

**THE EFFECT OF ENTREPRENEURIAL PASSION AND  
ENTREPRENEURIAL OUTCOME EXPECTATIONS ON  
ENTREPRENEURIAL CAREER CHOICE BY UTILIZING THE SOCIAL  
COGNITIVE CAREER THEORY (SCCT) AMONGST STUDENTS IN SAUDI  
ARABIA**

**Rabea Al-Awbathani, Marlin Marissa Malek**

OYA Graduate School of Business, Universiti Utara Malaysia

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**ABSTRACT:** *The main aim of this study is to study the mediating effect of entrepreneurial outcome expectations as one of the main constructs of the social cognitive career theory (SCCT) in the association between entrepreneurial passion and career choice amongst the technical colleges' students in Saudi Arabia. The sample Data was collected from 750 students across nine technical colleges in Saudi Arabia. The hypothesis for this study were tested using a bootstrap approach which discloses numerous interesting results. First, the findings demonstrated that EPI has a significant positive relationship with ECC. Second, when EOE is added as a mediator, it's also revealed that EOE has a significant partial complementary mediation influence on the relationship between EPI and ECC and indicates that EPI enhances ECC in Saudi Arabia.*

**KEYWORDS:** entrepreneurial passion, entrepreneurial outcome expectations, entrepreneurial career choice, social cognitive career theory

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**INTRODUCTION**

Previous studies have investigated that several factors determine individual's career choice which considered the decision of whether individual to start his/her own business or employed in an organization (Douglas & Shepherd, 2002; Sheu et al., 2010). Career choice is perceived cognitive sequence determined by intentions, attitude, beliefs and actions (Bandura, 1986; Krueger, 2000; Lent, Brown, & Hackett, 1994). Previously, the Theory of Planned Behaviour (TPB) and the Model of Entrepreneurial Event (MEE) model developed by Ajzen, (1991) and Shapero & Sokol, (1982) respectively are mostly regarded as the main general theories adopted in entrepreneurial career intention research to explain new venture formation. However, they do not explain the whole spectrum of the categories of prospective entrepreneurs and thus serves as some limitations of their validity in evaluating young adulthood intentions since they do not cover for the whole types of potential entrepreneurs (Kautonen, van Gelderen, & Fink, 2015; Lanero, Vázquez, & Aza, 2016; Politis, Winborg, & Dahlstrand, 2012). Therefore, this paper utilizes SCCT theory as a framework to explain the relationship between entrepreneurial passion, outcome expectations and career preference. SCCT is a motivational theory driven by outcome expectations, self-efficacy, and goal-directed activity (i.e., career choice) which has been broadly used to describe decision-making behavior linked with career issues (Lent, Brown, & Hackett, 2002). Thus, the theory maintains "that individuals' determination to take an action in a given domain is based on their probable and imagined consequences of performing particular behaviors

(outcome expectation)” (Lent et al., 1994). In this direction, how entrepreneurs understand the outcomes of their behavior enlightens and alters both their understanding of their psychological characteristics (e.g., entrepreneurial passion). Hence, entrepreneurial passion as a significant factor in the area of entrepreneurship in explaining the entrepreneurial process and as a tipping point for entrepreneurial action (Cardon, Wincent, Singh, & Drnovsek, 2009; Collewaert, et al., 2016; Murnieks, Mosakowski, & Cardon, 2014; Smilor, 1997). Moreover, entrepreneurial passion has a strong positive relationship with entrepreneurial career intentions (Montiel-campos, 2018). Nonetheless, research on the association between entrepreneurial passion and venture success and performance is at its infancy Collewaert *et al.*, (2016) and the relation between entrepreneurial passion and venture performance is still distal (Iyortsuun, Nmadu, Dakung, & Gajere, 2019). Therefore, this paper centres on the effect of entrepreneurial passion (EPI) and entrepreneurial career choice (ECC), mediated by entrepreneurial outcome expectations.

