

# Assessing Entrepreneurial Intentions of University Students: A Comparative Study of Two Different Cultures: Turkey and Pakistani

Merve Koçoğlu<sup>1</sup>, Masood Ul Hassan<sup>2</sup>

<sup>1</sup>Department of Business Administration, Yeditepe University, 34755, İstanbul, Turkey

<sup>2</sup>Department of Commerce, Bahauddin Zakariya University, 60800, Multan, Pakistan

Corresponding Author e-mail: [merve.kocoglu@yeditepe.edu.tr](mailto:merve.kocoglu@yeditepe.edu.tr)

## Abstract

Researchers have been considered about why people prefer to become entrepreneurs. The major aim of this study is to test the cross-cultural generalizability of how well Theory of Planned Behavior (TPB) would predict entrepreneurial intention (EI) amongst Turkish and Pakistani University students. The results demonstrated that the relationships among the TPB components are equally intense and comparable across Pakistani and Turkish cultures – the only exception being the relation of social norms with intentions. However, SN would prove its impact on EI through both PA and PBC, but not directly on intention.

**Keywords:** Entrepreneurial Intention, Theory of Planned Behavior, Pakistan, Turkey

## 1. Introduction

Recently, changes in the world's economies create numerous problems. Self-employment or entrepreneurship is one of the best solutions to solve those problems especially unemployment. Both Turkey and Pakistan come upon this issue. (Mboko, College, 2011). Self-employment offers many setbacks to both the individual and the economy as a whole, but it boosts small businesses which causes them to flourish in a market's economy because small businesses are suppliers of labor demands (Pejvak et al., 2011). Even though there are some drawbacks about entrepreneurship, people still prefer to become an entrepreneur. Intention plays a significant role in that decision. The purpose of this study is to test and point out the factors that affect people's entrepreneurial intentions and also to investigate whether there is a difference in the entrepreneurial intentions of different cultures or not. Ajzen's TPB model is considered with this study. The figures are gathered from two different countries' (Turkey and Pakistan) University Students. A structural equation technique is used to experiment the entrepreneurial intentions' of the students. As a consequence, entrepreneurial intention antecedents' of those who are of two different cultures are also clarified with this research.

## 2. Theory and Hypotheses Development

### 2.1. Entrepreneurial Intention

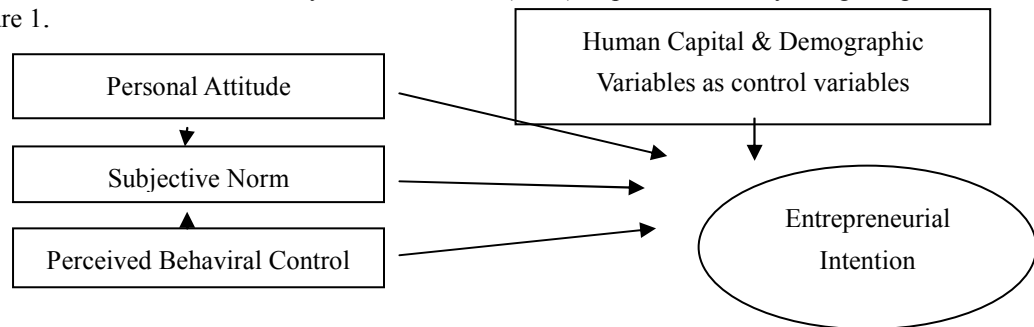
Entrepreneurial intentions are the first step in an intensive process of venture creation which are the necessary precursor to entrepreneurial behaviors (McLaughlin 2009). Individuals who are perceived to have a lack of knowledge finance are less probably to have entrepreneurial intention (Shinnar, Giacomini and Janssen, 2012). An entrepreneur is a person who starts a business and has great imagination, flexibility, creativeness for business. (Butler, Doktor and Lins, 2010; Krueger, 1993; Peterson, and Meckler 2001). Individuals can intend to become an entrepreneur when the expectation of the entrepreneurship is pleasurable, gaining freedom, risky, the work is hard and the income is high. (Venesaar, Kolbre and Piliste, 2006).

In order to analyze the entrepreneurial intentions, TPB has to be considered (Karhunen and Ledyeva; Zanger, Hodicová and Gaus, 2008). TPB posits that intention is both an antecedent to behavior and primary motivation to certain behaviors (Venesaar, Kolbre and Piliste, 2006). "Consistent with TPB maintains that there are three predictors of intention which are attitude towards the behavior (PA), subjective norms (SN) and the degree of perceived behavior control (PBC)" (Byabashaija and Katono, 2011).

The first one is attitude (or personal attitude) which indicates to the degree to which an individual has a positive or negative personal concerning the intended behavior. It refers to "the attractiveness of the proposed behavior in a positive or negative degree of a personal valuation to become an entrepreneur" (Pejvak et al., 2011). The second is subjective norms which measures the perceived social support of performing (or not performing) the intended behavior. Influential people (parents, friends, etc.), or referents, serve as reference guides to behavior and influence the beliefs of subjective norms (Gird and Bagraim, 2008). The final one is perceived behavioral control known as self-efficacy which associates an individual's perception of the ease or severity of the intended behavior

(Gaddam, 2008). It refers to an individual's feelings about the capability of performing the behavior or not. (Byabashaija and Katono, 2011).

The entrepreneurial intention model created by Liñán and Chen (2009) inspired us to study using this pattern. As it is shown in figure 1.



