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Refining the Relationship between Entrepreneurial Skills and Start-Up-Behavior: The Role of Fear of Failure and Age-Based Self-Image

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Abstract

This study provides information about how entrepreneurial skills (pro-activity, risk tolerance, and creativity) affect start-up-behavior. This study integrates entrepreneurial skills as an important aspect to the proposed model based on Ajzen's theory to establish intention-behavior link. Furthermore, fear of failure and age-based self-image are featured as negative aspects in this model to explore how these two factors deteriorate intention-behavior link. Data were collected from owner/managers of SMEs in Pakistan. Descriptive statistics, moderated hierarchical regression and structural equation modeling (SEM) approach were used for the purpose of analysis. The findings revealed that entrepreneurial skills have a positive relationship with perceived behavior control, subjective norms, and personal attitude. Furthermore, results of the study showed that perceived behavior control, subjective norms, and personal attitude also have positive relations with start-up intentions leading to start-up behavior. Moreover, the results suggested a negative moderation effect of fear of failure and age-based self-image on intention-behavior link.

Keywords: entrepreneurial skills, start-up intention, fear of failure, start-up behavior, subjective norms, personal attitude, and perceived behavior control.

1. Introduction

Entrepreneurship research in the21st century is largely focused on the antecedents of start-up behavior (Hulbert et al., 2013; Kam-Sing Wong, 2014; Martens et al., 2016; Tang, 2008; Yasir et al., 2017). Several authors (e.g. Fayolle and Gailly 2005; Krueger, 2007; Linan, 2008; Linan et al., 2013) have used the theory introduced by Ajzen to explain intention-start-up-behavior link. Theory of planned behavior provided by Ajzen (1991) offers a framework through which this study can explain and predict behaviors of individuals. According to this theory, perceived behavior control, personal attitude, and

subjective norms are motivational factors for an individual to become an entrepreneur (Kautonen et al., 2013).

Researchers frequently applied the concept of Ajzen's theory to correlate motivational factors with entrepreneurial start-up intention and start-up behavior (Kibler et al., 2014; Kautonen et al., 2015). For instance, researchers attempted to expand the concept of Ajzen theory with primary stance to prove motivation-intention-behavior link using various antecedents such as self-perceptions (Linan, 2008), as well as role model and business image (Rosique-Blasco et al., 2016) etc. Besides, the ability of the individual to generate ideas for opportunity recognition and then responding to these opportunities is considered as an important element for the promotion of entrepreneurship (Baum and Locke, 2004; Hulbert et al., 2013; Hajizadeh and Zali, 2016).Therefore, there is strong need to make efforts to explore the entrepreneurial skills which enhance individual motivation towards start-up intention and behavior.

Entrepreneurial skill is the ability to recognize opportunities, create new ideas and physical implementation of these ideas (Raposo and do Paco, 2011; Majid et al., 2017). In entrepreneurial literature, three skills that have been highly credited by researchers are proactivity (Martens et al., 2016), risk tolerance (Reid and de Brentani, 2012) and creativity (Rahman et al., 2015). Entrepreneurial skills (proactivity, risk-tolerance and creativity) promote and strengthen individual attitude towards entrepreneurship (Rosique-Blasco et al., 2016). Entrepreneurial skills provide high-enough confidence to perform entrepreneurial activities (Sambasivan et al., 2009; Linan, 2008). In this sense, when the individual beliefs are positive regarding entrepreneurial skills, it is probable that he/she is highly motivated towards the start-up behavior.

Researchers explained the process and consequences of start-up of new ventures and frequently highlighted the significance of positive factors that promote and influence start-up intention towards start-up behavior. Besides, positive factors some negative aspects such as a higher failure rate of businesses (Zimmerer et al., 2008), financial constraints (Buera et al., 2015), and environmental uncertainty (Kuratko et al., 2015) etc. are considered as destructive elements for consequent behavior (Wood et al., 2014). Beyond, these macro level constraints, individual level destructive elements that hinder their decision making are also considered in this study to explain their critical role on intention-behavior link. In the current study, we apply age-based self-image and fear of failure as a moderator for the process of transforming start-up intention into start-up behavior. The past studies confirmed that young entrepreneurs have higher perception regarding the entrepreneurship; they are more likely to turn their intention into start-up behavior (Levesque and Minniti, 2011). Moreover, the contingent effect of fear of failure on the relationship between start-up intention and behavior is also analyzed to make the model more appropriate and accurate. Higher level of fear or feeling for doing something inhibits individuals from the conversion of their start-up intention into actual action i.e. decision about business start-up (Tsai et al., 2016).

Thus, the purpose of the current study is to highlight both constructive and destructive elements for the growth of entrepreneurship. The study in hand contributes to entrepreneurship literature and research through four different ways. First, this study contributes by discovering the impact of individual's perception regarding entrepreneurial skills towards entrepreneurial activities. Second, it enriches the prevailing literature on start-up behavior by discovering the antecedents of start-up behavior. Third,

it pursued to establish the moderating effect after considering the age-based self-image and fear of failure. Lastly, by examining the interrelationship between the constructs of entrepreneurial skills, motivational factors, start-up intention and start-up behavior, it attempted to explore the chains of consequences and antecedents that may influence the entrepreneurial start-up behavior. In order to succeed these purposes, section-2 discusses the concept of entrepreneurial skills, motivational factors, start-up intention, and moderating role of fear of failure and age-based self-image, and their relevance towards start-up behavior. Section-3, explains the study design, participants, data collection, validity, reliability, and overall methodology. Section 4 and 5 presents the results and discussion respectively.