## **LITERATURE REVIEW**

### **Entrepreneurial Career Choice**

The raising of entrepreneurial activities and growing businesses with the subsequent hiring of employees are the key solutions for reducing the young graduates unemployment challenges (Apergis & Payne, 2016; Henry, 2013). Thus, promoting entrepreneurship is of utmost concern in government policy Luthje & Franke, (2003), due to ECC is a vital instrument for the economic performance through creating job opportunities, innovativeness and creativity, welfare benefits, and encouraging competitiveness (Al-Awbathani, Malek, & Rahman, 2019; Baregheh, Rowley, & Sambrook, 2009; de Wit & de Kok, 2014; Iakovleva, Kolvereid, & Stephan, 2011; Karimi, et al., 2014; Schumpeter, 1934; Shane & Venkataraman, 2000; Wong, Ho, & Autio, 2005). In addition, entrepreneurial career intentions play a vital function to formal start of the venture creation process or addition of new value for an existing one (Bird, 1988; Lee & Wong, 2004; Shook, Priem, & McGee, 2003), which then becomes an crucial antecedent of acting in entrepreneurial behaviour (Fayolle, Gailly, & Lassas-Clerc, 2006).

### **Entrepreneurial Passion**

According to Cardon *et al.*, 2009; Fauchart and Gruber, 2011; Murnieks *et al.*, 2014) Entrepreneurial passion is precisely concerns with intense positive feelings for actions that are meaningful and central to a person's self-identity. Passion is thus, a necessary factor in entrepreneurship ( Bird, 1988; Bierly, Kessler, & Christensen, 2000; Cardon, Gregoire, Stevens, & Patel, 2013; Cardon *et al.*, 2009; Montiel Campos, 2017). It motivates entrepreneurs to create new businesses and recognize opportunities (Cardon *et al.*, 2009; Carsrud & Brännback, 2011; Murnieks *et al.*, 2014). Therefore, this study examined the association between entrepreneurial passion for inventing and entrepreneurial career choice.

Entrepreneurial passion for inventing (EPI) has been defined as the process of developing entrepreneurial passion particularly among students which reflects the desire of the possible entrepreneur related to searching, inventing and discovering

innovative opportunities, achieved for the desire to lead in innovative way and new products or services (Cardon *et al.*, 2013; Cardon *et al.*, 2009). In this line, Montiel-campos, (2018) studied the association between entrepreneurial passion for inventing and alertness amongst 406 individuals of business in Mexico. The outcomes indicated that persons with high degree of entrepreneurial passion are likely to show better entrepreneurial alertness. In contrary, Nasiru, Keat, & Bhatti, (2014) didn't found any significant relationship between EPI and ECC in 130 Nigerian students. In addition, Foo, (2011) argued that entrepreneurial passion has positive emotional valence which increase an entrepreneur's possibility of success.

Moreover, De Clercq *et al.*, (2013) studied the moderating effect of passion for work on the link between desirable career outcomes and intention with university students that have no prior entrepreneurial experience as a sample. De Clercq and colleagues found that "financial rewards and autonomy might change the importance of passion for work in translating career-specific motivations into EI". Thus, this study seeks to formulate these hypotheses:

Hypothesis H1: *Entrepreneurial passion for inventing is positively significant related to entrepreneurial career choice.*

Hypothesis H2: *Entrepreneurial passion for inventing is positively significant related to entrepreneurial outcome expectations.*

### **Entrepreneurial Outcome Expectations (EOEs)**

Outcome expectations (OEs) are seen as the "imagined consequences of performing particular behaviors (If I do this, what will happen?)" (Bandura, 1986). EOEs has been defined as the expectation that specific results would pursue certain activities and include principles about extrinsic rewards, a self-coordinated achievement, for example, a feeling of pride, and social consequences, for example, peer administration (Bandura, 1986; Lent *et al.*, 2001). Few studies that have empirical delve deeply into the EOEs construct as it relates to career process development, this paper studies the importance of EOEs as one of the main constructs in SCCT Lent *et al.*, (1994) in career process formulation.

