

Triple Helix and Academic Entrepreneurial Intention

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Abstract:

Academic Spin-off is receiving a growing attention in entrepreneurship research due to increase in the number of ventures coming out from academia working at universities. The role of triple helix is key among many factors that derive young researchers to establish new venture as an outcome of their research. Thus, there is a need for a study to determine the factors that derive them for venture creation in order to identify and understand the determinants of Academic Entrepreneurial Intention (AEI) and how they are influenced by different helices of Triple Helix Model (THM). This study used sample of 310 young academic researchers studying/working in different universities of Pakistan. The finding of this study highlighted that government and academia have a positive and significant relationship with the academic entrepreneurial intentions of young researchers while industry has positive, but insignificant relationship. The findings of this study have implication for promoting academic spin-off from developed and developing countries context.

Keywords: *Triple Helix Model (THM), Spin-off, Theory of Planned Behavioral (TPB), Academic Entrepreneurial Intentions (AEI).*

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1. Introduction

Innovation is one of the most valuable elements for economic growth and the welfare of the nation (Atkinson *et al.* 2012). Entrepreneurship is the main driving force behind the innovations nowadays. Due to such importance, scholars of entrepreneurship are paying more attention to academic spin-offs as one of the key elements of innovation at national level (Feola *et al.*, 2017). Since many years contribution of academic spin-off companies to economic development has been clearly stated and a related intriguing about how the entrepreneurial potential of the academic community can be stimulated has developed (Obschonka *et al.*, 2012). Our society is experiencing different challenges, knowledge becomes the most challenging imperative for solving any challenge. Correspondingly, there is an emerging body of literature which addressed the interaction between universities, industries and governments. Therefore, the concept of networking is not new in the practice. In a modern academic language, this concept is acknowledged as Triple Helix Model (THM). In the innovation process, the THM emphasized the importance of academia and government. In addition to that, these actors play a crucial role in the creation of entrepreneurial society. This is why, Academic Entrepreneurial Intention (AEI) is considered fundamental. To start a new entrepreneurial adventure which is based out cone of academicians research is considered a fascinating research issue and has recently attracted a growing number of researchers in entrepreneurship (Mosey; Ozgul and Kunday, 2015). Academic literature has paid great attention towards understanding the characteristics of academic spin-offs and to the process behind their creation (Di Gregorio and Shane 2003; Grandi and Grimaldi 2005). However, limited research has been conducted for analyzing how a subject involved in the academic field developed intention for new venture creation based on the results of his or her academic research (Feola *et al.*, 2017, Prodan and Drnovsek 2010). Literature review showed various studies have been conducted to understand AEI (Clarysse, Tartari, and Salter, 2011; Meoli and Vismara 2016; Siegel and Wright, 2015). Despite a large number of literature on entrepreneurship intention, only a few studies on AEI focused on the determinants, and many of them did not even incorporate the role of government, industry and academia together. Based on the call from Siegel and Wright (2015), for rethinking on theoretical and empirical models of academic entrepreneurship, and suggestions (Feola *et al.*, 2017) to understand AEI in the context of Triple Helix in different cultural settings to understand different helices impact on Academic Entrepreneurial Intention. This study incorporates the components of THM to operationalize the three helices of THM in predicting AEI from developing country

perspective. For addressing this problem, the study on AEI in developing countries like Pakistan can have a huge impact to understand the commercialization of the innovations of young entrepreneur researchers and develop a platform to analyze how the intention of young entrepreneurs starts their own venture businesses which has a huge impact on society at large.

Thus, the goal of this study is to integrate the THM to understand the AEI from developing country perspective by testing the model to analyze the determinants of AEI. The study covers literature review in next section, based on the literature review proposed model for testing, testing of the model on the data collected from young researchers from different universities of Pakistan followed by findings, discussion on findings and conclusion.