2. Literature review

2.1Entrepreneurial Skills and Motivational Factors

It has been observed that motivation is the fundamental force for start-up intention and behavior (Ajzen 1991). Perceived behavior control, personal attitude, and subjective norms are three predictors of entrepreneurship termed as motivational factors that provide some foundations for the process of entrepreneurial activities (Miralles et al., 2015). Personal attitude of an individual comprises of his/her own satisfactory or unfavorable personal valuation towards becoming an entrepreneur. Subjective norms perceived by an individual are the result of social pressure from family, friends, and society to carry out entrepreneurial behavior. Furthermore, perceived behavior control of an individual is concerned with difficulties or ease he/she perceived for the execution of a particular behavior (Ajzen, 1991, 2002).Linan (2008) found that high level of personal attitude, subjective norms and perceived behavior control have positive effects on entrepreneurship. Discussing the motivation toward entrepreneurship, Rosique-Blasco et al. (2016) focused on entrepreneurship-related knowledge and personal skills as a driving force that encourages individuals towards entrepreneurship.

Based on previous literature, it is evident that specific entrepreneurial skills possessed by managers play an important role to promote his/her motivation towards entrepreneurship (Linan et al., 2013; Raposo and do Paco. 2011).Entrepreneurship researchers (Rosique-Blasco et al., 2016) are in the favor of the argument that managers with a higher level of entrepreneurial skills successfully execute entrepreneurial activity. Rosique-Blasco et al. (2016) and Zampetakis et al. (2009) explored that managers with higher level of creativity, proactivity and risk-tolerance abilities are more inclined towards entrepreneurship activities. Creativity skill is related to the individual ability for searching and exploiting existing opportunities (Rahman et al., 2015), while proactivity is the ability to anticipate future changes and then take initiative to act upon these changes to capitalize on opportunities (Martens et al., 2016). Risk-tolerance is the willingness to make risky commitments to take creative and proactive initiatives (Reid and de Brentani, 2012).

Sakari et al. (2013) are in the favor of the argument that creativity, proactivity, and risk-tolerance provide more confidence to start a new business. De Noble et al. (1999) also found that possessing high level of entrepreneurial skills enhances self-motivation of individuals needed for the execution of behavior as well as achieving a career option (DeNoble et al., 1999). Entrepreneurship related skills positively contribute to enhance individual confidence, perceived desirability and personal attitude to become an

entrepreneur (Martin et al., 2013; Zali and Chaychian, 2017). Manager with a higher level of entrepreneurial skills increases his/her perception towards behavior control which may enhance entrepreneurial start-up intention (Wilson et al., 2007). Entrepreneurial skills are the most relevant factor and a powerful determinant of motivation which increases the likelihood for the development of start-up intention and subsequent behavior (Baum and Locke, 2004). Moreover, individuals who possessed entrepreneurial knowledge and skills receive more pressure from family, friends, and society to become an entrepreneur (Kibler et al., 2014). Skills and knowledge related to entrepreneurship process has increased the level of social pressure to perform positive entrepreneurial behavior (Zampetakis, 2008). Positive perception of Individuals towards creativity, proactivity and risk-tolerance make his/her motivation stronger for self-employment (Yang and Chau, 2016).In line with these statements, the current study formulate the following hypotheses:

- **H_{1a}**: Entrepreneurial skills are positively related with personal attitude
- **H_{1b}**: Entrepreneurial skills are positively related with subjective norms
- **H_{1c}**: Entrepreneurial skills are positively related with perceived behavioral control

2.2 Motivational Factors and Start-Up Intention

Intention is defined as determination, aim or plan to do a specific thing; or an idea that we plan to carry out. According to Bachleda et al. (2012), start-up intention deals with readiness of an individual to execute a behavior. Theory of planned behavior assumed that personal attitude, subjective norms and perceived behavioral control are the three independent determinants of intention (Ajzen2002, 1991). Some studies (e.g. Fayolle and DeGeorge 2006; Linan, 2004; Murugesan and Dominic, 2014; Zali and Chaychian, 2017) empirically tested the relationship and confirmed that motivational factors are strong elements that accelerate entrepreneurial motivation towards start-up intention. Moreover, researcher confirmed that managers with a higher level of personal attitude, subjective norms and perceived behavioral control are more likely to engage in start-up intention and entrepreneurial activities (Yurtkoru et al., 2014). Linan et al. (2011) also investigated the same relationship and confirmed that perceived behavior control, subjective norms, and personal attitude have a significant effect on start-up intention. This has been hypothesized in our study as follows:

- **H_{2a}**: Personal attitude is positively related with start-up intention
- **H_{2b}**: A subjective norm is positively related with start-up intention
- **H_{2c}**: Perceived behavioral control is positively related with start-up intention

