

Correlation of Students' Self-efficacy, Adaptability and Entrepreneurial Intention

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Abstract

The current study is an investigation of the correlation between students' Self-efficacy, adaptability and Entrepreneurial Intention. For appropriate results and understand the phenomena; a descriptive research method was used. Previous entrepreneurial aptitude scale of the author was used for data collection from seven universities of Punjab and Islamabad territory of Pakistan. 3rd and 4th semesters' students (MBA and M.Sc Economics) and 7th and 8th semesters' students (BBA honor and BS Economics) of management science and economics departments were selected. Total 560 questionnaires were randomly distributed in respondents out of which 493 were returned within the scheduled period. Data examined by the Factor analysis, T-test, ANOVA, correlation tests in SPSS-20. Results revealed that students' SE, adaptability and EI are highly correlated with each- others.

Key Words

Students, Self-efficacy, Adaptability, Entrepreneurial Intention

Introduction

Education is the most important source of change in behavior (Ary, Jacobs, Irvine, & Walker, 2018). That is why people get education for a better social life. Education not only improves social life but also economic condition. The biggest reason for economic development is business education in the modern world. Therefore students of higher education select courses according to their interest in the improvement of their knowledge, skills and economic condition. At present, business education is getting a great deal around the world. More than 3000 universities are working in enterprise experience and provide entrepreneurial skills according to students' field of interest (Premand, Brodmann, Almeida, Grun, & Barouni, 2016). Basically, entrepreneurship is a risk-taking activity, therefore motivation, knowledge and special how to know is essential for improving self-confidence for future benefits (Venkataraman, 2019). Education improves students' interest, Self-efficacy (SE), adaptability and entrepreneurial intention (EI) towards entrepreneurship. SE, adaptability and intentions are also traits of special behavior.

Bandura (1997) defined that SE is a person's confidence in his or her special aptitude to achieve a job or a specific set of tasks. An individual's mental appraisal of "capabilities to mobilize the motivation, cognitive resources, and courses of action are needed to exercise control over task demands". SE focuses on two dimensions to attain high analytical power (Skaalvik & Skaalvik, 2017). It is a belief and confidence in achieving exact task successfully and second is an activity domain, that a person's have abilities to apply several related tasks within a domain (Miao, Qian, & Ma, 2017).

Many experiential studies proved that optimistic association between SE and altered motivational and social outcomes in instructive and organizational situations (Luthans, Luthans, Hodgetts, & Luthans, 2001). Like other personality assets, SE is also developed through teaching and demonstrating (Gist & Mitchell, 1992). SE provides a wide extension in the traditional and motivational approaches (Stajkovic & Luthans, 1998).

Adaptability is concerned with the capacity to adjust to suit new situations (Woods, 2017). The idea of adaptation alters in natural science and in social science. Adaptation is reinforced through suitable planning and compulsory for social systems to have the capability to adapt (Knapp, Veen, Renting, Wiskerke, & Groot, 2016). It is the capacity of a human system to adjust itself in order to maintain, progress and excellence beside a series of disturbances in their physical or social environment. A social systems' aptitude to adapt is depend on an excessive range on synchronized

cooperative and institutional actions through which efficiency enhance by developing mutual trust, social integration, community network, rules, consensus and information flow used by both individuals to their own benefit and the community (Pardo, Cresswell, Thompson, & Zhang, 2006).

EI' defined as a state of mind that guides a person's devotion, experience and action towards a specific goal, or a pathway to attain something (Karimi, Biemans, Lans, Chizari, & Mulder, 2016). Entrepreneurial accomplishment is expected like an intentional behavior (Vesalainen & Pihkala, 1999). Logically, the intent is providing motivation for action. The ability for self-motivation and planed action rooted in cognitive activity (Adam & Fayolle, 2015). In cognitive motivation, people make their actions preventive through the exercise of planning and guide (Bandura, Barbaranelli, Caprara, & Pastorelli, 2001).