**Figure 1: Entrepreneurial Intention Model**

However, various researchers have pointed out that economic, social, psychological, and environmental factors had an effect to choose to become an entrepreneur (Gaddam, 2008). Furthermore, personality could be an issue that effects the entrepreneurial career intentions the most. Out of several personality traits, self-efficacy is one of the significant traits (Ahmed, Aamir and Ijaz, 2011).

Along with those factors previously stated, demographic factors, age, education, and gender will all have a major impact on the entrepreneurs' intentions. (Ahmed et al. 2010; Prodan and Drnovsek, 2010). Moreover, norms and cultural factors also affect an individual's career choice to be an entrepreneur (Pejvak et al., 2011). Several entrepreneurship researchers have claimed that the role of cultural variations in explaining different entrepreneurial behaviors across countries and cultures may vary widely within different groups of people (Liñán, Urbanob and Guerrerob, 2011).

## 2.2. Cultural considerations

The phenomenon of entrepreneurship is extremely a complex The positive or negative perceptions that society has about entrepreneurship can strongly influence the motivations of people to become entrepreneur (Xavier et al., 2012). Although, numerous studies have clarify the phenomena of new venture creation, however, cross cultural applications to measure entrepreneurial intentions have been limited (Autio et al. 2001; Liñán and Chen, 2009; Gassea and Tremblayb, 2011). Two questions specifically require further investigation: why do particular cultures produce individuals who are more motivated to be entrepreneurs than others and how individual do and cultural values affect new venture creation (Gasse and Tremblayb, 2011).

In this study, Turkish and Pakistani cultures are noted. Notwithstanding, Hofstede's cultural dimensions are similar in both countries. Thus, power-distance (55 for Pakistan and 66 for Turkey) and masculinity (50 and 45, respectively) scores are almost equal. On the other hand, Turkey scores higher in individualism (37 vs. 14 for Pakistan), which indicates Turkish culture more promoter for entrepreneurship. At the same time, Turkish scores higher on uncertainty avoidance (85 vs. 70). It shows that Turkish culture is more contrary to entrepreneurship than Pakistani (Hofstede, 2003).

There is not any particular research which contrast differences on entrepreneurial intentions for two different cultures. However, Eroğlu and Piçak (2011) using Hofstede's dimensions compared cultural values of Turkish entrepreneurs with that of United States. Their study concluded that Turkish culture, which has been described as being high on collectivism, high on uncertainty avoidance and high on power distance, found to be negatively associated with entrepreneurship. Moreover, in examining how culture influences entrepreneurship, the findings showed countries with high individualism, low power distance and low uncertainty avoidance as United States have more entrepreneurs than other countries.

Global Entrepreneurship Monitor (GEM) report 2012, measures individual perceptions (198000 adults aged 18–64 years in 69 economies) about opportunities, capabilities, fear of failure, and intent to start a business. GEM report 2012 showed that except scores on perceived opportunities (Turkey 40 vs. Pakistan 46), Perceived capabilities (49 vs. 49), Fear of Failure (30 vs. 31), entrepreneurial intentions scores on (15 vs. 25), Entrepreneurship as a good career choice (67 vs. 66), High status to successful entrepreneurs (76 vs. 68) and Media attention for entrepreneurship (57 vs. 51) are more or less are equal. This showed that more Pakistani potential entrepreneurs as compared with Turkish express the intention to launch a new business in the foreseeable future. On the other hand more Turkish potential entrepreneurs as compared with Pakistani consider entrepreneurship as a high status that receives positive media attention.

Based on the above discussion, one should expect that SN would put forth much more effect over PA, PBC, and EI in both of the countries i.e. Turkey and Pakistan (Liñán and Chen, 2009). Second, Turkish adults agreed more than their Pakistani counterparts regarding the perceptions that entrepreneurs are afforded high status and receive positive media attention. These “salient beliefs” according to Liñán and Chen, (2009) point out that, the intention precursors are different in Turkish and Pakistani culture (Ajzen, 1991; Kolvereid, 1996). In this context, entrepreneurial intention might be more associated with PA among Turkish participants. On the other hand, in Pakistan PBC could be a relatively stronger influence as High UAV score in Turkey would guide people to feel “threatened by uncertain or unknown situations”, thus, they may unwilling to launch a firm, whether they had both the technical and practical knowledge (Hofstede, 1991). Moreover, among Pakistani respondents, EI score in term of decision to become entrepreneurs is high as compared with that of Turkish as provided in GEM report, so prediction may be made that both PBC and EI would be more in Pakistan as compared with that of Turkish.

Given these points, the following hypotheses are proposed:

H1: “Personal attitude positively influence entrepreneurial intention”.

H2: “Perceived behavioral control positively influence entrepreneurial intention”.

H3: “Subjective norm positively influence entrepreneurial intention”.

H4: “Subjective norm positively influence personal attitude”.

H5: “Subjective norm positively influence perceived behavioral control”.

H6: “Subjective norm exerts a stronger effect on PA and PBC in the less individualistic country”.

H7: “The relative effect of PA and PBC on EI differs by country”.

(PA effect on EI stronger in Turkey, PBC effect stronger in Pakistan)

### **3. Data Analysis and Empirical Findings**

#### **3.1. Measures and Their Psychometric Properties**

This study has followed Entrepreneurial Intention Questionnaire (EIQ) developed and tested by Liñán and Chen (2009). This research applied the EIQ in a cross-cultural study based on a 382-University students sample from two countries Pakistani University (200 students) and Turkish University (200 students) was used. Because of a high level of missing data; hence, the remaining 382 responses were retained. Entrepreneurial intention (EI) has been measured by 7, PA with 5, SN with 3, PBC with 6 items. Finally, human capital (education, experience & entrepreneurial knowledge), and personal data information that may have an impact on entrepreneurial intentions have also been provided in EIQ.