2.3 Start-Up Intention and Start-Up Behavior Link

The basic idea of the Ajzen's theory is that intentionality to the behavior is a vital element that culminates in every planned behavior. In the backdrop of every behavior, start-up intention provides some basic and initial foundation for the course of planning and performing behavior. In line with the concept of Ajzen's theory, there appears to be a strong connection among entrepreneurial initial intention and ultimate behavior: the greater the intention the greater will be the behavior to perform action (Lortie and Castogiovanni, 2015). Schlaegel and Koenig (2014) confirmed the association between entrepreneurial start-up intention and subsequent behavior. Researchers e.g. Kautonen et al. (2013) and Hack et al. (2016) argued that intention has an important role for the

development of entrepreneurial start-up behavior. Moreover, entrepreneurial intention provides a link between individual motivation and subsequent behavior i.e. start-up of a new venture (Kautonen et al., 2013; Yasir et al., 2018). Sheeran (2002) reports a 0.53 mean correlation among entrepreneurial start-up intention and subsequent behavior, whereas, Armitage and Conner (2001) reports a mean correlation of 0.49 in his study on the diverse behavioral domains based on theory of planned behavior. Based on the empirical evidence for the intention-behavior link this study formulates the following hypothesis:

- **H_3**:Start-up intention is positively related with start-up behavior

2.4 Moderating Role of Fear of Failure

Fear means being afraid of failing or some one's feeling of uncertainty for doing something (Cacciotti and Hayton, 2015). Fear of failure occurs when we allow that fear to restrict us from performing, or decision making about business start-up (Tsai et al., 2016; Morgan and Sisak, 2016). Along with positive forces that drive individuals' start-up intention into subsequent behaviors, there may also be some forces that slow down the process of entrepreneurship. Since the process of entrepreneurship is based on risk taking and uncertainty, Caliendo et al. (2009) found that individual's perception about fear of failure is considered as a powerful factor inhibiting individuals from action. The literature on entrepreneurship provides evidence for the influence of an individual's emotions such as fear of failure on subsequent behavior (Cacciotti and Hayton, 2014). It is noteworthy that individual's perception about fear of failure has been considered as a destructive emotion and an experience of humiliation for consequent behavior (Cacciotti et al., 2016; Morgan and Sisak, 2016).

Welpe et al. (2012) found that fear of failure adversely affect individuals' decision making capability related to exploiting an opportunity. Vaillant and Lafuente (2007) also argued that fear of failure is one of the important factors behind the declining rates of successful enterprise development. Fear of failure leads people towards a more careful attitude when their start-up intentions are going to be a subsequent behavior or turned into actions (Van Gelderen et al., 2015). Welpe et al. (2012) explained that action avoidance and delay are a result of fear that inhabits start-up intentions to be turned into a subsequent behavior. Increasing level of fear of failure decreases the intention to start a business, while lower level of fear of failure triggers the promptness to take action related to entrepreneurship (Koellinger et al., 2013). Therefore,

- **H_4**: High fear of failure reduced the start-up intention to be turned into a start-up behavior, whereas, low fear of failure enhances the chances to turn start-up intentions into a start-up behavior

2.5 Moderating Role of Age-Based Self-Image

Previous literature on entrepreneurship mainly considered age as a control variable. However, some of the studies (e.g. Parker, 2009) have found that it is a strong element of entrepreneurial behavior. Kulik et al. (2014) found that age has become a major focus of both empirical and theoretical studies. The current study used age-based self-image as a moderator between the relationship of entrepreneurial start-up intention and actual entrepreneurial behavior. Age-related self-image increases individual's positive perception towards entrepreneurship and is helpful for transforming start-up intention into a subsequent entrepreneurial behavior (Mitchell and Shepherd, 2010). Ageing factor

of an individual is critical for the conversion of initial intention into business start-up behavior. Hence, it has been observed that younger people are more likely to engage in start-up activities while managers in higher age brackets feel hesitated to make decision for their own businesses (Levesque and Minniti, 2006).Individuals' age-based self-image influences intention-behavior link(Kautonen et al., 2015). Kulik et al. (2014) found that if an entrepreneur has a negative perception about entrepreneurial activities with respect to his/her age, there will be a limited chance for turning the initial intention into desired behavior. Therefore, this study assumes that age-based entrepreneurial self-image moderates intention-behavior link.

- **H_5**: High age-based self-image enhances the chances to turn start-up intentions into a start-up behavior, whereas, low age-based self-image reduced the start-up intentions to be turned into a start-up behavior

Figure.1 shows a research model which provides information about the role of entrepreneurial skills as a foundation of start-up intentions leading to start-up behavior and moderating role of fear of failure, and age-based entrepreneurial self-image. The study in hand, used eight variables i.e. entrepreneurial skills, perceived behavior control, subjective norms, personal attitude, start-up intention, fear of failure, age-based self-image, and start-up behavior.