2. Literature Review

2.1 Triple Helix Model (THM)

In entrepreneurial research study, the THM has been widely adopted to understand the innovation process based on entrepreneurial activities ((Kim, Kim, and Yang 2012). THM is a basis for unfolding a representing relationship between government, industry and university for innovation. This model has been described as a cooperative relationship among research institutions, industry and government for promoting innovation in the era of knowledge based economy (Shin et al., 2012). The THM pivots on all helices that are interconnected and represents a national innovation system.

According to THM, governmental support at various levels has to be adopted for innovative start-ups. In particular, government is a central body and formulating the set of rules and normative conditions for the implementation of entrepreneurial activities. Similarly, the role of government also includes the provision of financial incentives and physical representation of incubators and science parks (Fini et al., 2011), that have been shown to be key elements in fostering entrepreneurship and process of innovation for start-ups. Second, academia has to promote policies and instruments (Fayolle and Klandt, 2006; Fini et al., 2011; Mian, 1996; Mustar and Wright, 2010; Siegel; Veugelers, and Wright, 2007; Smilor and Gill, 1986) that aimed to develop the entrepreneurial intentions of their researchers and give support to academic

spin-offs. It has been highlighted that University support mechanisms vary widely with regard to beneficiaries and the resources mobilized (Fini et al., 2011). Third, industry and finance, or in a more general perspective the universities operate in a business environment, can provide important resources for the development and growth of academic spin-offs (Fini et al., 2011). Studies have shown that there is positive contribution of venture capital on the establishment of research and development and the number of patents (Kortum and Lerner), professionalization of start-ups (Hellmann and Puri, 2002), and access to resources and competencies (Baum and Silverman, 2004). Similarly, in addition to financial support, the influence of industries present in the local context can stimulate the creation of start-ups (Klepper, 2007). Indeed, the presence of local firms working in the similar industries can facilitate the exchange of information and knowledge (Deeds, De Carolis, and Coombs, 1998). In case of Pakistan, triple helix of university-industry-government interaction for societal development is at infancy stage. Even the study on this field is emerging, regional triple helix innovation is also a function of academic goals and objectives, trust among university, industry and government and the strength of local organizing and initiating capabilities. Nevertheless, knowledge spill-over increasingly occurs through commercialization of research results on campus, irrespective of societal or academic differences (Bignante E., (2011). From developing and developed country perspective, triple helix is the physical device which succeeded in developing the university–industry–government interactions that have led to the creation of firm, the incubator, and the science centers and promotion of academic entrepreneurship (Safiullin L.N; Fatkhiev A.M, 2014).

2.2 Theory of Planned Behavior and Academic Entrepreneurial Intentions

The Theory of Planned Behavior (TPB) started as the Theory of Reasoned Action in 1980 to predict an individual's intention to engage in a behavior at a specific time and place. The theory was intended to explain all behaviors over which people have the ability to exert self-control. TPB can be applicable to all voluntary behaviour and it can provide explanation in different fields as well as the choice of becoming entrepreneur (Ajzen, 2001; Kolvereid, 1996; Krueger *et al.*, 2000). According to the model of TPB, individual entrepreneurial intentions identify the endeavor that he will make to carry out the entrepreneurial behaviour (Ajzen, 1991). The model classifies personal attitude towards the behavioural outcomes, perceived social norms which

reveal desirability of performing the behaviour and Perceived Behavioural Control (PBC) reflects the personal competence of controlling the behaviour (Ajzen, 1991).

The TPB is considered to be applicable to any behaviour which needed some level of planning (Kreuger *et al.*, 2000). This signifies the compatibility of TPB and its applications in various fields of research, like marketing (Ajzen, 1987), career choice (Kolver Kolveried, 1996), safety, health care and other fields. The outcome of research in various fields suggested that TPB proved it's significant in predicting the intentions (Lo, 2011). In entrepreneurship literature, it is common for studying entrepreneurial intention to apply TPB, such studies conducting by Autio *et al.* (2001); Fayolle *et al.* (2006); Gelderen *et al.* (2008); Koçoğlu & Hassan(2013); Krueger *et al.*(2000); Tkachev and Kolveried (1999); Jaen and Linan(2013); Zhang *et al.* (2014) and Karimi *et al.* (2014). From the context of THM development of entrepreneurial intention among academicians can be very interesting investigation which has received little attention from researcher (Fini et al., 2017, Fini et al., 2012; Prodan and Drnovsek, 2010). This implies to look at different helices of THM impact on academic entrepreneurial intentions.