In this study, factor analysis used to measure validity. Kaiser–Meyer–Olkin was found notably high for Pakistan, Turkey and Total sample (.885, .955 and .936) and Bartlett’s sphericity test highly significant ( $p < .001$ ). Those results proposed that data are proper for factor analysis. Four factor solutions with eigenvalues greater than 1 of EI, PBC, PA and SN with factor loading values range from .507 to .893 explained 70%, 63% and 70% of cumulative variance in Turkish, Pakistan and total sample respectively. Moreover, in Pakistani sample, two items i.e. PBC2 and SN1 and in Total Sample, one item i.e. SN1 have been removed due to low factor loadings. Thus all the items except these items loaded highly on their expected factor only.

**Table 1: Rotated Factor Matrix and Reliability Indicators**      **Table 2: Item-Construct Correlations**

Component Turkey (N=199)					Component Pakistan (N=183)					Component Turkey & Pakistan Combined (N=382)				
Label	EI	PBC	PA	SN	Label	EI	PA	PBC	SN	Label	EI	PA	PBC	SN
E14	.828				E14	.813				E14	.827			
E15	.814				E15	.782				E15	.807			
E12	.782				E16	.743				E16	.767			
E11	.776				E12	.691				E12	.732			
E16	.764				E13	.654				E11	.694			
E13	.713				E11	.637				E13	.692			
PBC4		.856			PA2		.823			PA2		.806		
PBC5		.816			PA4		.758			PA1		.758		
PBC2		.788			PA1		.754			PA3		.754		
PBC3		.786			PA3		.729			PA4		.739		
PBC1		.643			PA5		.591			PA5		.666		
PBC6		.606			PBC4		.798			PBC4		.819		
PA1			.825		PBC5		.768			PBC5		.791		
PA2			.739		PBC3		.675			PBC3		.745		
PA3			.683		PBC1		.521			PBC2		.671		
PA5			.643		PBC6		.507			PBC1		.620		
PA4			.631							PBC6		.540		
SN3				.844	SN3			.868		SN3			.893	
SN2				.814	SN2			.774		SN2			.783	
SN1				.643										
Cumulative%	25%	46%	63%	70%		21%	20%	55%	63%		23%	42%	61%	70%
Cronbach' α	.961	.889	.916	.779		.886	.858	.793	.689		.932	.891	.852	.750

	PA	SN	PBC	EI
PA1		.307**	.293**	.485**
PA2A		.322**	.372**	.543**
PA3		.424**	.428**	.611**
PA4		.453**	.472**	.636**
PA5		.373**	.467**	.650**
SN2	.500**		.307**	.438**
SN3	.311**		.239**	.276**
PBC1	.344**	.220**		.442**
PBC2	.442**	.242**		.565**
PBC3	.418**	.256**		.481**
PBC4	.286**	.191**		.420**
PBC5	.332**	.175**		.414**
PBC6	.399**	.305**		.527**
EI1	.538**	.274**	.534**	
EI2	.605**	.311**	.577**	
EI3	.702**	.422**	.566**	
EI4	.626**	.360**	.554**	
EI5	.631**	.337**	.558**	
EI6	.539**	.360**	.461**	
PA	1.000	.451**	.488**	.702**
SN	.451**	1.000	.304**	.397**
PBC	.488**	.304**	1.000	.627**
EI	.702**	.397**	.627**	1.000

Table-1-2 indicated that each item are below the average correlation showing that items are correlated with their construct. And also provided the Cronbach's alpha values to test reliability of EIQ in Pakistan, Turkish and Total sample which show the acceptable range from .690 to .961; thus showed the EIQ as a reliable measure.

### 3.2. Sample Characteristics

Several differences between different two cultures could be expected. Turkish sample involves 50.8% women compared to 32.8% of the Pakistani sample. In the same way 95.1% of the Pakistani sample having age group of 21-40 as compared to 69.8% of the Turkish sample. Moreover, proportion of respondents having self-employment experience in Turkish sample is 18.6%, whereas in Pakistani sample is 8.5%. However 65.3% of Turkish students have work-experience as compared with 40.4% of Pakistani sample. Knowing an entrepreneur is equally common in Turkish and Pakistani sample i.e. 92% and 90.2% respectively. Moreover, 100% sample of Pakistani is business, economics and commerce students as compared with 51% of Turkish sample. These dissimilarities could

influence by the variables in the model of entrepreneurial intention. Therefore, demographic variables are involved as control variables in this study.

### 3.3. Structural Analysis of Entrepreneurial Intention Model

Structural equation modeling was used to test entrepreneurial intention model's empirical validity on Pakistani, Turkish and Total Sample. The statistical analysis has been made by using LISREL 8.8. As shown in Table-3, structural model of entrepreneurial intention had degrees of freedom of 126, 154 and 141 for Pakistani, Turkish and Total sample respectively. The first step to assess a model is to look at the model fit indexes (Hoyle, 1995). Chi-square ( $\chi^2$ ) value "assesses the magnitude of discrepancy between the sample and fitted co-variances matrices" (Hu and Bentler, 1999: 2). A good model fit would provide an insignificant result at a 0.05 threshold (Barrett, 2007). However Chi-square ( $\chi^2$ ) values as provided in Table-3 (201.13, 236.25 & 329.43) are significant ( $p < .000$ ) for Pakistani, Turkish and Total sample which indicated in Table-3. Chi-square is sensitive to the sample size,  $\chi^2/df$  was used to adjust the sample size effects. The values for  $\chi^2/df$  (1.596, 1.534 & 2.336) were below the suggested cutoff value of 3.0 (Tabachnick and Fidell, 2007). Therefore, after adjusting the sample size,  $\chi^2/df$  specified that the model had a well fit for Pakistani, Turkish and Total Sample.