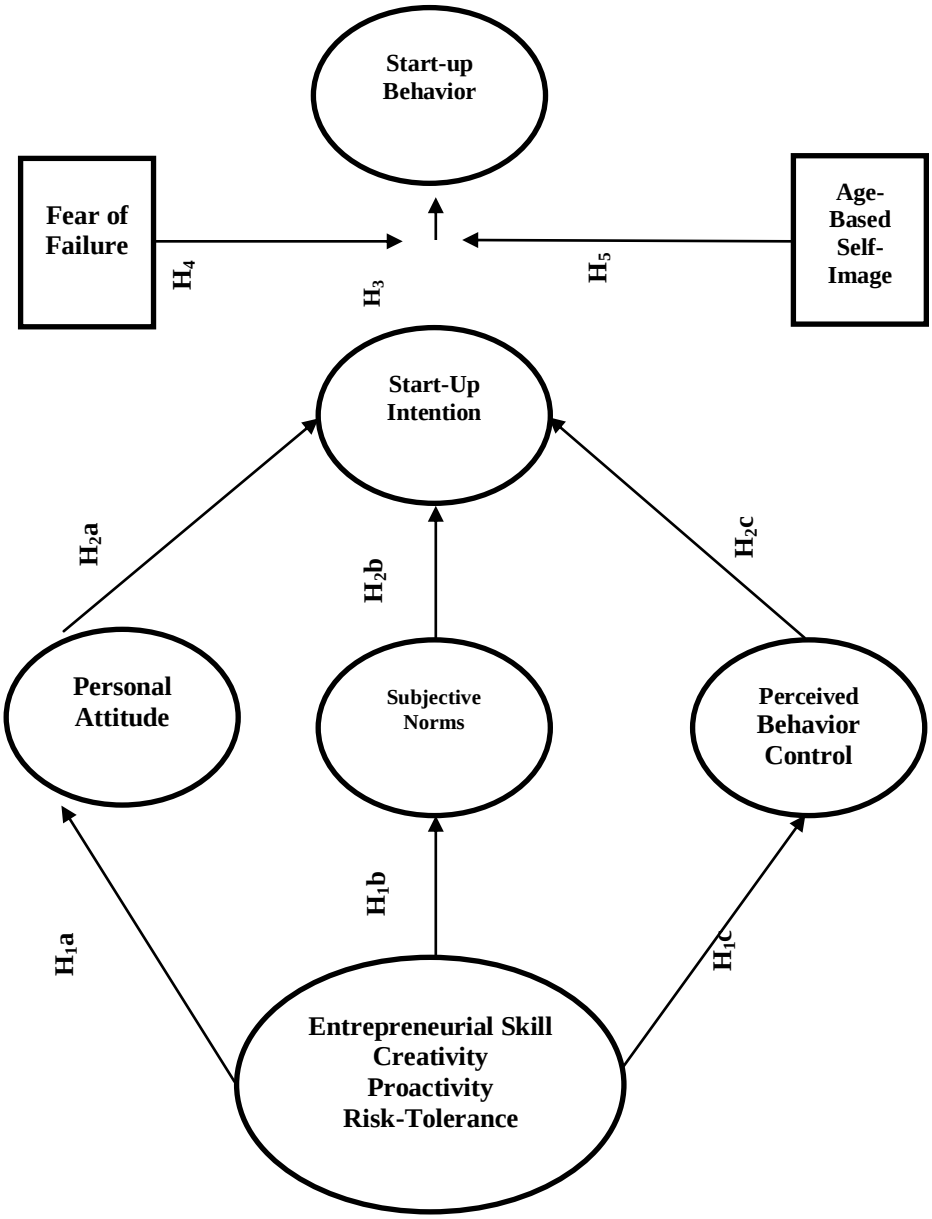

Figure 1: Research Model

3. Research methods

3.1 Sample and Data

The empirical analysis for the study in hand was carried out on a sample of owner/managers of SMEs and data were collected through questionnaires. Data collection process was completed during the period of 18 August 2016 to 30 March 2017. Questionnaires were administered to owner/managers of SMEs. Out of 623 participants,

87.32% were males and 12.68% were females. The respondents' age was between 25 to 50 years.

3.2 Measurements

In order to measure the construct of entrepreneurial skills (creativity, proactivity and risk-tolerance) a 9-item scale (A1 to A9) formulated by Saboia and Martin (2006) and Seibert et al. (2001) was utilized. In addition, Entrepreneurial Intention Questionnaire (EIQ) was used which was modified by Linan and Chen (2009). Items B1 to B20 were used to measure the four constructs, perceived behavioral control, personal attitude, subjective norms and start-up intention. Items B1 to B6 were used to measure the construct of personal attitude; items B7 to B11measured the construct of perceived behavior control, whereas, the items B12 to B17, and B18 to B20 were used to measure the start-up intention and subjective norms respectively.

Items C1 to C9 were used in order to measure the three constructs, action fear, aged-based self-image and start-up behavior. The dependent variable start-up behavior was measured with 3-item scale formulated and used by Kautonen et al. (2015). Moderating variable fear of failure was measured with 2-item scale and adapted from the work of Van Gelderen et al. (2015). Second, moderating variable aged-based self-image was measured with 4-item scale and adapted from the work of Kautonen et al. (2015).

To understand the nature of the study and the relevant constructs in a better way, questionnaires were provided to the respondents in a local language (Urdu), which were transcribed back into English in a later stage. Table 1 contained the indicators of reliability for the measurement items used in this study.