2.3 Triple Helix Model and Academic Entrepreneurial Intention

The role of academic spin-off has been recognized as fundamental element for economic development in the literature (Di Gregorio and Shane 2003, Fini et al.,2017). However, the question about how the academic community's academic entrepreneurial potential can be stimulated is still unanswered (Fini et al. 2017; Fini, Grimaldi and Sobrero 2009; Obschonka et al. 2012). To understand impact on young academicians, AEI has got a lot of attraction in many entrepreneurship researchers (Fini et al., 2017; Goethner et al., 2012; Huyghe and Knockaert 2015; Mosey, Noke, and Binks 2012)

Goethner et al. (2012), basing their study on the TPB, verified the ability of some economic variables to analyzed AEI. However, the key determinants of entrepreneurial intention in an academic context is the attitude and perceived behavioral control, whereas economic variables have an indirect effect and influence on attitude and perceived behavioral control. Huyghe and Knockaert (2015) studied how university culture and climate shape AEI. The authors found that the more committed .a university is to an entrepreneurial mission, the greater the entrepreneurial

intention of its academicians is. Similarly, it has been demonstrated and generally accepted that university technology transfer offices have a major contribution in developing entrepreneurial intention (Markman et al., 2005). More recently, the university has jointly examined in determining students' propensity to startups and universities propensity to create a spin-off, making a significant contribution to overall university entrepreneurship (Bergmann, Hundt, and Sternberg, 2016; Fini et al., 2011; Pirnay, Surlemont, and Nlemvo, 2003). Passing through the brief literature review herein conducted, one will notice that AEI scholars remain focused on psychological determinants or contextual determinants separately, neglecting to propose an all-encompassing model that simultaneously studies the role of endogenous (psychological) and exogenous (contextual) factors. The creation of new firm is the ultimate result of the interaction between a person and its social surroundings (Shane and Venkataraman, 2000). Therefore, it can be concluded that the way of investigation in which external factors influence entrepreneurial intention in conjunction with its psychological determinants remains, with specific reference to academic entrepreneurship, a meaningful, yet relatively an unexplored research area.

Following the call from Siegel and Wright (2015), who suggested a theoretical and empirical rethink on academic entrepreneurship, we propose an integration of theoretical models of personal behavior with a local environment orientation toward innovation. More specifically, we believe in the fruitfulness of integrating the TPB with THM. The concept of TPB is arising from the field of psychology and it represents one of the most popular models used for predicting specific individual behavior. There are three components of behavioral intention identified by TPB: attitude toward behavior, subjective norms, and perceived behavioral control. Attitude refers to the young researcher entrepreneur desirability of engaging in a new firm creating behavior, and it reflects the personal beliefs and expectations about the behavior itself. Another component is the subjective norms which state the external pressure from colleagues, peers, friends and family to perform a certain behavior, and they represent the beliefs of entrepreneurs about how they would be viewed by other individuals or their social group if they are engaged in a certain behavior. Whereas, perceived behavioral control states the personal beliefs about his or her capacity to perform a given behavior; it is an expression of the degree to which a subject considers his self-able to perform the behavior.

This theory has been used in a multiple-area research, such as marketing and consumer behavior, tourism, health sciences, and leisure studies (Conner and Sparks 2005; Hagger, Chatzisarantis, and Biddle, 2002; Lam and Hsu, 2006; Lee, 2009; Quintal, Lee, and Soutar , 2010).

There are a number of theories that have been developed to interoperate and predict entrepreneurial behavior, but the TPB has proven to be more robust, straightforward, and easily falsifiable than other models (Meeks, 2009). Lortie and Castrogiovanni (2015) stated that the TPB has become one of the most applied theories that have been widely used in entrepreneurship research and activity related to venture creation (Krueger and Brazeal 1994; Liñán, Urbano, and Guerrero, 2011) and new venture development. In addition, other kinds of entrepreneurial intention have been explained using the TPB, such as recognizing entrepreneurial opportunities (Ramos-Rodríguez et al. 2010) or innovation (Montalvo, 2006).