Most of the model incremental fit indices (NFI, NNFI, CFI and GFI) that do not use the chi-square in its raw form but compare the chi-square value to a baseline model also employed for Pakistani, Turkish and Total sample as seen from Table-3 exceeded .90 standards in the field (Medsker, Williams and Holahan, 1994). Of all these fit indices employed, the CFI statistic compares the sample covariance matrix with this null model. The CFI values (Pak .98, Turk.99 & Total.99) were higher than .95, suggesting a well model fit. Moreover, the GFI represents the variances and co-variances estimated by the model matrix. Model's GFI values (Pak.89, Turk.90 & Total.92) showed a good model fit. The NFI provides "an indication of how the target model compares with the baseline model". The model's NFI values (.95, .98 & .98) were higher than .95, suggesting a good model fit. A major drawback to NFI index is that "it is sensitive to sample size, underestimating fit for samples less than 200" (Mulaik et al, 1989; Bentler, 1990), and "it is thus not recommended to be solely relied on" (Kline, 2005). "This problem was rectified by the Non-Normed Fit Index (NNFI, also known as the Tucker-Lewis index), an index that prefers simpler models. The model's NNFI values (.97, .98 & .98) were higher than the threshold of .95 as suggested by Bentler and Hu" (1999). "In addition to those incremental model fit indices, RMSEA was also used to assess model fit. The RMSEA tells us how well the model, with unknown but optimally chosen parameter estimates would fit the population's covariance matrix" (Byrne, 1998). "A cut-off value close to .06 (Hu and Bentler, 1999) or a stringent upper limit of 0.07 (Steiger, 2007) seems to be the general consensus amongst authorities in this area". Therefore, the model's RMSEA values (.057, .050 & .053) showing a good fit. Taking the set of indexes into consideration, this study concluded that the entrepreneurial intention model for Pakistani, Turkish and Total sample had a good fit with the data.

**Table 3: Fit Indices**

	X <sup>2</sup>	df	X <sup>2</sup> /df	RMSEA	NFI	NNFI	CFI	GFI
Pak (N=183)	201.13	126	1.596	0.057	0.95	0.97	0.98	0.89
Turk(N=199)	236.25	154	1.534	0.050	0.98	0.99	0.99	0.90
Total(N=382)	329.43	141	2.336	0.058	0.98	0.98	0.99	0.92

The second procedure in assessing a hypothesized entrepreneurial model is to assess the adequacy of the parameter estimates (Hoyle, 1995) in Pakistani, Turkish and Total Sample. The most important parameters are the standardized factor loadings, which parenthesized standard error, R square and corresponding t-value. These parameters estimates for each item in the measurement model have been provided in Table-4.

**Table 4: Parameters Estimates of Entrepreneurial Intention Model-Paki, Turk & Total Sample**

Label	Turkey (N=199)				Label	Pakistan (N=183)				Label	Combined (N=382)			
	S.L.	t	S.E.	R <sup>2</sup>		S.L.	t	S.E.	R <sup>2</sup>		S.L.	t	S.E.	R <sup>2</sup>
SN1	0.72	10.55	0.082	0.52	SN1	Removed due to low loading				SN1	Removed due to low loading			
SN2	0.75	11.15	0.073	0.57	SN2	0.77	9.14	0.086	0.59	SN2	0.85	16.45	0.055	0.73
SN3	0.52	6.87	0.86	0.27	SN3	0.59	7.13	0.085	0.35	SN3	0.66	12.69	0.057	0.44
PA1	0.63	-----	-----	0.40	PA1	0.73	-----	-----	0.53	PA1	0.827	-----	-----	0.42
PA2	0.77	9.43	0.086	0.59	PA2	0.76	9.70	0.091	0.58	PA2	0.807	13.45	0.060	0.52
PA3	0.89	10.55	0.098	0.80	PA3	0.77	9.87	0.092	0.60	PA3	0.767	13.47	0.072	0.69
PA4	0.93	10.87	0.100	0.87	PA4	0.79	10.16	0.087	0.63	PA4	0.732	14.04	0.072	0.79
PA5	0.92	10.80	0.098	0.86	PA5	0.66	8.39	0.089	0.43	PA5	0.694	13.11	0.070	0.64
PBC1	0.62	-----	-----	0.38	PBC1	0.60	-----	-----	0.37	PBC1	0.59	-----	-----	0.35
PBC2	0.83	9.09	0.100	0.69	PBC2	Removed due to low loading				PBC2	0.73	12.27	0.068	0.53
PBC3	0.81	8.95	0.087	0.65	PBC3	0.73	6.67	0.11	0.54	PBC3	0.77	10.73	0.073	0.60
PBC4	0.76	8.52	0.100	0.57	PBC4	0.60	6.07	0.10	0.36	PBC4	0.70	10.07	0.070	0.59
PBC5	0.74	8.37	0.091	0.54	PBC5	0.58	5.98	0.11	0.33	PBC5	0.67	9.82	0.074	0.45
PBC6	0.72	8.26	0.086	0.51	PBC6	0.56	5.86	0.098	0.32	PBC6	0.64	9.59	0.068	0.41
EI1	0.79	-----	-----	0.63	EI1	0.63	-----	-----	0.40	EI1	0.72	-----	-----	0.51
EI2	0.86	17.67	0.060	0.74	EI2	0.78	8.72	0.11	0.60	EI2	0.83	17.34	0.058	0.69
EI3	0.90	16.34	0.066	0.81	EI3	0.82	9.05	0.10	0.68	EI3	0.87	16.52	0.061	0.75
EI4	0.92	15.42	0.073	0.85	EI4	0.85	9.27	0.11	0.73	EI4	0.90	17.06	0.062	0.80
EI5	0.93	15.80	0.076	0.87	EI5	0.84	8.43	0.11	0.70	EI5	0.88	16.85	0.063	0.78
EI6	0.91	0.535	0.073	0.83	EI6	0.55	6.61	0.094	0.30	EI6	0.72	13.42	0.062	0.51

