN                                      | .283** | .307** | .335** | .449** | 1  |    |    |    |    |

| LC                                                           | .373** | .403** | .369**     | .491** | .462** | 1      |        |        |   |
|--------------------------------------------------------------|--------|--------|------------|--------|--------|--------|--------|--------|---|
| PR                                                           | .572** | .394** | .533**     | .499** | .426** | .507** | 1      |        |   |
| ES                                                           | .272** | .279** | .308**     | .333** | .163** | .204** | .332** | 1      |   |
| SS                                                           | 067    | 104*   | $.107^{*}$ | 055    | .081   | 088    | .072   | .355** | 1 |
|                                                              |        |        |            |        |        |        |        |        |   |
| **. Correlation is significant at the 0.01 level (2-tailed). |        |        |            |        |        |        |        |        |   |
| *. Correlation is significant at the 0.05 level (2-tailed).  |        |        |            |        |        |        |        |        |   |

The findings of Pearson correlation shows that all variables are connected with each other. All values are within suggested ranges (Hair *et al.* (2010).

#### Normality of data

The central purpose of normality assumption is linear distribution of items. According to Tabachnick and Fidell, (2007) Hair *et al.*, (2010) normality is very important and fundamental assumption concept regarding multivariate investigation. There are some well-known methods are using researchers for knowing the linearity of data. 1) Kolmogorov-Smirnov and Shapiro-Wilk (K-S). 2) P plot graphical test 3) skewnesses and kurtosis and Homoscedasticity. All mentioned tests were employed and find values within suggested ranges.

#### **Factor analysis**

Hair *et al.* (2010 p 46) "states that factor analysis is a platform to analyse behavior and correlations that exist between huge sets of variables and it can also be used to identify interrelated variables that are named as factors". Current study employed exploratory factor analysis (EFA) for variability of research instrument due to large number of variables. This study used communality, eigen values, scree plot and factor analysis. Below given table shows the factor analysis values (Field, 2009). Below given graph scree plot extraction factors are confirmed.



#### **Factor analysis**

Table 10. Component 2 Variable 1 3 7 8 9 4 6 5 .941 LC40 LC38 .939 LC37 .934 LC41 .927 LC42 .924 LC39 .871 EI12 .906 EI10 .904 EI8 .902 EI13 .774 EI11 .764 EI9 .620 PBC14 .843 PBC17 .783 PBC16 .773 PBC18 .760 PBC19 .719 PBC15 .656 .952 IN35 IN34 .952 .951 IN31 .934 IN32 IN33 .603 .956 **PR43 PR44** .955 **PR47** .952 **PR48** .949 SN29 .833 .829 SN26 SN27 .649 **SN30** .642 **SN28** .545 **SN25** .524 SS57 .919 .919 SS60 SS56 .781 SS58 .740 SS54 .675 ES51 .824 **ES50** .794 **ES52** .769 **ES49** .722 **ES53** .669 ATB23 .789 ATB22 .786 ATB20 .645

According to Field, (2009) there are two well-known techniques of rotation method such that first orthogonal and second oblique rotation. As per suggested values eight items were removed, which have correlation less than 0.5 (Gefen *et al.* 2000).

For testing of the distribution of multivariate normality KMO and Bartlett's test was used (Hinton *et al.* 2004). Results of both tests were ranges within suggested values. Below given table shows results of KMO and Bartlett's test.

| Table 11. KMO and Bartlett's Test (Pakistan) |                    |           |  |  |  |  |
|----------------------------------------------|--------------------|-----------|--|--|--|--|
| Kaiser-Meyer-Olkin Measure of San            | .903               |           |  |  |  |  |
| Bartlett's Test of Sphericity                | Approx. Chi-Square | 26105.416 |  |  |  |  |
|                                              | Df                 | 1378      |  |  |  |  |
|                                              | Sig.               | .000      |  |  |  |  |

## **Relationship identification**

Structure equation modelling (SEM) technique were used for knowing psychometric properties of research instrument and hypotheses testing (Tabachnick & Fidell, 2006). Due to outstanding qualities of SEM in management sciences, social sciences widely accepted for multiple modeling. There are some well-known SEM approaches are mentioned in literature like, Covariance-based structure equation modeling (CB-SEM), Partial Least Squares (PLS) and Generalized Structured Component Analysis (GSCA) (Bass *et al.*, 2003; Hwang *et al.*, 2010; Vinzi *et al.*, 2010). This study used Partial Least Squares (PLS) approach for identification of hypothetical relations among model. There are two types of models are tested 1) measurement model). 2 Structural model. It also called inner measurement and outer measurement model

#### 1) Measurement model

The main purpose of measurement model is to know the psychometric properties of research instrument through confirmatory factor analysis (CFA) (Gefen *et al.*, 2000). The validities of research instrument were tested. All values are within suggested ranges No any value of the interconstruct correlation is above the square-root of the AVE. Below given graph shows the values of measurement model.