Table 1: Descriptive and Reliability Statistics

Construct	Item	Loading	Mean	Std.dev	α	AVE
Entrepreneurial Skill	A1	0.7350	2.5498	1.11782	0.70	0.523
	A2	0.7170	2.6415	1.03641		
	A3	0.6193	2.6672	1.10198		
	A4	0.7381	2.5498	1.11782		
	A5	0.7438	2.6415	1.03641		
	A6	0.7019	2.6672	1.10198		
	A7	0.6172	2.6615	1.07641		
	A8	0.7193	2.6772	1.10298		
	A9	0.7081	2.5298	1.10682		
Personal Attitude	B1	0.7579	3.6672	1.00089	0.71	0.731
	B2	0.8634	3.4196	1.14312		
	B3	0.8787	3.9791	0.83089		
	B4	0.7838	3.3146	0.93089		
Perceived Behavior Control	B6	0.8109	3.9003	0.87165	0.67	0.629
	B8	0.7597	3.6479	0.97628		
	B9	0.8374	3.9116	0.97978		
	B10	0.8564	3.4164	0.93974		
Start-Up Intention	B12	0.7258	3.6174	1.09672	0.76	0.662
	B13	0.8105	3.9357	1.03826		
	B15	0.8658	3.7283	0.98873		
	B16	0.8522	3.6174	1.09672		
Subjective Norms	B18	0.8309	3.8003	0.84165	0.71	0.649
	B19	0.7797	3.6879	0.98628		
	B20	0.8974	3.8616	0.92978		
Start-Up Behavior	C1	0.8500	3.6672	1.00089	0.81	0.729
	C2	0.8264	4.2685	0.79871		
	C3	0.9310	3.6672	1.00089		
Age Based Self-Image	C4	0.7479	4.2685	0.79871	0.85	0.746
	C5	0.8301	3.7315	0.86268		
	C6	0.8838	3.9791	0.83089		
	C7	0.8107	3.9807	0.85293		
Fear Of Failure	C8	0.8429	3.9518	0.99318	0.75	0.766
	C9	0.8631	3.9261	0.84803		

3.3 Structural Equation Modeling

SEM was performed to confirm the formulated hypotheses. Utilizing the statistics of SEM, items (B5, B7, B11, B14 and B17) were removed from any further analysis. For better estimates of the effects of the independent and moderating variables on the dependent variable, current study controlled several factors relevant to the small and medium enterprises. Based on previous literature, firm size and firm age were considered as controlled variables.

4. Results

Correlation among variables is shows in Table 2.The coefficients of correlations confirmed the association between entrepreneurial skills and personal attitude (r = 0.28),

entrepreneurial skill and perceived behavior control (r = 0.40),entrepreneurial skill and subjective norms (r = 0.39), personal attitude and start-up intention (r = 0.49), perceived behavior control and start-up intention (r = 0.41),subjective norms and start-up intention (r = 0.51),start-up intention and start-up behavior (r = 0.40), fear of failure and start-up behavior (r = -0.22), and age-based self-image and start-up behavior (r = -0.15).

Table 2: Correlation among Variables

Variables	1	2	3	4	5	6	7	8	9	10
Firm size	1									
Firm age	.06	1								
Entrepreneurial skill	.05	.03	1							
Personal attitude	-.64	.02	.28**	1						
Perceived behavior control	.01	.25	.40**	.43**	1					
Subjective norms	.01	.09	.39**	.48**	.34**	1				
Start-up intention	.07	-.02	.60**	.49**	.41**	.51**	1			
Start-up behavior	.02	.04	.56**	.21**	.33**	.44**	.40**	1		
Fear of failure	.01	-.01	.26**	.14**	.16**	.01	.19**	-.22**	1	
Age based self-image	.10*	-.01	.04	.15**	.10*	.02	.22**	-.15**	.49**	1

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

4.1 Hypotheses Testing

Table 3 depicts the results of SEM. The results confirmed that proposed relationships between entrepreneurial skills and personal attitude providing (0.287) supports Hypothesis 1a (entrepreneurial skills --> personal attitude).Entrepreneurial skills and subjective norms providing (0.393) support Hypothesis 1b (entrepreneurial skills --> subjective norms). Whereas, entrepreneurial skills and perceived behavior control providing (0.409) support Hypothesis 1c (entrepreneurial skills --> perceived behavior control).

Table 3: Results of Path Analysis

Path to		Path from	Estimate	S.E	C.R.	P
Personal attitude	←	Entrepreneurial skill	.287	.043	7.452	***
Subjective norms	←	Entrepreneurial skill	.393	.037	10.653	***
Perceived behavior control	←	Entrepreneurial skill	.409	.038	11.167	***
Start-up intention	←	Personal attitude	.490	.031	14.009	***
Start-up intention	←	Social norms	.515	.035	14.948	***
Start-up intention	←	Perceived behavior control	.419	.035	11.496	***
Start-up behavior	←	start-up intention	.404	.046	11.006	***

Results in Table 3 confirmed the proposed relationship between (personal attitude -->start-up intention) with coefficient of (0.490) which is strong enough support for Hypothesis 2a. The relationship between (subjective norms --> start-up intention) confirmed and supports Hypothesis 2b with coefficient of (0.515) and the relationship (perceived behavioral control -->start-up intention) confirms and supports Hypothesis 2c with coefficient of (0.419). The results also support Hypothesis 3 (start-up intention -->start-up behavior with coefficient (0.404).