Note: All values are significant ( $p < .05$ )

As seen from Table-4 that all the standardized loadings of each observed variable on respective latent variable for Pakistani, Turk and Combined sample ranged from 0.55 to 0.93 bigger than .52, the cutoff value for factor loadings recommended by Stevens (1996). All parameter estimates obtained through t values were statistically significant ( $>2$ ) under significant level 0.05.

The path parameters ( $\beta$ ) of the Entrepreneurial Intention Model are estimated by the MLE (Maximum Likelihood Estimation) method on Pakistani, Turkish and Combined samples. The MLEs of the parameters are shown in Table-4. Hypotheses 1 & 2 predicted that Personal Attitude and Perceived behavioral control positively influence entrepreneurial intention. As shown in Table-4, coefficient values for Pakistani, Turkish and combined sample were significant ( $P > 0.05$ ) and moderate in magnitude: PA and EI relationship ( $\beta = .49, .68$  &  $.58$ ) and PBC and EI relationship ( $\beta = .42, .32$ , &  $.42$ ;  $P > 0.05$ ), hence, supporting the hypotheses H1 and H2. Hypotheses 3, 4, & 5 predicted that Subjective Norm positively influence PA, PBC and EI. As may be observed except H3, coefficient values of Pakistani, Turkish and combined sample were significant and high in magnitude: SN and PA relationship ( $\beta = .61, .82$  &  $.65$ ) and SN & PBC relationship ( $\beta = .52, .57$  &  $.47$ ;  $P > 0.05$ ), hence supporting the Hypotheses H4 & H5, while rejecting the H3. These results confirmed the assertion of Liñán and Chen (2009) regarding SN and EI relationship that “the relative strength of this motivational factor has already been identified as a pending issue in intention models”. Liñán and Chen (2009) further provided that the base impact of SN on EI would be proved through its impact on PA and PBC, hence H4 and H5 confirmed this possibility, because both paths are significant in Pakistani, Turkish and combined sample. Moreover in term of R-Squared, Pakistani, Turkish and combined sample explain 65%, 77% & 66% variance in entrepreneurial intention based on PA and PBC. Besides, these three samples explain 65%, 67% & 42% variance in PA and 48%, 32% & 22% in PBC based on SN, hence acknowledge the important contribution of SN in explaining the variance in EI through PA and PBC. These results confirmed not only the empirical findings of Liñán and Chen (2009) but are most satisfactory as prior empirical studies using linear models explain less than 40% in explaining the variance in EI (Liñán and Chen, 2009).



**Table 5: Hypotheses Testing of Structural Equation Model of Entrepreneurial Intention**

Path Hypothesis	Parameter estimate ( $\beta$ )			t-value			R-Squared			Result
	Pak	Turk	Total	Pak	Turk	Total	Pak	Turk	Total	
SN $\rightarrow$ PA	0.61	0.82	0.65	6.21	8.37	9.47	0.65	0.67	0.42	H1 accepted H2 accepted H4 accepted H5 accepted
SN $\rightarrow$ PBC	0.52	0.57	0.47	4.75	6.10	6.84	0.48	0.32	0.22	
PA $\rightarrow$ EI	0.49	0.68	0.58	5.53	8.13	9.51	0.65	0.77	0.66	
PBC $\rightarrow$ EI	0.42	0.32	0.42	4.63	5.33	7.45				

Note: All values are significant ( $p < .05$ )