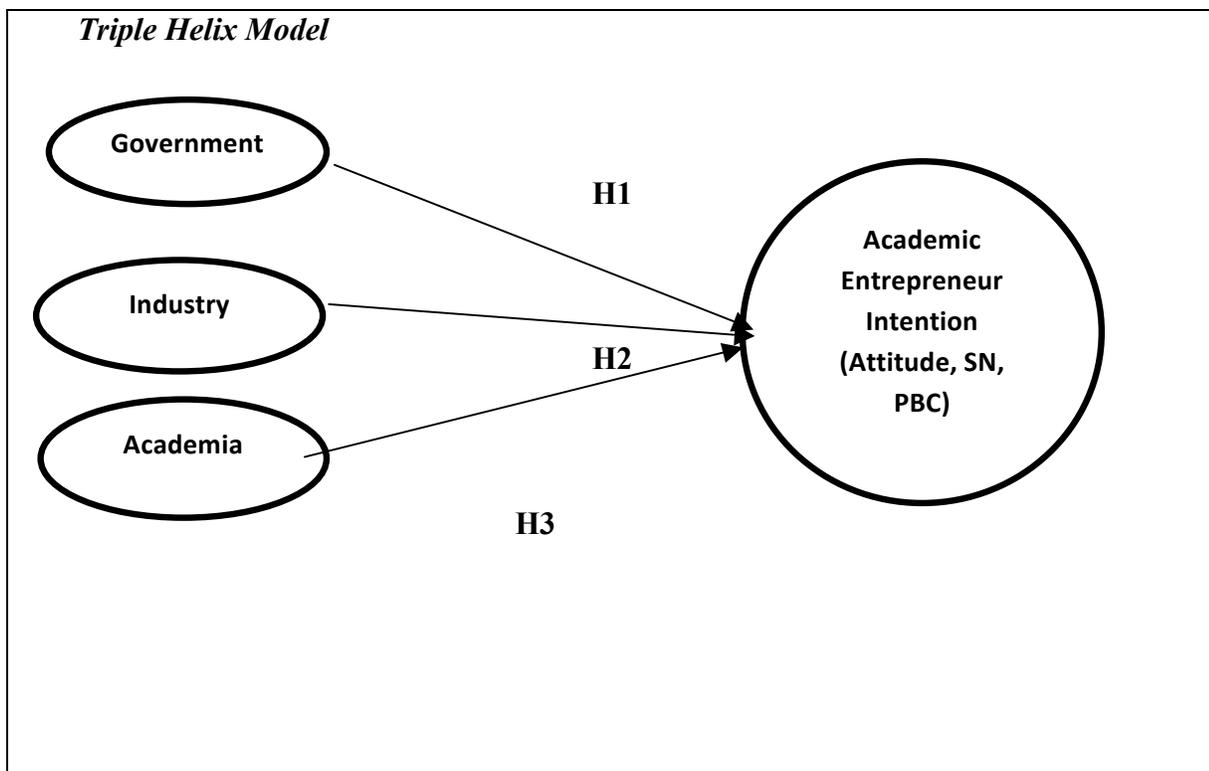


Figure 2.1

Conceptual Framework of This Study

Based on the literature review and previous studies, the hypotheses of this study are as follows:

H1: Among young researchers, perceived government support is positively related to Academic Entrepreneurial Intention.

H2: Among young researchers, perceived industrial support is positively related to Academic Entrepreneurial Intention.

H3: Among young researchers, perceived university support is positively related to Academic Entrepreneurial Intention.