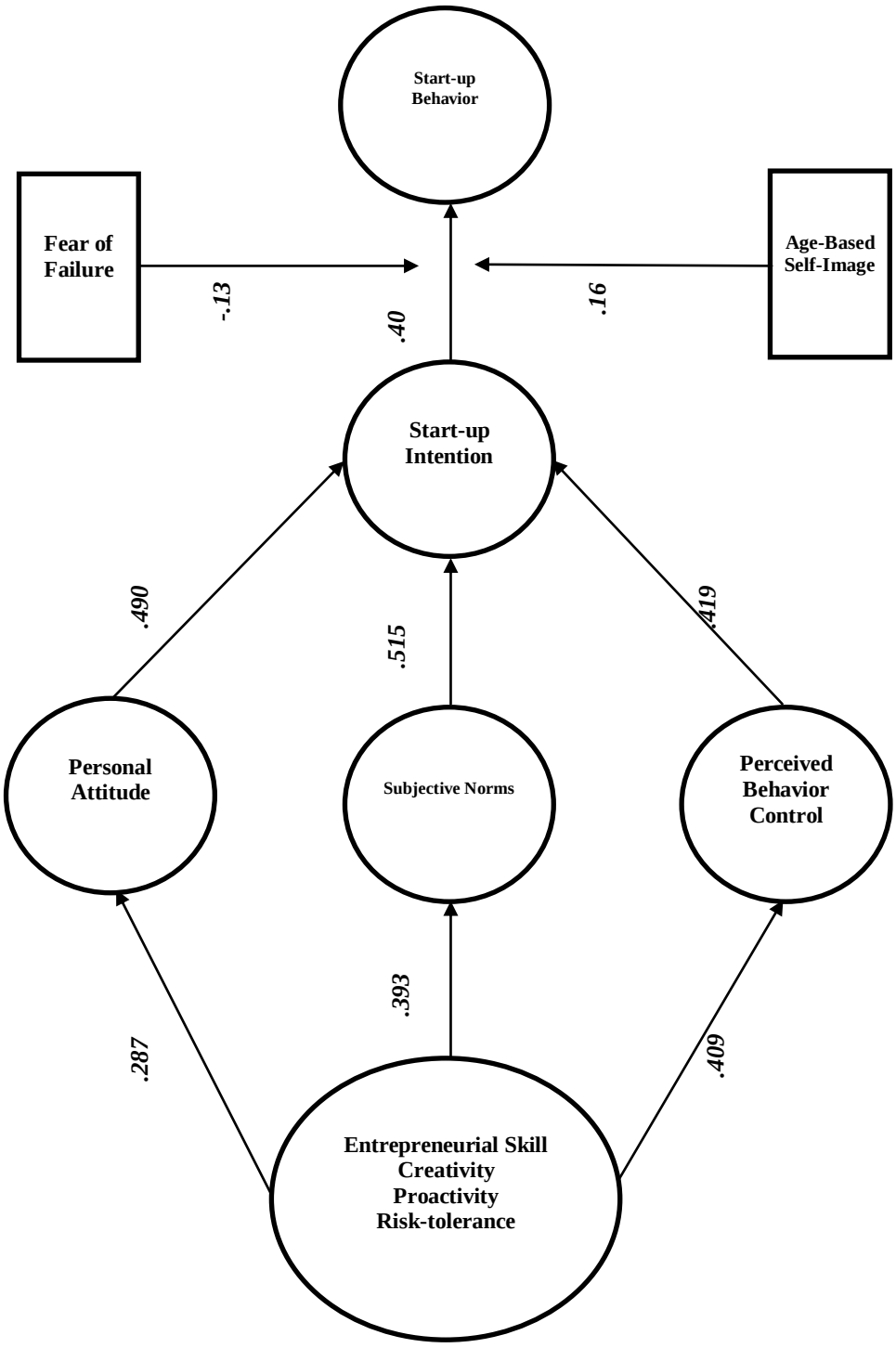

Figure 2: Standardized Coefficients of Path Analysis

4.3 Moderating Effect

For the moderating role of fear of failure and age-based self-image we used hierarchical regression. Table 4 presents the results of moderation effect through 3 Models. To observe the information about base model we used Model 1 and 2 in Table 4. To find out the moderation effect Model 3 is used. Coefficients shown in Model 3 explain the moderation of fear of failure on the connection between start-up intention and start-up behavior. The coefficient of the interaction term shown in Model 3 i.e. start-up intention x fear of failure which indicates that fear of failure adversely impacts the connection between start-up intention-behavior link (β = -.13, p< .01). Furthermore, slope analysis for moderation suggested by Aiken et al. (1991) was also conducted. The outcomes of slope analysis depicts in Fig. 3.

The results presented in Table 4 and Figure 3 reveal that start-up intention is not a driving force for start-up behavior when entrepreneurial fear of failure is high; whereas, start-up intention significantly increases start-up behavior when entrepreneurial fear of failure is low. The results of Model 3 in Table 4 provided that Hypothesis 4 was accepted.

Model 3 also shows the result of the interaction term i.e. start-up intention x age-based self-image presented in Table 4 indicates that age-based self-image affects the association between start-up intention and start-up behavior (β = .16, p<.01). The results confirm that age-based self-image influence intention-behavior link; young entrepreneurs show more intention towards entrepreneurship, whereas, individuals with superior age are less oriented towards converting their intention into behavior.

