



# **Need for Achievement as a Predictor of Entrepreneurial Behavior: The Mediating Role of Entrepreneurial Passion for Founding and Entrepreneurial Interest**

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## **ABSTRACT**

This study aims to explore the role of new predictors of Entrepreneurial behavior (EB). Build on entrepreneurial passion literature we propose that entrepreneurial passion for founding (EPF) predicts EB. We then apply McClelland's (1961) Need for achievement (NACH) theory to propose that NACH predicts EB. We also propose that EPF and entrepreneurial interest mediate this relationship. Furthermore, we hypothesize that prior experience moderates EPF and EB relationship as well as NACH and EB relationship and EI and EB relationship. Based on a sample of 223 collected by using a reliable questionnaire distributed to actual and potential entrepreneurs from different nationalities who are living in china; we found support for our hypotheses. Results indicated that EPF and NACH are significantly related to EB. Furthermore, we found that entrepreneurial interest and EPF mediate NACH and EB relationship. Moreover, the results revealed that prior experience affects the relationship between EPF and EB and NACH and EB as well as the relationship between entrepreneurial interest and EB such that prior experience strengthens those relationships. Study implications, limitations, and future directions are discussed.

**Keywords:** Entrepreneurial Behavior, Entrepreneurial Interest, Entrepreneurial Passion, Need for Achievement, Prior Experience

**JEL Classifications:** L26, J52

## **1. INTRODUCTION**

The basic issue in the entrepreneurship research area is the process of starting a new business, Gartner defined entrepreneurship as founding an organization; he also argued that foundation process is what makes the difference between entrepreneurs and others (1988: 11—emphasis added). Consequently, starting a business considered to be the center of entrepreneurship (Shook et al., 2003). Crucially, what leads to starting a new business is entrepreneurial behavior (EB) because Founding a new business inherently considered to be an individual level incident and individual behaviors are considered to be the most important factors result in the existing of a new business (Gartner et al., 2010). EB is considered to be the translation of the intention of creating a business into actual activities that end in creating a new

venture. Furthermore, EB is considered to be a broad concept that reflects all activities made by individuals to identify, assess and exploit entrepreneurial chances (Shane and Venkataraman, 2000; Smith and Di Gregorio, 2002; Cavus et al., 2014). Gartner et al. (2010) argued that EB is a very important factor for business creation because the creation of new business comes out as a result of entrepreneurs' actions or behavior. This behavior indicates that individuals are involved in activities characterized as risky and engaged in tasks with reasonably high threats (Covin and Slevin 1989; Lumpkin and Dess 1997; Hernandez, 2019). But how does this behavior form and what are the antecedents or predictors of this behavior?

Scholars have made a decent effort to answer this question; previously a lot of efforts have been done by scholars to

understand how a person makes a certain decision to work in the entrepreneurship area (Zahra, et al., 2014; Neneh, 2019). Additionally, EB was investigated in four directions (Blanka 2018; Mustafa et al. 2018; Neessen et al. 2019; Hernandez, 2019) first direction: attributes or traits of individuals like ethnicity and attitudes; the second direction: from institutional aspects like administration encouragement and organization environment, third direction: Situational or contextual considerations like nature of business, market factors, forth direction: individuals results or outcomes like accomplishments (Hernandez, 2019). In addition, there is a consensus in the literature that behavior always occurs as a result of intention (Lee et al., 2011; Neneh, 2019). Consequently, the majority of prior studies on EB has centered on the differentiation between those who show an intention to create new business and those being without it (Schlaegel and Koenig, 2014). But, these researches lacking the recognition of the new argument that most of the intentions are not becoming an actual behavior to start a new business (Shirokova et al., 2016). This means that intention is not the only predictor of behavior and what makes individuals behave as entrepreneurs not only the entrepreneurial intention that they have but there are other factors affect this behavior.

There is a gap in literature due to the lack of studies examining the role of entrepreneurial passion for founding and entrepreneurial interest in driving EB as well as their mediating effect on the NACH and EB relationship. Therefore, in this study, we try to fill this gap by concentrating on predictors of EB other than entrepreneurial intention; specifically, we focus on the need for achievement, entrepreneurial passion for foundation and entrepreneurial interest which might predict EB. Interestingly-up to our knowledge- this is one of the first studies that investigate entrepreneurial passion for founding and entrepreneurial interest as mediators between the need for achievement and EB.

Regarding need for achievement, there are few studies in the literature of need for achievement and entrepreneurship that examine the direct relationship between motivation for achievement and entrepreneurial actions, the findings of these studies indicate different results; for example, McClelland (1965) and Durand and Shea (1974) found that EB is remarkably driven by need for achievement. however, a later study conducted by McClelland (1972) failed to confirm this correlation. this drives the necessity of conducting new studies to investigate the relationship between need for achievement and EB (Collins et al., 2004).