According to Tran and Korflesc (2016), argued that there is share in some level of conceptual overlap in outcome expectations in SCCT, attitude toward entrepreneurship and social norms in TPB, and perceived desirability in MEE. It was recommended that persons with high EOEs will have a strong entrepreneurial career preference (Krueger *et al.* 2000; Wilson *et al.* 2007). Moreover, Schaub & Tokar, (2005) and Sheu *et al.*, (2010) in their research based on SCCT revealed that students associated with positive outcomes in the pursuit of entrepreneurial career, they bound to affirm more interests in career choices. Particularly, Heinze and Hu, (2010) implied a positive connection between self-evaluating OEs and attitudes towards a career for undergraduates' in the college. The study revealed that high entrepreneurial intentions have high entrepreneurial outcome expectations among Students. Hence, based on the these arguments, this paper seeks to propose the following hypothesis:

Hypothesis H3: *Entrepreneurial outcome expectations are positively significant related to entrepreneurial career choice*

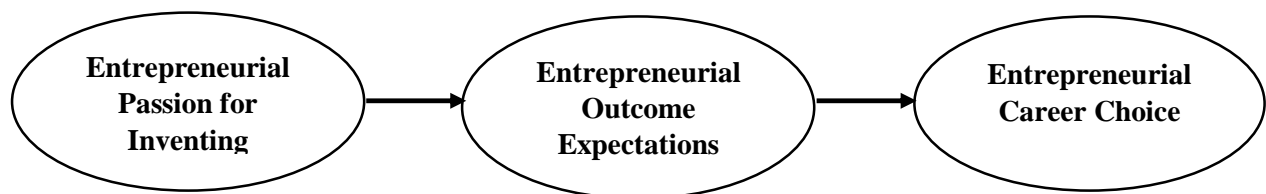
### **The Mediating Influence of Entrepreneurial Outcome Expectations**

This study contends that entrepreneurial outcome expectations will perform a mediating role on the link between EPI and ECC. Lent et al., (1994) argued that EOE's mediate the link between individual, environmental / background inputs and career intentions. Moreover, in their meta-analysis, Sheu et al., (2010) tested several model variations by representing the unique SCCT choice model. Their findings showed that the connection of supports and barriers to goals is facilitated by OE's as well as by self-efficacy. Furthermore, some studies focused on the relationship between personal factors influence individuals' EOE's for an entrepreneurial career. For example, Schlaegel and Koenig, (2014) has conducted a meta-analytic analysis of 128 samples by utilizing meta-analytic structural equation modeling and found a partial mediation of perceived desirability on the role of attitude towards entrepreneurship, ESE social norm and perceived behavioral control on entrepreneurial career intentions. Therefore, based on this argument this paper presents the subsequent hypothesis:

Hypothesis H4: *Entrepreneurial outcome expectations mediate the relationship between entrepreneurial passion for inventing and entrepreneurial career choice*

### **Theoretical Framework**

The framework of this study has one intervening variable known as Entrepreneurial Outcome Expectations, as a mediator that have been underpinned by theory , and the exogenous construct named as Entrepreneurial Passion for Inventing. Thus, the Entrepreneurial Career Choice served as the endogenous construct. Accordingly, the model is underpinned by to theories known as the theory.



Source: Researchers proposed

**Figure 1: The research model of entrepreneurial career choice**

### **METHODOLOGY**

The cross-sectional survey research design method was employed and the geographical area for this study was the three main regions in Saudi Arabia. In this regard, the population for this study were students of public technical colleges in Saudi Arabia which consist of three regions namely: Riyadh, Eastern and Makkah Al-Mukarramah

regions that constitute the largest part of the nation's population and also consider as the key regions of business in Saudi Arabia (GaStat, 2010; IMA, 2013).