Thus entrepreneurship is the type of planned behavior of intention model (Kautonen, van Gelderen, & Fink, 2015). It provides a calculation for a person's personality, status and explanation of their entrepreneurial behavior (Krueger Jr, 2007). For entrepreneurial behavior, three dimensions; SE, adaptability and EI are also needed for university students. Therefore the purpose of the study is to investigate the correlation between these extents in the Pakistani context.

Methodology

The present study is descriptive in nature which provides insight about SE, adaptability and EI. The survey was deliberated to be most appropriate for dependable results and address the matter. The questionnaire used for data collection. For analysis of data, SPSS-20 was used.

Population

University Students of management science and economics from Punjab and Islamabad territory of Pakistan were the population of the study.

Sample

A multistage sampling technique used for data collection. In the first stage, conveniently participants included from seven universities (the Islamia university of Bahawalpur, University of Punjab, Bahu Al Din Zakaria University Multan, Government College University Faisal Abad, PMASAAU Rawalpindi, Qaid E Azam University Islamabad and Islamic International University Islamabad) of the Punjab and Islamabad territories. In the second stage, two semesters (7th and 8th) from BS classes and two (3rd and 4th) from Master Classes selected. In the third stage; 280 students from BS honor (140 from seventh and 140 from the eighth semester) as well 240 students from a master class (140 from third and 140 from the fourth semester) selected by simple random sample. Total of 560 questionnaires distributed in students and 493 questionnaires returned in the scheduled time period.

In the present study, 245 (49.7%) students study in master classes and 248 (50.3%) students study in BS honor classes (see table 1.1). regarding semester, 119 (24.1%) students study in 3rd semester, 126 (25.6%) in 4th semester, 125 (25.4%) in 7th and 123 (24.9%) students in 8th semester. About 283 (57.4%) of students are male and 210 (42.6%) students are female. Nearly 409 (83.0%) students from urban areas and 84 (17.0%) students are from rural areas. Approximately, 268 (54.4%) fathers' qualification in between matric and graduation, and 210 (42%) have a master or higher qualification. As, the majority of the students' mothers' qualification 312 (63.3%) in between matric and graduation, and 136 (27.6%) have a master or higher qualification. About 130 (26.4%) students are reported their fathers' profession as private employees, 194 (39.4%) government employees, 110 (22.3%) self-employed, 39 (7.9 %) retired and 20 (4.1%) unemployed.

Table 1. Personal Characteristics of Respondents

Personal Characteristics	Category	N	%
Class	Master	245	49.7
	BS	248	50.3
Semester	3 rd	119	24.1
	4 th	126	25.6
	7 th	125	25.4
	8 th	123	24.9
Gender	Male	283	
	Female	210	
Residence	Urban	409	83.0
	Rural	84	17.0

Father Education	Illiterate	7	1.4
	Primary	8	1.6
	Secondary	71	14.4
	Graduate	197	40.0
	Master	156	31.6
	MPhil/PhD	54	11.0
Mother Education	Illiterate	13	2.6
	Primary	32	6.5
	Secondary	113	22.9
	Graduate	199	40.4
	Master	124	25.2
	MPhil/PhD	12	2.4
Father Occupation	Private Sector	130	26.4
	Public sector	194	39.4
	Self Employed	110	22.3
	Retired	39	7.9
	Unemployed	20	4.1

Research Tool

For study purpose, previous entrepreneurial aptitude scale (prepared by author) was used after some modification. Several studies on personality traits have examined by the different psychological feature of persons. In the present study; SE, adaptability and EI (SEAEI) were addressed.

The original scale is comprised of 34 items that are divided into four factors named; Locus of control, SE, EI and Adaptability. In current research 23 items are used. The first factor SE is contained of (7 items), adaptability contained (6 items), and EI (10 items) separately. The author reported Cronbach's α of the whole scale was .89. Researchers are also personally collected the required data from university students. Detail of SPSS-20 analysis is in results.

Results

The collected data analyzed for exploratory factor analysis (EFA). In the second phase, t-test, one-way ANOVA and Pearson correlation applied. The fundamental factor structure in the 23-items of SEAEI scale; we were conducted the EFA with Principal Components Method (PCM) tracked by Varimax rotation (see Table 2).