3. Methodology

3.1 Research Design

This study is based on the causal comparative and quantitative research design. The goal is to provide a clear understanding of the interaction among government, industry and academia on entrepreneurial intention of young scientists. Measurement items were adapted from the questionnaires used by (Feola et al., 2017). The population of interest for this study consisted of young Pakistani researchers who were enrolled in universities operating in all provinces of the country and those who have completed their Ph.D. Degree in last three years and working in universities across Pakistan. The sample includes the Ph.D. students who are currently enrolled in Ph.D. programs and academicians who completed their Ph.Ds. in last three years. The questionnaire was distributed among more than 500 randomly selected students and academicians of 30 universities of Pakistan from June to November 2017. Total 350 questionnaires were received; out of which 40 were discarded and 310 were used for analysis. The data was analyzed by using quantitative approach.

3.2 Data Analysis Techniques

For data analysis, quantitative approach was used for hypothesis-testing in order to explain causality between variables. The assessment of the proposed model was performed by implementing SmartPLS. The measurement of PLS model is based on the measurement of predictions through convergent validity having the loading values > 0.50 (Chin, 1988) and the value discriminant validity of Average Variance Extracted (AVE) of each construct. If the value of AVE is greater than the value of the correlation between the construct model discriminants, then it is said to have good validity (Fornell and Larcker, 1981). Moreover, for measuring

reliability of the scale, Cronbachs alpha was used with a value >0.6 (Sekaran, 2000). While the structural models were evaluated using R² for the dependent construct, Stone-Geiser Q² test for predictive relevance test and the t-test and the significance of the parameters of structural lines and criteria for measurement Tennenhaus GoF. Where, Tennenhaus GoF (GoF) = small $> = 0.1$, medium $> = 0.25$, large $> = 0.36$ (Kock, 2012).

4. Results and Discussions

4.1 Respondents' Demographics

As indicated in the Table 4.1 below, more than 64% respondents are females, while 90% of them are below 35 years of age. The demographic also indicates that 77% of the respondents have less than 5 years of research experience, while 28% are professionals working in universities, almost 6% are entrepreneurs and above 34% are PhD students with no work experience.

Table. 4.1

Respondents' Demographics

Demographics	Frequency	Percentage
Gender		
Male	110	35.5
Female	200	64.5
Age		
20-25	126	40.6
25-30	132	42.6
30-35	31	10
35-40	21	6.8
Performed Research Activity		
1-2 years	113	36.5
3-4 years	125	40.3
5-6 years	37	11.9
7-8 years	24	7.7
9-10 years	11	3.5

Work Experience

Professional	87	28.1
Non-Professional	31	10
Entrepreneur	19	6.1
Employee	66	21.3
No Experience	107	34.5

4.2 Reliability and Validity

Cronbachs Alpha was implemented for validity and reliability analysis. The results indicate that the value of Cronbachs Alpha of the measurement scale of independent variables government, industry and academia is greater than 0.8 and the value of dependent variable, AEI is also > 0.8 which shows the internal reliability of the scale. Similarly, composite reliability should be > 0.8 (Hair et al., 2013). As per Bagozzi and Yi (1988), the AVE value of every variable should be > 0.5 and individual Loading to be higher than 0.5 as per Hair et al., (2013). The results of the analysis of entrepreneurial intention to Cronbachs Alpha, Composite Reliability and AVE are given in the following table.

Table 4.2

Reliability and Validity

Variables	Items	Loadings	AVE	Cronbachs Alpha	Composite Reliability
Government			0.573	0.849	0.888
	GS 2	0.660			
	GS 3	0.621			
	GS 29	0.784			
	GS 30	0.846			
	GS 31	0.822			
	GS 32	0.781			
Industry			0.634	0.883	0.911
	Ind 52	0.873			
	Ind 53	0.853			
	Ind 54	0.878			
	Ind 73	0.579			
	Ind 74	0.776			
	Ind 75	0.778			
Academia			0.670	0.820	0.887
	Acd 23	0.547			
	Acd 43	0.886			
	Acd 44	0.906			
	Acd 45	0.880			
AEI			0.608	0.892 0.915	
	AEI 5	0.785			
	AEI 6	0.747			
	AEI 47	0.840			
	AEI 48	0.830			
	AEI 49	0.803			
	AEI 50	0.741			
	AEI 51	0.704			

4.3 Discriminant Validity Assessment

Discriminant validity has been tested and demonstrated in Table 4.3 that shows the value of AVE of each construct is greater than the variance shared between the constructs; thus, it indicates the sufficient discriminant validity (Fornell and Larcker 1981). These results are significant for newly proposed joint constructs.