#### 2) Structural model

Current study employed structural model for assessing hypothetical relation of constructs (Gefen *et al.*, 2000). For hypotheses testing basic criterions of Hair *et al.* (2006) Keil *et al.* (2000, p.312) were employed. The suggested values are t=2.58 p<0.01, t=1.96 p<0.05, and t=1.64 p<0.10. Table 12. Structural Relations and Path Significance of Basic Model (Pakistan)

| Table 12. Structural relations and 1 ath Significance of Dasic Model (1 aristan) |                |                  |                   |        |        |                         |  |  |
|----------------------------------------------------------------------------------|----------------|------------------|-------------------|--------|--------|-------------------------|--|--|
| H.NO                                                                             | Path Relations | Path, t-value    | Standard<br>Error | $f^2$  | $q^2$  | Supported/<br>Supported |  |  |
| H1                                                                               | PBC -> EI      | 0.2112 (3.0329)  | 0.0696            | 0.0522 | 0.0334 | Yes                     |  |  |
| H2                                                                               | ATB -> EI      | 0.3512 (5.9401)  | 0.0591            | 0.1521 | 0.1062 | Yes                     |  |  |
| H3                                                                               | SN -> EI       | 0.2159 (3.2443)  | 0.0665            | 0.0506 | 0.0341 | Yes                     |  |  |
| H4                                                                               | IN -> EI       | -0.0948 (2.1978) | 0.0431            | 0.0137 | 0.0113 | Yes                     |  |  |
| Н5                                                                               | LC -> EI       | 0.0462 (1.0136)  | 0.0456            | 0.0029 | 0.0027 | No                      |  |  |
| H6                                                                               | PR -> EI       | 0.1269 (3.1143)  | 0.0407            | 0.0279 | 0.0200 | Yes                     |  |  |
| H7                                                                               | ES -> EI       | 0.0606 (1.2926)  | 0.0469            | 0.0055 | 0.0047 | No                      |  |  |
| H8                                                                               | SS -> EI       | -0.0874 (1.5112) | 0.0579            | 0.0137 | 0.0100 | No                      |  |  |



#### Discussions

Key findings of study shows that multidimensional model is fitted model for new venture creation. The results of study also support the previous research in domain of entrepreneurial intentions. The results of study revealed that first three hypotheses accepted at significance level. First hypothesis was: There is a positive relationship between perceived behavioral control and entrepreneurial intentions of *Pakistan university students*. The values shows that PBC -> EI ( $\beta$ = 0.2112 t= 3.0329) statement accepted. It is proved that the person who has strong skills, experiences, administrative capability have more chances to be an entrepreneur. The result also supports previous studies argument (Fayolle et al., 2006; Souitaris et al., 2007, Shah & Shah, 2017). Second hypothesis was: there is a positive relationship between personal attitude and entrepreneurial intentions Pakistan university students. The values shows that ATB -> EI ( $\beta$ = 0.3512 t= 5.9401) statement accepted. The persons who have more attitudes to behavior have more chance to be self-employed. The result also supports previous studies argument (Peterman & Kennedy, 2003; Fayolle et al., 2006). Third hypothesis was: there is a positive relationship between subjective norms and entrepreneurial intentions Pakistan university students. The values shows that SN -> EI ( $\beta$ = 0.2159 t= 3.2443) statement accepted. It is proved that social pressure from family, friend, peer groups and other members of society impacts on students' entrepreneurial intentions. The result also supports previous studies argument (Fayolle et al., 2006; Peng, & Kang, 2010). In this way, second approach of model was psychological approach and entrepreneurial intentions. Three statements were hypothesized from psychological approach. The results of study revealed that two hypothesis innovativeness and propensity to take risk accepted and one locus of control rejected. Fourth hypothesis was: there is a positive relationship between innovativeness and entrepreneurial intentions of Pakistan *university students.* The values show that, IN -> EI ( $\beta$ =0.0948 t=2.1978) statement accepted. It is proved that innovativeness is basic determinant for to be an entrepreneur. Those persons who have more innovative ideas or creative thinking more inclined towards new venture creations. Results also support previous studies argument (Gurol and Atsan, 2006; Gurel et al., 2010). Fifth hypothesis was: there is a