The result of EFA verified that three-factor solutions perceived for data sets on the basis of eigenvalues greater than one and were accounted for more than 50% of the common variance. The significance of the KMO measure of sampling adequacy was .866 and Bartlett's Test of Sphericity was $df(276) = 3729.739, p < .000$. The three factors of SEAEI produced by EFA were SE (7, 3, 6, 4, 2, 1, 5; Cronbach's $\alpha = .764$), adaptability (9, 13, 8, 12, 10, 11; Cronbach's $\alpha = .730$), and EI (19,21,22,23,17,14,15,20,16,18; Cronbach's $\alpha = .772$). Factor loadings of three dimensions range from 0.423 to 0.738. Cronbach's alpha coefficient of the overall scale was .89.

Table 2. Factor Matrix for the Items of SEAEI

Items	SE	Adaptability	EI
7. goals direction	.738		
3.starting own business	.713		
6.connection between hard work and success	.699		
4.Preferences of business	.663		
2.Pursue a career as an entrepreneur	.638		
1.misfortune results	.558		
5.monitor areas of practice	.423		
9.views are reflected by the role		.726	
13.opportunities for innovation		.693	
8. Embrace change easily		.688	
12. Imagine new uses for old ideas		.653	
10.Organizational mechanisms		.638	
11.Core values for staff		.540	
19.Own business prestigious			.668

21. Read situations			.665
22.Strategic and selective for business			.600
23.Launch something new with available resources			.577
17.Comprehensive unit of business			.563
14.Access on investment as an entrepreneur.			.557
15.Status quo			.553
20.Right action as an entrepreneur			.546
16.the risks and insecurities associated with business			.531
18.Like working hard			.486
Eigen value	2.878	2.606	2.302
Total Variance Explained % (50.09)	41.121	43.425	33.300
Sig.	.000	.000	.000

A correlation matrix among the three dimensions of the scale showed that SE has a high correlation with adaptability ($r=.639, p< .01$) and a high correlation with EI ($r=.693, p<.01$). Moreover, adaptability is also showed high correlation with EI ($r=.621, p< .01$).

Table 3. Correlation Coefficients among the sub-scales of SEAEI

	Mean	Std. Deviation	1	2
SE	29.4625	5.82547	--	
Adaptability	23.4260	4.21007	.639**	
EI	37.5233	6.63830	.693**	.621**

The effects of personal characteristics of university students as independent variables and SEAEI as dependent variables are calculated (See table 4). The results of t-test expose that the main effect of gender was significant. Male ($M = 30.88, SD = 4.88$) and female ($M = 27.54, SD = 6.48$) students differ significantly in terms of SE, $t(493) = 6.549, p < .000$. However, the difference between urban ($M = 29.44, SD = 5.89$) and rural ($M = 29.54, SD = 5.49$) students is not significant difference considering SE $t(493) = -.147, p < .883$. Similarly, there is a significant difference between the students of Master class ($M = 29.48, SD = 5.80$) and BS (honors) class ($M = 29.44, SD = 5.85$) regarding SE, $t(493) = -1.63, p < .103$. Moreover, the results of ANOVA also reveal a significant difference between fathers' education $F = 3.862, p < .002$, mothers' education $F=3.493, Sig< .004$ However, in case of fathers' occupation $F=.403, Sig< .806$ the difference is not significant.