This study also tested whether the variances of PA, SN, PBC and EI differed across cultures i.e., Pakistan and Turkey. First, as shown in Table-6, the Pakistani sample was found to have higher intentions (EI) on average to start a business (3.75) compared to the Turkish (3.44). In other words as shown in ANOVA results (Table-7), the variance of EI differed significantly (F value= 8.124;  $P < 0.05$ ) across Pakistani and Turkish cultures, hence would mean that intentions to start a business are not formed the same way in Pakistani and Turkish culture. Second, similarly, as shown in Table-6, the Pakistani sample was found to have higher perceptions (PBC) on average about establishment of firm-creation behaviors (3.40) compared to the Turkish sample (3.20). In other words as shown in ANOVA results (Table-7), the variance of PBC differed significantly (F value= 5.477;  $P < 0.05$ ) across Pakistani and Turkish cultures, hence would mean that feelings of being able and controllability of firm-creation behaviors are not formed the same way in Pakistani and Turkish culture. Third, however, as shown in Table-6, Pakistani and Turkish samples were found to have similar averages on PA and SN i.e. 3.94 & 3.85 and 3.76 & 3.73 respectively. In other words as shown in ANOVA results (Table-7), the insignificant variances of PA (F value= .745;  $P > 0.05$ ) and SN (F value= .138;  $P > 0.05$ ) across Pakistani and Turkish cultures showed that students of both countries having same perceptions on personal valuation about being an entrepreneur (PA) and on social pressure to carry out entrepreneurial behaviors (SN) (F value= 5.477;  $P < 0.05$ ). Finally, regarding possible cultural specificities, looking back to Table-5, several significant differences were also found between Pakistani and Turkish Culture. SN proves a significant impact on both PA and PBC in Turkey ( $\beta = .82$  &  $.57$ ) and Pakistan ( $\beta = .61$  &  $.52$ ). The results would promote hypothesis 6. However, this stronger effect is not able to verify for the SN–EI relationship because it is not significant in Pakistani, Turkish and combined sample.

Hypothesis 7 stated that the relative influence of PA and PBC on EI would be different depending on the country. In the Turkish subsample, PA exerts the stronger effect (.68 vs. .32 for PBC). In Pakistan, PBC is the strongest predictor of EI (.49 vs. .42 for PA).

Therefore, hypothesis 7 would be supported.

**Table 6: Descriptive Measures**

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
PA	Pakistan	183	3.9432	.90484	.06689	3.8112	4.0751
	Turkey	199	3.8593	.98734	.06999	3.7213	3.9973
	Total	382	3.8995	.94841	.04852	3.8041	3.9949
SN	Pakistan	183	3.7678	.89375	.06607	3.6374	3.8981
	Turkey	199	3.7312	1.01843	.07219	3.5888	3.8735
	Total	382	3.7487	.95965	.04910	3.6522	3.8452
PBC	Pakistan	183	3.4007	.75614	.05590	3.2904	3.5110
	Turkey	199	3.2085	.84565	.05995	3.0903	3.3268
	Total	382	3.3006	.80870	.04138	3.2193	3.3820
EI	Pakistan	183	3.7514	.94311	.06972	3.6138	3.8889
	Turkey	199	3.4456	1.13508	.08046	3.2869	3.6042
	Total	382	3.5921	1.05729	.05410	3.4857	3.6984

**Table 7: ANOVA Results**

		Sum of Squares	df	Mean Square	F	Sig.
PA	Between Groups	.671	1	.671	.745	.389
	Within Groups	342.029	380	.900		
	Total	342.700	381			
SN	Between Groups	.128	1	.128	.138	.710
	Within Groups	350.747	380	.923		
	Total	350.874	381			
PBC	Between Groups	3.521	1	3.521	5.447	.020
	Within Groups	245.653	380	.646		
	Total	249.174	381			
EI	Between Groups	8.915	1	8.915	8.124	.005
	Within Groups	416.986	380	1.097		
	Total	425.901	381			

Finally, regarding control variables, Table-8 shows that male students in Pakistani and combined samples are more likely to have entrepreneurial intention as compared with female students ( $\beta = .154$  &  $.133$ ;  $P < .05$ ).

Moreover, for the combined sample, a country dummy-Pakistan was included to explain entrepreneurial intention and this relationship was significant. This suggests that Pakistani students are more likely to have entrepreneurial intention as compared with Turkish students ( $\beta=.117$ ;  $P<.05$ ). Besides, as seen from Table-8, all the signs of the standardized coefficients for the control variables i.e. gender, work-experience, self-experience and knowledge of entrepreneur are insignificant ( $P>.05$ ) in Pakistani, Turkish and Combined samples.

**Table 8: Standardized coefficients of Control Variables**

Variable	Standardized coefficient ( $\beta$ )		
	Pakistan	Turkey	Combined
Step 1: Control Variables			
Gender (Male=1)	.154*	.124	.133*
work-experience	.060	-.062	-.007
Self-experience	.048	.008	.033
Knowledge of Entrepreneur	.039	.105	.070
Country (Pakistan=1)			.117*
Step 2: Main variables			
PA	.373*	.593*	.500*
PBC	.405*	.332*	.351*
SN	.030	.062	.062

Note: \* values are significant ( $p < .05$ )

#### 4. Discussion and Conclusion

This study was undertaken to test the cross-cultural generalizability of how well TPB would predict entrepreneurial intent amongst students. It study validates the EIQ by using aggregate measures for the three motivational processors (PA, SN, and PBC) and EI across Pakistani, Turkish and combined samples. In this study also, PA and PBC measures were found to have significant relationship with EI, however, on the other hand, SN measure as used in prior researches has shown an insignificant relationship with EI across all the samples i.e. Pakistan, Turkey and combined; hence hypothesis **H3** was rejected.