Table. 4.3

Discriminant Validity Assessment

Latent Variable Correlations	Academia	AEI	Government	Industry
Academia	0.818			
AEI	0.621	0.780		
Government	0.744	0.570	0.757	
Industry	0.739	0.506	0.682	0.796

4.4 The Predictive Power of the Model

The summarized computed values for AEI is the dependent variable in the model. It determines 41.2% R² for AEI considering the international and industrial research perspective, which also indicates that the R² of 0.412 is greater than the acceptable threshold of 0.1 (Falk and Miller, 1992).

Table. 4.4

Effect Sizes of Latent Variables

	R²	f²	Effect Size Rating
Entrepreneurial Intention	0.412		
Government	-	0.037	small effects
Industry	-	0.001	very small effects
Academia	-	0.104	large effects

F² analysis is the calculation of effect size, which complements R² in the total impact size of the specific variables on dependent variables (Chin, 2010). The effect size calculation is based on the

following formula: $f^2 = (R^2 \text{ included} - R^2 \text{ excluded}) / (1 - R^2 \text{ included})$ (Cohen, 1988). The results of the study found that government support has small effect size ($f^2=0.037$) over academic entrepreneurial intention. Similarly, industry was also determined with very small effect ($f^2=0.001$), however, the determined effect size for academia ($f^2=0.104$) is overall a larger effect size on academic entrepreneurial intention. Hence, the Table. 4.4 above summarized the effect sizes of each of the latent variables.

Table. 4.4.1

Blindfolding Results

	SSO	SSE	Q ² (=1-SSE/SSO)
AEI	2,170.000	1,668.900	0.231

In this study, the analysis of predictive relevance of the AEI, a dependent variable, is also carried out. Therefore, blindfolding test was used to calculate the cross-validated redundancy Q² (Fornell & Cha, 1994) as shown in Table 4.4.1. The value of Q² for latent construct should be > zero, and the result of the blindfolding test is 0.232, which indicates the relevance of the predictive model (Chin, 1998).

4.5 Results and Discussion

As shown in Table 4.5, Government support was tested with academic entrepreneurial intention, which indicates it is significant with respect to the young researcher entrepreneurs in Pakistan.

Table.4.5

Path Coefficients and Hypothesis Testing

Hypothesis	Relationship	Path coefficient	T-statistics	Pvalues	Decision
H1	Government support -> AEI	0.232	2.968	0.002	Supported
H2	Industry support -> AEI	0.037	0.472	0.318	Not Supported
H2	Academia -> AEI	0.421	5.161	0.000	Supported

*** $p < 0.01$, ** $p < 0.05$

The results show that $\beta = 0.232$, $t\text{-value} = 2.968$, and $p = 0.002$, which suggest hypothesis 1 is supported. This indicates that Government support has significant influence on the Academic Entrepreneurial Intentions of young researchers to become entrepreneurs. Similarly, Industry support was tested with respect to the relationship between Industry and Academic Entrepreneurial Intention, which reveals that they have insignificant relationship to each other ($\beta = 0.037$, $t\text{-value} = 0.472$, $p = 0.318$). It means that industry infrastructure is not very much developed in Pakistan and the market is not encouraging the inventions of nascent entrepreneurs because there is no proper channel of communication followed between industry and academia. Therefore, industry is insignificantly related to Academic Entrepreneurial Intention of young researchers. Apart from that, Academia support was tested with respect to its relationship with Academic Entrepreneurial Intention and results show that ($\beta = 0.421$, $t\text{-value} = 5.161$, $p = 0.000$) is significantly related to Academic Entrepreneurial Intention. It indicates that the role of Academia is very encouraging and positive in the entrepreneurship sector. This means that Academia supports young researchers by providing them a platform,