First of all this study try to confirm and generalize this relationship between need for achievement and EB; According to McClelland (1961) need for achievement and EB are related to each other, as the need for achievement stimulates the willing to be excellent in performing things and to be better than others. Moreover, there are certain characteristics for those with a high need for achievements such as preparing early plans, high acceptance of responsibilities and the willingness to get feedback for their outcomes; these features are always necessary when starting a new business and are part of EB that contributes to the creation of a new venture.

Second, this study contributes to the literature by using entrepreneurial passion for founding as a mediator between NACH and EB. As this mediation hasn't been studied before. Recently, more attention has been directed towards entrepreneurial passion and a lot of scholars have revealed how entrepreneurial passion leads to significant outcomes such as business development, constancy and engagement and loyalty (Murnieks et al., 2018). There is an agreement that entrepreneurial passion works as an impetus that stimulates entrepreneurs and increases their motivations to overcome the obstacles on their way of starting a new business (Cardon et al., 2009). Scholars suggested that further away than other kinds of motivations entrepreneurial passion thought to be the strongest incentive for promoting entrepreneurship (Baum et al., 2001; Chen et al., 2009; Mueller et al., 2017). what makes people totally committed to a certain action is passion; it's also what leads to higher achievement and performance, in fact, research proofed that passion leads to attain goals and get higher performance through helping in a long term engagement in the activities that leads to achieve these goals and get higher efficiency (Mageau et al., 2009; Mageau and Vallerand, 2007; Vallerand et al., 2007; Gielnik et al., 2017). Beside the scarceness of the studies that investigate the mediating role of entrepreneurial passion for founding on the NACH and EB relationship; what motivate us to study the mediating role of EPF between NACH and EB relationship is the noticeable relationship between this type of passion (EPF) and entrepreneurial activities related to starting a new business as entrepreneurial passion for founding means the entrepreneurs will have a passion for entrepreneurial activities associated with the business creation process (Chen et al., 2009; Breugst et al., 2012). Actually, EPF has a major impact upon EB and it leads to engage in establishment activities; According to Vallerand et al. (2003) starting a new business is positively influenced by entrepreneurial passion. they also argued that behavior is boosted and driven by passion.

Third, in this study we contribute by investigating the mediating role of entrepreneurial interest between the need for achievement and EB. Entrepreneurial Interest represents willingness for doing specific activities, behaviors, and tasks, and how these desires take place and their related outcomes or results (Rounds, 1995; Almeida et al., 2014). Furthermore, Entrepreneurial interest can be characterized as a reflection of an individual's general entrepreneurial propensity and approach to a specific behavior (Karhunen and Ledyeva, 2010). some studies investigated some antecedents of entrepreneurial interest, for example, Baughn et al. (2006) found that self-efficacy and close social supports has a very vital impact on developing entrepreneurial interest. however, entrepreneurial interest hasn't been studied as a mediator between the need for achievement and EB.

Finally, we explore the moderating role of prior entrepreneurial experience (PEX) between the need for achievement and EB and entrepreneurial passion for founding and EB, as well as between entrepreneurial interest and EB because past experience is considered to be a key element that affecting EB; it impacts venture creation behavior in significant ways (Dick and Rallis, 1991). Career Choice Theory stresses that the convictions of people about careers are affected by their understanding of previous

experiences and also their understanding of “socializers” behaviors and expectations towards those professions (e.g. parents, friends, educators) (Carr and Sequeira, 2007).

In sum this study made a significant contribution to entrepreneurship literature as well as to need for achievement literature: Firstly, we contribute by introducing two new mediators that mediate the relationship between need for achievement and EB, which we think an important contribution to the literature of need for achievement as well as to entrepreneurship literature. Secondly, we made a contextual contribution by investigating the association between EPF and EB as well as between need for achievement and EB, as we used samples from across china which helps in generalizing the findings of the positive relationship between these variables. Finally, we contributed to the entrepreneurship literature by testing the moderation effect of PEX on the relationship between EPF and EB, NACH and EB and between EI and EB.

Our current study aims to answer these questions:

- R.Q.1: Is there any significant association between EPF and EB as well as between NACH and EB?  
R.Q.2: What are the mediating effects of EPF and EI on the relationship between NACH and EB?  
R.Q.3: How PEX moderate the relationship between:  
a. Need for achievement and EB,  
b. Entrepreneurial passion for founding and EB and  
c. Entrepreneurial interest and EB?