Moreover, this study concluded that the TPB based Entrepreneurial Intentions model for Pakistani, Turkish and Total sample had a good fit with the data. Therefore, it can be concluded that TPB based Entrepreneurial Intention model was a good explanation of entrepreneurial intent amongst students. Moreover, current study supports the notion that “the relationships among the TPB components are equally strong and comparable across Pakistani and Turkish cultures – the only exception being the relation of social norms with intentions”. However, SN would prove its impact on EI through both PA and PBC, but not directly on intention. In particular, four of the five original core-path relationships were significant. First, in  $SN \rightarrow PA$  path, SN is the strongest predictor of PA in Turk sample followed by combined and Pakistani samples. Second, in the same way, in  $SN \rightarrow PBC$  path, SN is the strongest predictor of PBC in Turkish Sample followed by Pakistani and combined samples. Third, in  $PA \rightarrow EI$  path, PA is the strongest predictor of EI in Turkish Sample followed by Total and Pakistani samples. Fourth and finally, in  $PBC \rightarrow EI$  path, PBC is the strongest predictor of EI in Pakistani sample followed by combined and Paki samples. Therefore, regardless of cultural differences between both Pakistan and Turkey and even some differences in sample characteristics, **Hypotheses: H1** ( $PA \rightarrow EI$ ), **H2** ( $PBC \rightarrow EI$ ), **H4** ( $SN \rightarrow PA$ ) and **H5** ( $SN \rightarrow PBC$ ) are confirmed for the Turkish, Pakistani, and total samples, thus, the strength of the model appears to be confirmed.

Regarding demographic variables, entrepreneurial intention was tested, with exception of gender in Pakistani and combined sample, none resulting significant. This suggests that male students in Pakistani and combined samples are more likely to have entrepreneurial intention as compared with female students. Moreover, for the combined sample, a country dummy-Pakistan was involved to clarify entrepreneurial intention and relationship was significant. This suggests that the probability of becoming an entrepreneur among Pakistani students is high as compared with Turkish students.

Hypothesis **H6** is relatively straightforward to the literature. As the results of this study showed that SN exerts a significant influence over both PA and PBC in Turkey and Pakistan, so the hypothesis 6 is accepted. However, this effect could not be verified for the SN–EI relationship because this is not significant in Pakistani, Turkish and combined samples. This on the whole weak influence of SN on EI could claim that people within



young age making entrepreneurial career decisions more based on personal (PA, PBC) rather than social (subjective norm) considerations (Autio et al., 2001). Therefore, SN would prove its effects on EI through both PA and PBC, but not directly on intention.

Hypothesis **H7** stated that the relative influence of PA and PBC on EI would be different depending on the country. The results of the current study also showed that in the Turkish subsample, PA proves the stronger effect; hence the results are in consistent with GEM-2012 report which provided that Turkish adults agreed more than their Pakistani counterparts regarding the perceptions that entrepreneurs are afforded high status and receive positive media attention. In contrast with the results of this study showed that in Pakistani subsample, PBC is the strongest predictor of EI; hence the results are in consistent with high UAV score in Turkey that would guide people to feel “threatened by uncertain or unknown situations”, thus, they may feel less able to launch a firm, whether they had technical and practical knowledge (Hofstede, 1991). Moreover, the results showed that among Pakistani respondents, EI score in term of decision to become entrepreneurs is high as compared with that of Turkish.

Specifically, these results concludes that intention is essentially similar in Pakistani and Turkish culture i.e. SN would be the first step in order to influence perceptions of PA and PBC. However, the relative magnitude of each component in the formation of entrepreneurial intention may be differ showing that national differences demonstrate themselves in the way people understand reality and transform it into perceptions toward entrepreneurship (Liñán and Chen, 2009).

### References

- Ahmed, Ishfaq, Muhammad Aamir & Hafiza Arooj Ijaz. (2011). External Factors and Entrepreneurial Career Intentions; Moderating Role of Personality Traits, *International Journal of Academic Research*, 3(5): 262-267.
- Ahmed, Ishfaq, Muhammad Musarrat Nawaz, Zafar Ahmad, Muhammad Zeeshan Shaukat, Ahmad Usman, Wasim-ul-Rehman & Naveed Ahmed. (2010). Determinants of Students' Entrepreneurial Career Intentions: Evidence from Business Graduates, *European Journal of Social Sciences*, 15 (2): 14-22.
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2): 179–211.
- Autio, E., Keeley, R.H., Klofsten, M., Parker, G.G.C., & Hay, M. (2001). Entrepreneurial Intent among Students in Scandinavia and in the USA. *Enterprise and Innovation Management Studies*, 2(2): 145–160.
- Barrett, P. (2007). Structural Equation Modelling: Adjudging Model Fit. *Personality and Individual Differences*, 42(5): 815-824.
- Bentler, P. M. (1990). Comparative Fit Indexes in Structural Models. *Psychological Bulletin*, 107 (2): 238-246.
- Butler, John E., Robert Doktor & Frederick A. Lins. (2010). Linking International Entrepreneurship to Uncertainty, Opportunity Discovery, and Cognition, *J Int Entrep*, 8:121–134.
- Byabashaija, Warren, Isaac Katono. (2011). The Impact of College Entrepreneurial Education on Entrepreneurial Attitudes and Intention to Start A Business in Uganda, *Journal of Developmental Entrepreneurship*, 16 (1): 127–144.
- Byrne, B. M. 1998. *Structural Equation Modeling with LISREL, PRELIS, And SIMPLIS: Basic Concepts, Applications, and Programming*. Psychology Press.
- Davidsson, P. (1995). Culture, Structure and Regional Levels of Entrepreneurship, *Entrepreneurship and Regional Development*, 7(1): 41-62.
- Eroğlu, O., & Picak, M. (2011). Entrepreneurship, National Culture and Turkey. *International Journal of Business and Social Science*, 2(16): 146-151.
- Gaddam, Soumya. (2008). Identifying the Relationship Between Behavioral Motives and Entrepreneurial Intentions: An Empirical Study Based on the Perceptions of Business Management Students, *The Icfai Journal of Management Research*, 7 (5):35-55.
- Gasse, Y., & Tremblay, M. (2011). Entrepreneurial Beliefs and Intentions: A Cross-cultural Study Of University Students in Seven Countries. *International Journal of Business*, 16(4), 303-314.
- Gird, Anthony, Jeffrey J. Bagraim. (2008). The Theory of Planned Behaviour As Predictor of Entrepreneurial Intent Amongst Final-Year University Students School of Management Studies, *South African Journal of Psychology*, 38(4):711-724.
- Hofstede, G. (1991). *Cultures and Organizations: Software of the mind*. London: McGraw-Hill.
- Hofstede, G. (2003). *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations* (2nd ed.). Newbury Park, CA: Sage Publications.
- Hoyle RH. (1995). *Structural Equation Modeling: Concepts, Issues, And Applications*: Sage Publications.