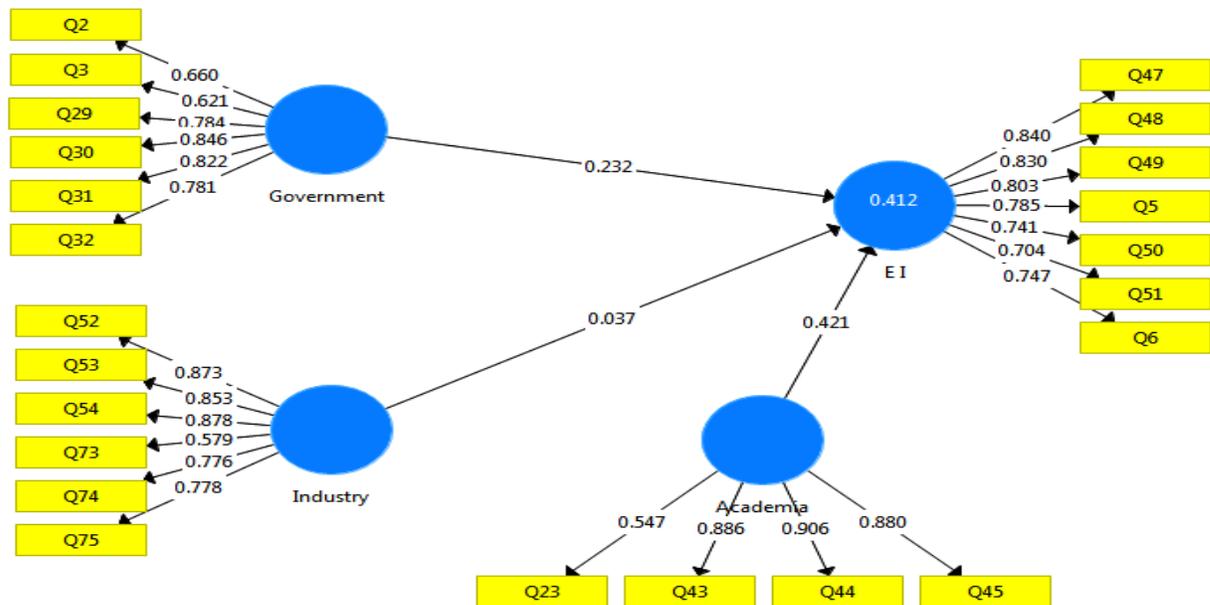


Figure. 2

Results of Structural Model

where they can start their own business. It also improves the quality of young researchers to become reliable and useful entrepreneurs and provide them funding for startups and boosts the financial and economic welfare of the country. In addition to that, the result also shows R^2 for Academic Entrepreneurial Intention is 0.412 which indicates that the variables are explained 41.2% of the variance of the Academic Entrepreneurial Intention and remaining 58.8% is explained by other variables, which are not included in this study.

4.6 Discussion

The study was conducted in order to analyze the influence of Triple Helix Model on the Academic Entrepreneurship Intentions in Pakistani universities. The conceptual framework of this model suggests that 41.2% of the variance of AEI has surpassed the variance explained in the previous studies on AE. (Goethner, Obschonka, Silbereisen, & Cantner, 2009; Fernández-Pérez et al., 2014). The empirical evidence for the effects of Triple Helix Model that includes Government, Industry and Academia on Academic Entrepreneurial Intentions which reveals that there are some encouraging aspects that influence the intention of young entrepreneur researchers. The findings of this study suggest that academic support is the most important factor for developing the young researchers' Academic Entrepreneurship Intentions. These findings are in consistent with the findings of (Fini et al. , 2017;Levie and Autio 2008) which support the idea of establishing academic incubator access, offices for research innovation and commercialization at universities for promoting new venture creation, innovation, fostering researchers' motivation arising from researcher activity. In addition to that, this study also reveals that the female academic researchers are more eager to start their business than their male counterparts. Thus, the role of academia is very positive and encouraging for the young researchers to choose their career choice as an entrepreneur.