Moreover, the students in final year category were selected as the population because they are in their career decision phase and used in similar previous studies (Ahmed, Chandran, & Klobas, 2017; Aloulou, 2016; Díaz-Casero, Ferreira, Mogollón, & Raposo, 2012; Fitzsimmons & Douglas, 2011; Kothari, Hem & Patra, 2016; Liñán, Rodríguez-Cohard, & Rueda-Cantuche, 2011). Thus, the study total population constitutes 10615 trainees that are at their final year and are entirely all technical colleges in the biggest three regions in Saudi Arabia. The study selected a stratified random sampling technique to enable the researcher to generalize to the population (Bryman & Bell, 2011). to minimize sampling error and take care of nonresponse rate issues, the sample size was multiplied by two as proposed by (Hair, Wolfinbarger, Ortinau, & Bush, 2008). As suggested by (Uma Sekaran, 2003) the guiding principle developed by Krejcie and Morgan, (1970) table for sample size was used. Therefore, considering the total population of 10615 in this study, the sample size had been 375 trainees. thus, the sample size of 375 had been sufficient and acceptable (Uma Sekaran, 2003; Krejcie & Morgan's, 1970; F Faul et al., 2007; Franz Faul et al., 2009. In addition, to minimize sampling error and take care of nonresponse rate issues, the sample size was multiplied by two as proposed by (Hair, Wolfinbarger, Ortinau, & Bush, 2008). 750 respondents were chosen from nine technical colleges in Riyadh, Makkah Al-Mukarramah and the eastern region.

The unit of analysis for any study were selected from individual, firm, industry or macro levels in a particular research (Uma Sekaran, 2003). The unit of analysis should be consistent with a research problem, questions and objectives in the research (Cavana, Dalahaye, & Sekaran, 2001). In this study, the undergraduate students were served as the unit of analysis. Final year students have been widely used as unit of analysis by many researchers in the field of entrepreneurial career studies (Ahmed et al., 2017; Aloulou, 2016; Díaz-Casero et al., 2012; Fitzsimmons & Douglas, 2011; Ibrahim, Bakar, Asimiran, Mohamed, & Zakaria, 2015; Kothari, Hem & Patra, 2016; Lanero et al., 2016; Walter, Parboteeah, & Walter, 2013)

### **Measurement**

**Entrepreneurial career choice (ECC)** was measured using six (6) items, two (2) items of entrepreneurial intentions and four (4) items of nascent behavior a seven-point (7) Likert-scale from (7=strongly-agree- 1=strongly-disagree) which were initially used (Lanero *et al.*, 2016).

**Entrepreneurial Passion for Inventing (EPI)** was assessed using five validated indicators adopted from Cardon et al., (2013) using a 7-point Likert-type scale.

**Entrepreneurial Outcome Expectations (EOEs)** was assessed using 4 items-scale established by (Krueger, 2000). The four (4) indicators were measured on seven-point Likert- scale of 1 = strongly disagree; to 7 = strongly agree.

### **Data Analysis**

The research model was analysed using “Partial Least Squares (PLS)” through “SmartPLS 3.2.7” Sarstedt *et al.*, (2014) to establish the relations between the independent constructs and the dependent construct. The PLS stages and procedures

were followed to estimate the research model. The first stage was the model measurement to validate the goodness of the model by assessing the reliability, validity and factor loadings for the constructs. The second stage emphasizes on the structural model of the hypotheses (Henseler, Ringle, & Sinkovics, 2009; Sarstedt, Ringle, Smith, Reams, & Hair, 2014).