## 2. THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

Passion is perceived as a power that provides individuals with enjoyment and obligation (Rockwell, 2002: 52) and leads them to be fully engaged with activities they love (Belitz and Lundstrom, 1997: 57; Cardon et al., 2009). It has been defined by Vallerand et al. (2003) as a high tendency that people have concerning activity that they realize salient and in which they spend more time and effort. (p. 757; Gielnik et al., 2017). Passion is not caused by the fact that entrepreneurs are naturally predisposed to such emotions, but by engaging in activities that relate to the significant and relevant self-personality of entrepreneurs (Cardon et al., 2009). Baum and Locke (2004) and Shane et al. (2003) claim that entrepreneurial passion is loving the activities or job that one’s doing. Additionally, Smilor (1997) states that it is all about business-related activity excitement. Cardon et al. (2005) also argue that love for the business itself is considered to be the passion.

Previous research showed that the passion of entrepreneurs can drive to many useful results, for example effectiveness, (Murnieks et al., 2014; Ma et al., 2017), entrepreneurial endeavor (Foo et al., 2009; Ma et al., 2017), “entrepreneurial persistence” (Cardon and Kirk, 2015; Ma et al., 2017), “entrepreneurial intentions” (De Clercq et al., 2012; Biraglia and Kadile, 2016; Ma et al., 2017).

### 2.1. EPF and EB

“I was a very public failure, and I even thought about running away from the valley. But something slowly began to dawn on

me — I still loved what I did. The turn of events at Apple had not changed that one bit. I had been rejected, but I was still in love. And so I decided to start over”.

(Steve Jobs – Stanford’s commencement speech, 2005; Collewaert et al., 2016).

What makes Steve jobs continuing his business creation process is the passion that he felt; because the love that he felt towards his company is a type of passion; as psychological literature stated that passion is a power that provides people a feeling of enjoyment (Rockwell, 2002: 52) and drives them to get involved with the activities that they love (Belitz and Lundstrom, 1997: 57; Cardon et al., 2009). Locke and Collins (2003) argued that Feeling the love and pleasure of work is what passion is called.

Passion was recognized by recent theoretical and empirical development in the literature as a crucial factor affecting business action (Collewaert et al., 2016). It is also a significant factor for business development and its growth (Baum et al., 2001; Shane et al., 2003). Having this feeling for an entrepreneur will support him/her to overcome the obstacles and barriers he/she may face before establishing his/her new business.

Entrepreneurial passion for founding reflects the passion of entrepreneurs for actions involving the creation of a merchandising and profiteering venture (Cardon et al., 2009; Breugst et al., 2012). This type of passion leads to EB and so to start up a new business by creating facilitation in the collection of some necessary economic, human and social resources required to start up the business (Cardon et al., 2009). Additionally, entrepreneurial passion for founding influences EB, as Fauchart and Gruber have demonstrated that founders’ identities make important distinctions between many substance strategic aspects of new business development (2011: 950; Cardon et al., 2009; Cardon et al., 2013).

Therefore, entrepreneurs who are passionate about founding predominantly love setting up a new venture process and mostly create characteristics associated with the business personality (e.g. Cardon et al., 2005; Cardon et al., 2009). This indicates that those entrepreneurs with a high passion for founding are likely to have an EB that leads them to start their own business because they enjoy business establishment activities (Cardon et al., 2013). Also because entrepreneurial passion encourages them to prepare for the starting up process; in this context, Biraglia and Kadile (2017) argued that entrepreneurial passion within a particular environment triggers the scheduling and preparation of a situation-related venture start-up. additionally, Cardon et al. (2017) argue that entrepreneurial passion harmonizes entrepreneurs’ mental actions and their behavior and triggers their inspiration.

Finally, Entrepreneurial passion as a key factor for entrepreneurial activities (Bird, 1988; Cardon et al., 2013) does have some important psychological and behavioral elements (Chen, et al., 2009), that impact individual behavior (Cardon et al., 2009b; Murnieks, et al., 2011; Nasiru et al., 2015). Consequently, we propose the following hypothesis:

H1. EPF is positively related to EB



## 2.2. NACH and EB

Scholars argue that three unique desires or drives distinguish businesspersons NACH, competitiveness need and autonomy's need (Barba-Sánchez and Atienza-Sahuquillo, 2012). The need for achievement notion was developed in the 1950s (McClelland et al., 1958) which relates to high criteria, challenge recognition, autonomous thinking, and excellence concern. Therefore, high achievers prefer to select activities of reasonable complexity, take accountability for the outcomes and try to find feedback about the results of actions (Unger et al., 2015). McClelland's theory of needs states that the Need for achievement is defined as the willingness to Succeed, to achieve success concerning a set of norms (Stephen et al., 2011). He also describes Need for Achievement (NACH) as a willingness to perform well, not for the sake of social recognition, but for the internal feeling of private accomplishment (Perry et al., 1986).