Table 4: Results of Multiple Hierarchical Regressions

(a) Moderating Effect of Fear of Failure	Model 1	Model 2	Model 3
Firm size	-.11	-.01	-.03
Firm age	.07	.05	.07
Start-up intention		.46**	.43**
Fear of failure		-.30**	-.32**
INT_x_FF			-.13**
R^2	.002	.255	.272
Adjusted R^2	-.002	.251	.266
ΔR^2	.002	.254	.017
Δ F	.507	105.14	14.11
(b) Moderating Effect of Age-Based Self-Image			
Firm size	-.002	-.013	-.032
Firm age	.096	.090	.088
Start-up intention		.46**	.40**
Age-based self-image		.26**	.24**
INT_x_ABSI			.16**
R^2	.002	.230	.251
Adjusted R^2	-.002	.225	.245
ΔR^2	.002	.228	.021
Δ F	.507	91.36	17.49

The result of slope analysis for age-based self-image is shown in Figure 4. Slope analysis indicates that relationship between start-up intention and start-up behavior is significantly increases with high age-based self-image or start-up intention and start-up behavior relationship is significantly decreases with low age-based self-image. The results of Model 3 in Table 4 provide significant evidence to accept the study Hypothesis 5.

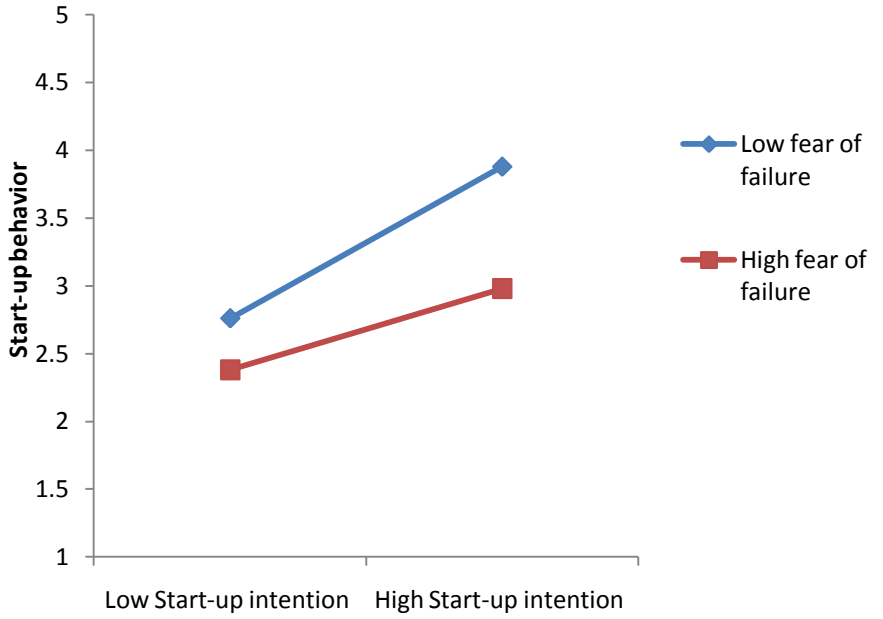

Figure 3: Slope Analysis SUI X FF on Start-Up-Behavior

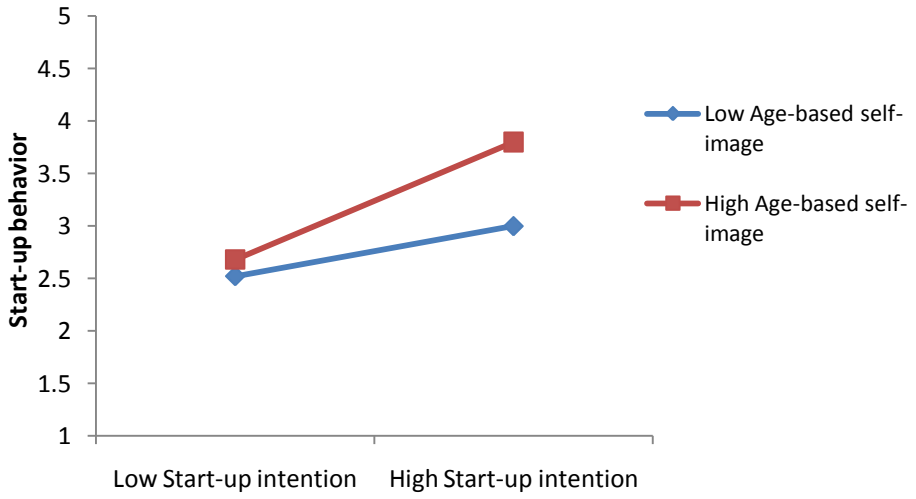

Figure: 4 Slope Analyses for SUI X ABSI on Start-Up Behavior

5. Discussion

This study had a primary concern to empirically test the probable influence of entrepreneurial skills on the motivational factors, start-up intention and start-up behavior.

The findings of the study confirmed direct association among entrepreneurial skills, motivational factors, start-up intention and start-up behavior as well as the moderating role of fear of failure and aged-based self-image on start-up intention and start-up behavior link. The results of the study provide useful insights.