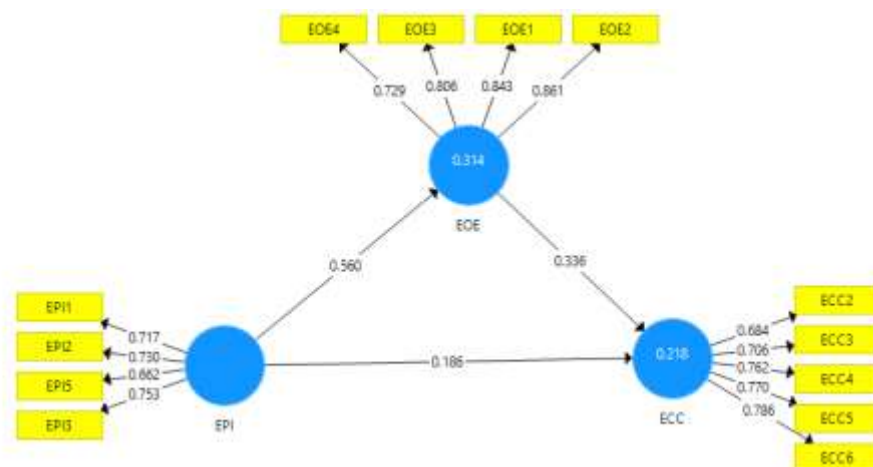
### Results/Findings

The measurement model evaluation involves assessing the individual item reliability by measuring the outer loadings of each construct's (Duarte, Alves, & Raposo 2010; Hair, F. Jr *et al.*, 2014; Hulland 1999).

Table 1 shows item loadings and consistency reliability of the present study. The individual item reliability was evaluated by using the indicators items reliability. With the deleting of two of the indicators with outer loadings below 0.60 from the scale, the rest of the factor loadings of the indicators for all the constructs are above 0.60 (Hair, Sarstedt, Ringle, & Mena, 2012). These two items with low loadings were excluded from subsequent analysis. one of the indicators is associated with entrepreneurial passion for inventing whilst the other indicator relates to entrepreneurial career choice.

The composite reliability was evaluated in this study as recommended by Hair, Sarstedt, Hopkins, & Kuppelwieser, (2014) that is more appropriate for PLS-SEM than Cronbach's Alpha, thus, this study used it for measuring internal consistency reliability. The composite reliability coefficient value ranges between 0.81 to 0.88 which is higher than the value of the minimum level of 0.7 which indicated high levels of internal consistency reliability (Bagozzi, Baumgartner, & Yi, 1989; Hair, Ringle, & Sarstedt, 2011).

The Convergent validity was evaluated with average variance extracted (AVE) guide, All the values of AVE exceed the 0.50 (Bagozzi, Yi, & Philipps, L., 1991; Hair *et al.*, 2011).



**Figure 2: Measurement Model**

**Table 1: Indicator Loadings and Internal Consistency Reliability**

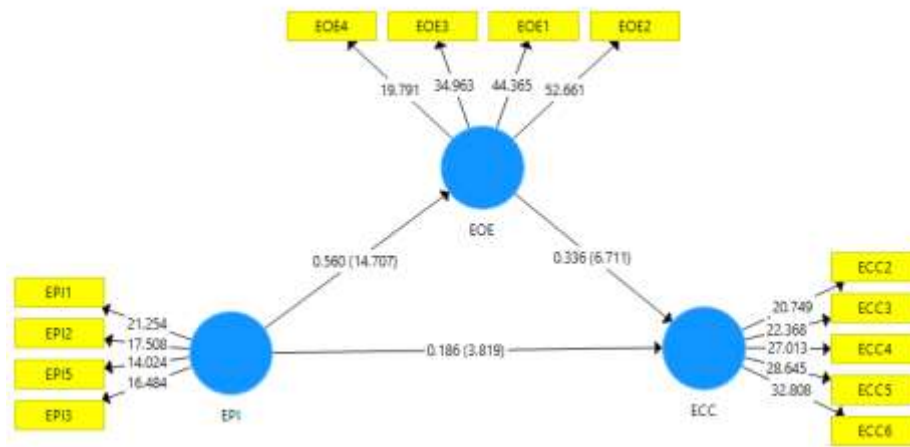
Constructs	Items	Outer Loadings	Composite Reliability	Average Variance Extracted (AVE)	Items deleted
<b>Entrepreneurial Career Choice</b>			<b>0.86</b>	<b>0.55</b>	ECC1
	ECC2	0.68			
	ECC3	0.71			
	ECC4	0.76			
	ECC5	0.77			
	ECC6	0.79			
<b>Entrepreneurial Outcome Expectations</b>			<b>0.88</b>	<b>0.66</b>	
	EOE1	0.84			
	EOE2	0.86			
	EOE3	0.81			
	EOE4	0.73			
<b>Entrepreneurial Passion for Inventing</b>			<b>0.81</b>	<b>0.51</b>	EPI4
	EPI1	0.72			
	EPI2	0.73			
	EPI3	0.75			
	EPI5	0.66			

Furthermore, the Table below, the shows the correlations between the variables which were compared with the square-root of the AVE values written in bold. Thus, it portrayed the square-roots of the AVE which were all larger than the correlations among the variables, signifying acceptable threshold (Fornell & Larcker, 1981). Thus, for the purpose of achieving acceptable discriminant validity.