- Hu, L. T., & Bentler, P. M. (1999). Cut off Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1): 1-55.
- Karhunen, Päivi, Svetlana Ledyeva. (2010). Determinants Of Entrepreneurial Interest and Risk Tolerance Among Russian University Students: Empirical Study, *Journal of Enterprising Culture*, 18 (3): 229–263
- Kline, R.B. (2005). *Principles and Practice of Structural Equation Modeling* (2nd Edition ed.). New York: The Guilford Press.
- Kristiansen, S. & Indarti, N. (2004). Entrepreneurial Intention among Indonesian and Norwegian students. *Journal of Enterprising Culture*, 12(1): 55–78.
- Kolvereid, L. (1996). Organizational Employment Versus Self-Employment: Reasons for Career Intentions. *Entrepreneurship Theory and Practice*, 20(3): 23–31.
- Kolvereid, L. & Isaksen, E. (2006). New Business Start-Up and Subsequent Entry into Self-Employment. *Journal of Business Venturing*, 21(6): 866–885.
- Krueger, Norris. (1993). The Impact of Prior Entrepreneurial Exposure on Perceptions of New Venture Feasibility and Desirability, *Entrepreneurship Theory and Practice*, 5-21. .
- Liñán, F., Urbano, D., & Guerrero, M. (2011). Regional Variations in Entrepreneurial Cognitions: Start-up Intentions of University Students in Spain. *Entrepreneurship and Regional Development*, 23(3-4): 187-215.
- Liñán, F., & Chen, Y. W. (2009). Development and Cross-Cultural Application Of A Specific Instrument To Measure Entrepreneurial Intentions. *Entrepreneurship Theory and Practice*, 33(3): 593-617.
- Mboko, Swithina, Aquinas College. (2011). Towards an Explanation of the Growth in Young Entrepreneur Activities: A Cross Country Survey of Work Values of College Students, *Journal of Marketing Development and Competitiveness*, 5(4).
- McLaughlin, Erin B. (2010). The Role of Emotional Intelligence And Self-Efficacy in Developing Entrepreneurial Career Intentions, Best Paper Award, Academy of Management.
- Medsker, G. J., Williams, L. J., & Holahan, P. J. (1994). A review of current practices for evaluating causal models in organizational behavior and human resources management research. *Journal of Management*, 20(2): 439-464.
- Mulaik, S. A., James, L. R., Van Alstine, J., Bennett, N., Lind, S., & Stilwell, C. D. (1989). Quantitative Methods in Psychology. *Psychological Bulletin*, 105(3): 430-445.
- Pejvak, Oghazi, Jung Marie-Louise, Peighambari Kaveh and Tretten Phillip. (2009). What Makes People Want To Become Self-Employed? Applying the Theory of Planned Behavior, *Advances In Management*. 2(11): 9-18.
- Peterson, Mark F., & Mark R. Meckler. (2001). Cuban–American Entrepreneurs: Chance, Complexity and Chaos, *Organization Studies*, 22 (1): 31–57.
- Prodan, Igor Mateja Drnovsek. (2010). Conceptualizing Academic-Entrepreneurial Intentions: An Empirical Test. *Technovation*. 30:332–347.
- Shinnar Rachel S., Olivier Giacomin, Frank Janssen. (2012). Entrepreneurial Perceptions and Intentions: The Role of Gender and Culture, *Entrepreneurship Theory and Practice*, 465-493.
- Steiger, J. H. (2007). Understanding the Limitations of Global Fit Assessment in Structural Equation Modeling. *Personality and Individual Differences*, 42(5): 893-898.
- Stevens, J. P. (1996). *Applied Multivariate Statistics for The Social Sciences*. Routledge Academic.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Experimental Designs Using ANOVA*. Thomson/Brooks/Cole.s
- Venasaar, Urve, Ene Kolbre, Toomas Piliste. (2006). Students’ Attitudes and Intentions toward Entrepreneurship at Tallinn University of Technology, JEL Classification, Number: A2, D8, I21, 97-114.
- Xavier, S.R., Kelley, D., Kew, J., Herrington, M. Vorderwulbecke, A. (2012). “ Global Entrepreneurship Monitor Global Report, Babson College, Universidad del Desarrollo, Universiti Tun Abdul Razak, London Business School.
- Zanger, Cornelia, Radka Hodicová, Hansjoerg Gaus. (2008). Psychic Distance and Cross – Border Cooperation of Smes: An Empirical Study on Saxon And Czech Entrepreneurs’ Interest in Cooperazion, *JEEMS*, 1:40-58.