The results of this study indicate that government support is other key element for fostering the Academic Entrepreneurial Intentions of young researchers which are consistent with the findings of (Fini et al., 2017, Audretsch, Grilo, and Thurik2007). These results are providing supporting signals to the Government of Pakistan's initiatives for encouraging the young researchers for funding new research and supporting the incubators within universities. Government of Pakistan through Higher Education Commission (HEC) has also enhanced a number of research

programs, technology park funding, research grants, and ORIC and establishing incubation center at universities. This helps in determining young researchers' attitude and belief in government policies and motivates them towards spin-off the new venture from their research.

According to above mentioned results, it is suggested that the role of academia is fostering a change in this environment by promoting a culture that includes entrepreneurial activities as a part of the academic professional curriculum. Undoubtedly, business school education will be geared towards startups and innovativeness to foster entrepreneurship (Plaschka and welsch, 1990; Solomon and fernald, 1991). The relationship between the Industry support and AEI was positive, but insignificant in contrast with a lot of studies, and in consistence with finding of (Fini e tal., 2017). These results are indication of weak academia and industry linkages in Pakistan. The results also indicate that the **academic research work** exists in separate SILO's within Pakistani context (Gul & Ahmed, 2012). Therefore, there is a dire need of time in Pakistan for academic community to focus on Knowledge sharing and transferring with industries. This can be done by promoting and sharing the scientific activities and research with industry and getting inputs from them for getting information about trends and needs of industry.

5. Implication and Limitation

This study proposed both the theoretical and practical implications. From theoretical punt of view, the study instigates the THM impact on AEI. The literature on AEI has mainly focused on psychological and individual factors that have ignored the integration between TPB and THM in order to analyze the impact of AEI. Secondly, the study is operationalizing Triple Helix approach for the first time to provide a better analysis of the helices (Fini et al. 2012; Fini, Grimaldi, and Sobrero, 2009).

From the practical point of view, three variables, Government, Industry and Academia support, are shaping the attitude towards AEI of young researchers. This study also focused on several implications given below for three helices. First, the government can promote and stimulate entrepreneurial activities among young researchers. In addition to that, government can also formulate the financial policies that encourage new startups based on the results of research. Second, the universities can facilitate young researchers with patent and technology transfer

offices and can also introduce the promotional activities that create awareness among young researchers and local entrepreneurs. It can also provide incubators that foster academicians to start their own business. Third implication is a good rapport can be created among companies that operate in the same environment and encourage young researchers to become entrepreneurs.

The limitations of the study for further research on AEI is the value that implies that the Triple Helix variables explained only 41.2% variance in AEI of young researchers. Hence, the future research requires to include some variables that can influence the entrepreneurial intention on researchers. Secondly, the data was collected from Pakistani universities; therefore, to further validate the entrepreneurial intention on young researchers, the data to be collected from other developing countries in order to compare and measure the relative growth in the entrepreneurship sector.

6. Conclusion

Academic Entrepreneurial Intention (AEI) of young researchers is a little explored area of research. The purpose of this study was to explore the determinants of AEI in the context of Triple Helix Model (THM). The results of this study show that two out of three variables, Government and Academia have a significantly positive relationship to the Academic Entrepreneurial Intentions, whereas Industry has an insignificant relationship to AEI. It also shows that Industry support does not shape the intentions of young researchers towards entrepreneurial behavior in Pakistan because of weak Industry- Academia ties in labor market. In a nut shell, this study is the first of its kind carried out in Pakistan and it was analyzed comprehensively integrating three helices of the THM and cohesively evaluated three variables addressed in isolation with respect to previous studies. It also shows that universities are promoting entrepreneurship that contributes in triple helix configurations. Thus, the role of academia and government is to promote academic incubator and develop technology-transfer infrastructures that play a key development of new venture creation intentions and there is need of more close interaction between industry and academia to get greater no academic spin-offs which is key for innovation at national level and economic development.

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