**Table 2: Discriminant Validity Fornell-Larcker Criterion**

Latent Variables	ECC	EOE	EPI
ECC	<b>0.743</b>		
EOE	0.441	<b>0.811</b>	
EPI	0.374	0.560	<b>0.716</b>

The next step is to evaluate the structural model. Accordingly, this study like any other study, this study has applied 5000 bootstrapping standard procedure in assessing the path coefficient significance (Hair, F. Jr et al., 2014; Hair et al., 2011, 2012). The structural model estimates of the present survey can be seen below as they were examined in Figure 3 and Table 3 respectively.



Source: The reserarchers’ collecting data and SPSS 23, PLS 3.2.7

**Figure 3: The structural model showing the linkage between EPI, EOE and ECC**

**Table 4: Structural Model Analysis Result**

Latent variables	Beta	STD	T Statistics	P Values
EOE -> ECC	0.340	0.050	6.710	0.000***
EPI -> ECC	0.190	0.050	3.820	0.000***
EPI -> EOE	0.560	0.040	14.710	0.000***
PI-> EOE -> ECC	0.190	0.030	5.440	0.000***

Note: \*\*\*Significant at 0.01 (1-tailed), \*\*significant at 0.05 (1-tailed), \*significant at 0.1 (1-tailed)

From the Table 4 above: the model was tested to assess the structural model and find out the relationships between latent constructs. The results confirmed and supported hypothesis H1 ( $\beta = 0.19$ ,  $t = 3.82$ ,  $P = 0$ ); hypothesis H2 ( $\beta = 0.56$ ,  $t = 14.71$ ,  $P = 0$ ) and hypothesis H3 ( $\beta = 0.34$ ,  $t = 6.71$ ,  $P = 0$ ). These results showing that the first direct hypothesis (H1) is accepted that the EPI has significant and positive effect on ECC. The second direct hypothesis (H2) is supported which means that EPI has significant and positive effect on ECC. Lastly, the third hypothesis (H3) is also supported that the entrepreneurial outcome expectations are significantly positive effect on ECC.

The mediator effect hypothesis H4 ( $\beta = 0.34$ ,  $t = 6.71$ ,  $P = 0$ ) is also supported PI-> EOE -> ECC ( $\beta = 0.19$ ,  $t = 5.44$ ,  $P = 0$ ). The results revealed that hypothesis (H4) signified a partial complementary mediation because both the direct and indirect relationships are positively significant (Cepeda-carrion, Gabriel., Nitzl, & Roldan, Jose, 2018; Zhao, Lynch, & Chen, 2010).

The coefficient of determination ( $R^2$  value) is an important principle for the estimation of the structural model (Hair et al., 2012; Hair et al., 2011; Henseler et al., 2009). The value of  $R^2$  signifies the collective effects of the exogenous latent variables on the latent endogenous variable (Hair et al., 2016). This study endogenous variable  $R^2$  value is 0.218, 0.314 for EOE and ECC respectively. Even though the satisfactory  $R^2$  level value differs with research framework (Hair et al., 2010). Falk & Miller, (1992); Hair et al., (2010) suggested 0.10  $R^2$  value as the minimum tolerable level. Furthermore, Chin (1998) suggests in PLS-SEM the coefficient values of .67, .33, and .19 as significant,



moderate and weak respectively. Similarly,  $R^2$  values of 0.02 to 0.12, 0.13 to 0.25 are regarded as small and moderate while values above 0.26 are considered as substantial (Cohen 1988). Therefore, as recommended by Chin (1998)  $R^2$  value explained by exogenous constructs are moderate.

The study considered the assessment of effect size to appraise whether the omitted exogenous variable has a significant impact on the endogenous variable in the model.