positive relationship between locus of control and entrepreneurial intentions of Pakistan university students. The values show that, LC -> EI ( $\beta$ = 0.0462 t=1.0136) not supported. It is proved that those persons who are more believe on luck, fate chance and low locus of control have less chance of to be an entrepreneur. It is also support argument of previous studies (Kobulnicky & Moss 2004; Hui et al., 2008). Sixth hypothesis was: there is a positive relationship between propensity to risk and entrepreneurial intentions of Pakistan university students. The values show that PR -> EI ( $\beta$ = 0.1269 t= 3.1143) supported. It is proved that taking risk is basic element for startup new venture. Those students who have risk taking characteristics are more inclined towards entrepreneurial activities. Results also support argument of previous studies (Taramisi Sama-Ae, 2009; Dohse & Walter, 2010). Third approach was contextual approach and entrepreneurial intentions. Two statements were hypothesized from contextual approach educational support and structural support. Results revealed that both statements were rejected. Seventh hypothesis was: there is a positive relationship between educational support and entrepreneurial intentions of Pakistan university students. The values shows that EI ( $\beta=0.0606$ t=1.2926) not supported. It is showing that that university of Pakistan don't have such type of environment which can develop entrepreneurial intentions among students. The universities are failed to provide such type of courses, curriculum and overall image for intentions development. The findings of study also support previous studies argument (Walter et al., 2011; Kaijun, & Sholiha 2015). Eighth's hypothesis was: there is a positive relationship between structural support and entrepreneurial intentions of Pakistan university students. The values shows that EI ( $\beta$ = -0.0874 t=1.5112) not supported. The result shows that government rules regulation, policies, laws, taxation system discourage students to be an entrepreneur. The policies of government regarding new venture creation are unclear. Therefore, students are not ready to involve in entrepreneurial activities. The result of study also supports previous studies argument (Liñán et al., 2013; Malebana, 2015).

#### **Significance and Implication**

The central theme of study was to know how to be an entrepreneur. Under developing countries have very low level of entrepreneurial activities among young generation. Current study provides a policy direction to under developing countries for increase more entrepreneurs in economy. Study discussed major influencing factors of entrepreneurship intentions development among young generation. Governments, non-governmental organizations (NGOs), academia's, parents, students, and other stakeholder of economy can get right direction by using multidimensional model of new venture creation. By applying the model of study universities can revise their curriculum, course design and marketing policies. In addition, all stakeholders of economies can improve rules regulation and policies about ease of doing business. Ease of doing business is way forward for economic prosperity. **Contribution** 

# Current study contributes in the domain of entrepreneurship literature. Study provides theoretical and practical side about development of entrepreneurial intentions among young generation. The results of study confirm that theory of planned behaviour plays important role to perform certain behaviour. Personal psychological characteristics are main determinants for involvement of entrepreneurial activities. Contextual support like rules and regulation of government and educational support from universities are strengthening students' intentions to be an entrepreneur.

#### Conclusion

The findings of study revealed that behavioral approach (perceived behavioral control, attitude to behavior and subjective norms) positively related with student's intention to become an entrepreneur. Secondly, psychological approach was hypothesized and found innovativeness and risk taking positively whereas, locus of control negatively. Thirdly, contextual approach found education support and structural support insignificant with entrepreneurial intentions of students. Strong inclination of students towards new venture creation is preliminary step for to be an entrepreneur.

of study suggest that entrepreneurship intentions are initial phase for new venture creation. Behavioral approach is associated with intentions development (Ajzen, 1991). The theory of planned behavior (TPB) suggests that to perform certain behavior directly connected with perceived behavioral control, attitude towards behavior and subjective norms. As discussed, entrepreneurship is a multidimensional approach. There are lot of factors involved in decisions making process. The findings of study revealed that psychological approach are major affecting factors. Include factors are: innovativeness, locus of control and propensity to take risk. According to Schumpeter (1934) innovation and risk-taking propensity are basic elements for start-up of any new firm. Whereas, locus of control refers how a person can control the outer events. The concept given by Julian B. Rotter in (1954) that the events are results of fate, luck and chances. In this way, contextual approach or exterior factor is also impacts on students' intentions development. Support of educational institutions, support of institutional legislations, different learning context, rules regulations, policies, laws, taxation systems, political stability, and international scenarios. Majority of young generations are studying in universities. The impact and image of role models and to build any mind set is primary responsibility of their respective institutions. On the other hand, the policies of government or structural support are directly associated with entrepreneurial mid set. This study has some limitation. Firstly, study taken university students only as a participant. Secondly, only behavioural, psychological and contextual approaches were tested. Thirdly, study chosen sample from selected universities of Pakistan. Fourthly, study used only quantitative method through close ended questionnaire. Fifthly, only cross-sectional method used. This study has some future directions. Firstly, study can extend on other sectors like, health, agriculture and general public. Secondly, only behavioural, psychological and contextual approaches were tested. Model of study can extend to add financial, international and political approaches. Thirdly, other sample can investigate like, engineering students and medical student. Fourthly, qualitative or mixed method can use through interview, focal group discussion and in-depth interviews. Fifthly, longitudinal method can employ.

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