Table 4. Results of t-test and ANOVA Representing the Effect of Personal Characteristics on SE of University Students for Entrepreneurship

	N	Mean	SD	
Gender				
Male	283	30.8834	4.88199	$t(493) = 6.549, Sig = .000$
Female	210	27.5476	6.42737	
Residence				
Urban	409	29.4450	5.89679	$t(493) = -.147, Sig = .883$
Rural	84	29.5476	5.49787	
Class				
Master	245	29.4816	5.85661	$t(493) = -1.631, Sig = .104$
BS	248	29.4435	5.80632	
Father Edu				
Mphil/Phd	7	33.8571	4.14039	$F = 3.862, Sig = .002$
primary	8	28.8750	5.86606	
secondary	71	29.0282	5.91601	
graduate	197	28.3807	6.11891	
master	156	30.7179	5.37473	
Illiterate	54	29.8704	5.23070	
Mother Edu				
Mphil/Phd	13	33.6923	3.35123	$F=3.493, Sig=.004$
primary	32	28.9688	4.78900	
secondary	113	28.0973	6.59947	

graduate	199	29.3869	5.94894	
master	124	30.4516	5.04348	
Illiterate	12	30.0833	4.85159	
Father Occupation				
private sector	130	29.4846	5.37758	F=.403, Sig= .806
public sector	194	29.6959	5.86155	
self-employed	110	28.8818	6.23652	
Retired	39	29.5641	6.76210	
Unemployed	20	30.0500	3.99309	

To discover the effects of personal characteristics of university students as independent variables and SEAEI as dependent variables are used (See table 5). The results of t-test exposed that the main effect of gender was significant. Male (M = 30.88, SD = 4.88) and female (M = 27.54, SD = 6.42) students differ significantly in terms of adaptability, $t(493) = 6.447, p < .000$. However, the difference between urban (M = 23.28, SD = 4.30) and rural (M = 24.10, SD = 3.64) students is not significant considering adaptability $t(493) = -1.631, p < .104$. Similarly, there is a significant difference between the students of Master class (M = 23.25, SD = 4.51) and BS (honors) class (M = 23.59, SD = 3.88) regarding adaptability, $t(493) = -1.631, p < .104$. Moreover, the results of ANOVA also reveal a significant difference between fathers' education $F=2.475, Sig < .031$, However, in case of mothers' education $F=2.139, Sig < .060$ and fathers' occupation $F= .141, Sig < .967$ the difference is not significant.

Table 5. Results of t-test and ANOVA representing the effect of Personal Characteristics on the adaptability of University Students for entrepreneurship

	N	Mean	SD	
Gender				
Male	283	30.8834	4.88199	
Female	210	27.5476	6.42737	$t(493) = 6.447, Sig = 000$
Residence				
Urban	409	23.2861	4.30786	$t(493) = -1.631, Sig = .104$
Rural	84	24.1071	3.64384	
Class				
Master	245	23.2571	4.51355	$t(493) = -1.631, Sig = .104$
BS	248	23.5927	3.88908	
Father_Edu				
Mphil/Phd	7	25.4286	1.51186	$F=2.475, Sig=.031$
Primary	8	23.2500	3.61544	
Secondary	71	23.1549	4.32153	
Graduate	197	22.7563	4.35205	
Master	156	24.1538	3.84733	
Illiterate	54	23.8889	4.52526	
Mother Edu				
Mphil/Phd	13	25.5385	2.43637	$F=2.139, Sig=.060$
Primary	32	21.8750	3.98181	
Secondary	113	23.0354	4.30724	
Graduate	199	23.4724	4.51126	
Master	124	23.7581	3.77921	
Illiterate	12	24.7500	3.10791	
Father Occupation				
private sector	130	23.5000	4.25405	$F= .141, Sig=.967$
public sector	194	23.5412	4.22071	
self-employed	110	23.2545	4.10065	
Retired	39	23.1282	4.68019	
Unemployed	20	23.3500	3.78744	

The effects of personal characteristics of university students as independent variables and SEAEI as dependent variables were calculated (See table 6). The results of t-test exposed that the main effect of gender was significant. Male (M = 39.014, SD = 5.73) and female (M = 35.51, SD = 7.23) students differ significantly in terms of EI, $t(493) = 5.99, p < .000$. However, the difference between urban (M = 37.718, SD = 6.70) and rural (M = 36.5, SD = 6.28)

students is not significant considering EI $t(493) = 1.444, p < .149$. Similarly, there is not significant difference between the students of Master class ($M = 37.47, SD = 6.38$) and BS (honors) class ($M = 37.56, SD = 6.88$) regarding EI, $t(493) = -1.631, p < .104$. Moreover, the results of ANOVA also reveal a significant difference between fathers' education $F=4.029, Sig< .001$ and mothers' education $F=3.206, Sig< .007$. However, in case of fathers' occupation $F= 2.063, Sig< .085$ the difference is not significant.