The results indicate that the  $Q^2$  values for the endogenous latent variables are greater than zero EOE and ECC respectively, thus, signifies the existence of the predictive power of the model (Hair Jr. et al., 2013; Henseler et al., 2009).

## **DISCUSSION AND CONCLUSION**

This part discusses the findings on the association between EPI, EOE and ECC, and also explain the mediating role of EOE on the link between EPI and ECC. The outcomes indicated support and positive effect of entrepreneurial passion for inventing on technical students career choice in Saudi Arabia. The results implied that individuals with higher degree of passion for inventing which they able to realize new opportunities and achieve the desire of innovative ways of doing things. Also, are more likely to show great entrepreneurial expected outcomes and preference. Moreover, the findings showed a mediation relationship of the effect of EPI on ECC where the EOE serve as a channel in this relationship. This results found that the strength of the association between EPI and ECC was significant with the inclusion of a mediator variable of EOE and this indicates a partial mediation in the association between EPI, and ECC (Baron & Kenny, 1986; Hair, Black, Babin, & Anderson, 2010). This also implied that EPI has a direct influence toward ECC but indirectly exerts its influence towards ECC through EOE.

Moreover, under SCCT, the mediation result is supported the sense that the main view of the theory is used broadly to describe decision-making behavior linked with career issues. Therefore, the SCCT argues that “people’s resolve to take an action in a certain discipline is based on their capabilities to organize and perform a courses of their possible and imagined consequences of executing a particular behaviors (Bandura, 1986; Lent et al., 1994)”. SCCT Lent et al., (1994) similarly advocates that EOE mediate the link between personal input and important outcomes such as career choice and decision. Thus, existence of EOE serve as a way through which EPI influences ECC performance in Saudi Arabia.

## **RESEARCH IMPLICATIONS**

This study have several theoretical and research implications. First, although the SCCT Lent, Brown, & Hackett, (2000); Lent *et al.*, (1994) and Lent *et al.*, (2002) is recommended as a comprehensive framework of factors determining entrepreneurial career choice Al-Awbathani *et al.*, (2019); Tran & Von Korflesc, (2016), few studies applied this theory as background for predicting career intention. Thus, this study empirically extended the use of SCCT framework to provide useful information to develop a model that linked entrepreneurial passion & entrepreneurial outcome expectations to the formation of ECC. Second, this empirical result provided that student’s entrepreneurial passion can inspire their entrepreneurial career as

recommended in earlier studies (Cardon & Kirk, 2015; Montiel-campos, 2018; Stenholm & Renko, 2016).

Third, the study highlighted the mediating effect of EOE on the association between EPI & ECC amongst technical colleges' students in Saudi Arabia. This shows that entrepreneurial outcome expectations serve as an intermediate through which entrepreneurial passion for inventing can be transmuted into entrepreneurial career choice. Therefore, the policymakers should identify and develop modules that increase students' expected outcome which sequentially improves their entrepreneurial career preference of students. Finally, this study contributes by empirically established the reliability and validity of the adapted scales in the context of the technical and vocational education in Saudi Arabia. The confirmatory and validation procedures of the PLS measurements in this paper signify methodological contributions to the literature on entrepreneurial passion for inventing, entrepreneurial outcome expectations, and entrepreneurial career choice by offering other validation on the constructs in a new methodological view.

### **FUTURE RESEARCH**

The study concentrates on the groups of researchers, practitioners and policy makers in entrepreneurship since it explains the interaction between the underexplored concepts of the effectiveness of entrepreneurial passion, entrepreneurial outcome expectations in the establishment of overall entrepreneurial career choice. It has also anticipated the study would guide future studies into discovering the interplay of passion for founding and passion for developing, and other environmental conditions and personality traits in improving entrepreneurship. Future studies can answer the call to integrate the main SCCT construct (entrepreneurial self-efficacy & outcome expectations) and the three entrepreneurial passion domains (EPI, EPF and EPD) together in a complete model to fully realize the development of entrepreneurial career intentions which lead to actual behaviour for starting a new venture.

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