First, the results support the findings of the previous researchers and provide insight that entrepreneurial skills positively and significantly affect personal attitude. In line with these findings, it is evident that positive perception regarding entrepreneurial skills increases the self-valuation of an individual to become an entrepreneur (Ajzen 1991; Linan, 2008; DeNoble et al., 1999). Furthermore, findings also suggest that higher pressure from family, friends and society to become an entrepreneur increases the chances to get involved in entrepreneurial activities (Kibler et al., 2014). Moreover, the results of the study confirm that entrepreneurial skills positively and significantly affect perceived behavior control. Hence, the study hypotheses H_1a, H_1b and H_1c were supported.

Second, it is important to highlight that motivational factor such as personal attitude; subjective norms and perceived behavior control contribute for the development of individual intention towards entrepreneurship. The major contribution of this research is that motivational factors play an influential role for developing individual intention towards start-up behavior. The outcomes of the study support a significant association between personal attitude and start-up intention, and suggest that favorable personal attitude towards becoming an entrepreneur shows an imperative role in the improvement of the start-up intention. Researchers (Yurtkoru et al., 2014) confirmed this relationship and found that managers with a higher level of personal attitude show more willingness to engage in start-up intention. In addition, this study explains the predictive role of subjective norms towards start-up intention. Lortie and Castogiovanni (2015) also found that subjective norms increase the pressure to become an entrepreneur, and augment the individual start-up intention that would be helpful for execution of desired behavior. The results of the study also confirmed that perceived behavior control positively and significantly affect start-up intention. In line with previous studies (e.g. Baum and Locke, 2004; Murugesan and Dominic, 2014) it is evident that higher self-perception of behavior control explains the start-up intention and to become involved in entrepreneurial activities. Therefore, the study hypotheses H_2a, H_2b, and H_2c were confirmed.

Third, we examined the relationship between start-up intention and start-up behavior. The, results of the H_3 "start-up intention has a positive relationship with start-up behavior" explain that start-up intention is a powerful stimulus of desired behavior. In line with the outcomes of past studies e.g. De Clercq and Arenius (2006); Lortie and Castogiovanni (2015); Schlaegel and Koenig (2014) that explained start-up intention and behavior links, this study explains the predictive role of start-up intention towards start-up behavior. Hence, the study hypothesis H3 was confirmed.

Fourth, we also examined the role of fear of failure as a moderator for intention-behavior link. The study hypothesis 4 analyzed the moderating role and provides insight that effect of intention on start-up behavior become stronger when owner/managers perceived lower fear of failure, while higher fear of failure reduces the chances that initial start-up intention would turn into desired behavior. Managers who perceive greater fear regarding the failure of business are less likely to engage in start-up behavior. These findings are based on the evidence provided by previous researchers and assume that fear of failure is

a powerful factor that influences individual perception regarding action e.g. Caliendo et al. (2009) and Cacciotti et al. (2016). According to our results, H4 is confirmed.

Lastly, the study hypothesis 5 analyzed the moderating role of age-based self-image that influences the start-up intention-behavior link. Young managers are more inclined to start a new venture as compared to managers in higher age brackets. These findings are based on the evidence provided by previous researchers and assume that age-based self-image is the powerful factor that influences individual perception regarding action e.g. Tsai et al. (2016). According to our results, study H_5 is confirmed.

6. Implications for Research, Theory, and Practice

Research on SMEs has shown that entrepreneurial knowledge and skills are more significant and positively contribute to the development of entrepreneurship process in emerging economies (Liu, 2013). Furthermore, prosperity and survival of developing economies remains with the commencement of entrepreneurship activities (Yasir and Majid, 2017). As outlined in the introduction, the primary objective was to provide information about the perceptions of individuals regarding entrepreneurial skills which proved to have a significant impact over individual motivation to engage in venture creation activities. Individual perception regarding entrepreneurial skills contributes towards entrepreneurial activity (Linan, 2008). In order to promote entrepreneurial skill and support the personal characteristics to enhance the entrepreneurial activities (Hayton et al., 2002), legal and educational institutions responsible for promoting and smooth running of new ventures should be put in place which in turn would promote entrepreneurship in emerging economies.

Moreover, strong effect of entrepreneurial skills on motivational factors provides evidence that possession of entrepreneurial skills could significantly help in taking decision to become an entrepreneur. Furthermore, possessing high level of these skills would also give encouragement to the entrepreneurial start-up intention, and therefore, develop a sense of turning it into actual start-up activity (Baum and Locke, 2004).This empirically tested relationship may be important for entrepreneurship policy in general, and specifically for development of skills necessary for becoming an entrepreneur. Entrepreneurial skills are considered as a relevant instrument to promote entrepreneurial activities in the society. Therefore, an important outcome for entrepreneurial skills could be derived. Training required to enhance entrepreneurial potential should include intervention programs and workshops for the development of entrepreneurial skills.

Further, moderating role of fear of failure and age-based self-image are associated with start-up behavior add value to this theoretical model. Age-based self-image acts as a moderator for the intention-behavior link. Past studies confirmed that managers, who are in younger age brackets, have higher self-perception regarding the entrepreneurial potential and they are more confident for turning their intention into actual behavior (Levesque and Minniti, 2011). Young managers are more inclined to create a new venture, while their intention to start a new venture declines with each additional year in age (Parker, 2009). Furthermore, managers who perceived a higher level of fear have lower potential to convert their start-up intention into actual action i.e. decision about business start-up (Tsai et al., 2016).

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