Table 6. Results of t-test and ANOVA Representing the Effect of Personal Characteristics on EI of University Students

	N	Mean	SD	
Gender				
Male	283	39.0141	5.73404	$t(493) = 5.99, Sig = .000$
Female	210	35.5143	7.23246	
Residence				
Urban	409	37.7188	6.70028	$t(493) = 1.444, Sig = .149$
Rural	84	36.5714	6.27922	
Class				
Master	245	37.4776	6.38426	$t(493) = -1.631, Sig = .104$
BS	248	37.5685	6.89271	
Father_Edu				
Mphil/Phd	7	39.2857	3.40168	$F=4.029, Sig=.001$
primary	8	38.0000	11.27576	
secondary	71	36.1972	6.43566	
graduate	197	36.5584	7.33408	
master	156	38.9615	5.25343	
Illiterate	54	34.0556	6.35556	
Mother Edu				
Mphil/Phd	13	39.7692	5.55509	$F=3.206, Sig= .007$
primary	32	36.5313	6.54012	
secondary	113	35.6195	7.67919	
graduate	199	37.8693	6.37411	
master	124	38.7903	5.92813	
Illiterate	12	37.0000	5.41043	
Father Occupation				
private sector	130	38.0692	6.93401	$F= 2.063, Sig= .085$
public sector	194	38.0361	6.10900	
self-employed	110	36.2545	7.05475	
retired	39	37.8205	7.68071	
unemployed	20	35.4000	3.61867	

Discussion and Conclusion

We tried to discuss observed data of the present research for discovering a correlation between SE, adaptability and EI of university students in the Pakistani context. In the current economic situation of the country, the young generation, especially students of higher education institutions need to play a role in achieving creativity and foster entrepreneurship culture in Pakistan. They must have comprehensive knowledge about it before starting a business. SEAEI research mostly examined from trait aspects for a career. SEAEI play an important role in the motivation of students that are extended by their self-reliance and competence to set goals for entrepreneurship.

The data reveals many important findings for development in the apprehensive area. Sabiu and Abdullah (2018) found that there is a significant difference between male and female SE about entrepreneurship. The present study also found Male is better than female about SE of entrepreneurship. This result is in line with Westhead and Solesvik (2016) who found that male is better in self-efficacy of entrepreneurship. The difference between urban and rural students is not significant considering SE. Likewise, there is a significant difference between the students of Master's and BS (honors) classes regarding SE. the results of ANOVA also reveal a significant difference between fathers' education and mothers' education. Students those mother and fathers have Ph.D. education are better in SE than other respondents. By the Fathers' occupation, the respondents have the same views about SE.

The results of the study showed that Male respondents are advanced than female respondents in terms of adaptability. The urban and rural students have the same opinions about adaptability. The students of Master's and

BS (honors) classes also same visions regarding adaptability. Respondents those fathers' education is Ph.D. are good in adaptability. But in the shape of mothers' education and fathers' occupation, the difference is not significant in respondents' opinion

The results of the current study showed that gender wise students differ significantly in terms of EI. However, in the shape of residence and class wise students have the same outlook about EI. Moreover, the results of ANOVA reveal a significant difference between fathers' education and mothers' education. Respondents, whose fathers and mothers have Ph.D. education, are better in EI However, in the case of fathers' occupation, the difference is not significant.

A correlation matrix among the three dimensions of scale for the main objective of the study indicated that SE has a high correlation with adaptability and EI. In past study Fuller, Liu, Bajaba, Marler, and Pratt (2018) also found a correlation between SE and EI. Adaptability is also showed high correlation with EI. Including these results, exploration, study, counseling, education, researches and community involvement may facilitate the young generation to act as an entrepreneur.

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