Furthermore, McClelland (1961) stated that high achievers ought also to prefer skill and effort-related activities, give clear performance feedback, he as well argued that entrepreneurial positions have more of these attributes than other kinds of positions (Collins et al., 2004). Moreover, empirical research identifies the need for achievement for a given population in the context of entrepreneurial intention, in addition to retrospective research of entrepreneurs traits and behavior, in any case; Accordingly, most research focuses on the value of NACH as being an attribute of entrepreneurs as well as its effect on the prosperity of businesses (Barba-Sánchez and Atienza-Sahuquillo, 2012).

McClelland (1961) argued that NACH was affiliated with EB, Therefore, many studies emphasize the significance of the need for achievement as a trait of entrepreneurs and an impact on the performance of the venture (Barba-Sánchez and Atienza-Sahuquillo, 2012). previously, a review of 23 studies was conducted by Johnson (1990) these studies differed in terms of samples, need for achievement's measurements and entrepreneurship definitions, he found an association between NACH and entrepreneurial engagement. similarly, Fineman (1977) conducted a review of 19 studies and he found that both NACH's "projective and questionnaire" methods predict business foundation considerably (Shane et al., 2003).

Another contribution was made by Collins, Locke, and Hanges (2000) Who carried out a meta-analysis that was NACH and Entrepreneurship's first meta-analysis. They analyzed 63 studies of NACH and entrepreneurship they found that NACH is importantly linked to the establishment of a business (Shane et al., 2003). Later on Unger et al. (2015) on their research into the influence on the entrepreneurial success of genetics and psychological incentives (NACH); The association between testosterone exposure and NACH has been found to predict entrepreneurial success.

Furthermore, previous research argued that there is a significant association between NACH and the intention to work as entrepreneurs (Robinson et al., 1991; Johnson, 1990 and Shaver et al., 1991; Chatterjee and Das, 2015). which eventually leads to EB as Planned behavior theory (Ajzen, 1985, 1987, 1991) proposed that intention is considered to be the instantaneous

predictor of behavior (Cordano and Frieze, 2000) build on this we propose that NACH positively related to EB. And those with a high need for achievement prefer working as entrepreneurs because entrepreneurial work offers them more possibilities to take advantage of the features connected with their high motivation for accomplishment (Holland, 1985; Collins et al., 2004). Consequently, High achievers will be more attracted to entrepreneurial positions and They will have a greater probability of pursuing entrepreneurial employment than other positions (Costa et al., 1984). Similarly, McClelland (1961) proposed that high achievers would perform well in entrepreneurial roles (Collins et al., 2004).

On the other hand, Need for achievement relate to economic growth which believed to be a result of entrepreneurial activities; this relation was confirmed by McClelland (1961) as he argued that entrepreneurial activities and economic growth will be more in countries with a greater mean rate of need for achievement than those with a lower rate (Collins et al., 2004). Moreover, McClelland argued that the need for achievement influences a person to pursue entrepreneurial activities to gain more achievement satisfaction (Stewart et al., 2003, p. 29; Carraher et al., 2010).

Therefore, achievement motivation leads to EB and drives entrepreneurs to create a new business because this motivation probably comes before the startup process (Brandstatter, 1997; Carraher et al., 2010). After all, we conclude that the connection between high need for achievement and EB is clearly positive, since the need for achievement was directly linked to economic development and venture success (Collins et al., 2004; McClelland, 1961; Rauch and Frese, 2007; Unger et al., 2015) which considered to be a result of entrepreneurial activities and behavior. Furthermore, Stephen et al. (2011) asserted that individuals with a strong need for achievement will be highly motivated and successful in starting their new ventures. Thus, we hypothesize:

H2: NACH is positively related to EB.

## 2.3. The Mediating Role of Entrepreneurial Passion for Founding

Entrepreneurs have more duties that require more passion, they need to take the lead in controlling and motivating staff and other tasks, such as talking to peers, focusing on how to start a company, mentoring less skilled people, promoting trade associations... etc. More passion, more effort, more responsibility and a strong need for achievement are needed for these tasks. McClelland et al. (1965). Claims that the need for achievement (NACH) helps to establish a path, high goal direction, and accomplishment (Unger et al., 2015). Therefore, when entrepreneurs have elevated goal orientation because of their high NACH, they will need passion to support them to be more dedicated to their objective (e.g. business creation), Thus, with the help of an entrepreneurial passion for founding, NACH will encourage entrepreneurs to be more committed to achieving their objective; and lead them to EB and eventually to establish their new business.

Passion is linked with encountering flow and positive influence within and following activity participation (Mageau et al., 2009; Vallerand et al., 2003). this positive impact results in

approach inclination and energetic efforts as well as to determine greater objectives and a greater commitment to achieving these objectives (Seo et al., 2004; Gielnik et al., 2017). This implies that entrepreneurial passion along with the need for achievement predicts EB; because the need for achievement encourages individuals to establish a goals orientation and set objectives, on the other hand, entrepreneurial passion helps them to be more committed to these goals and eventually leads to achieving these goals.

Furthermore, the significance of achievement motive for economic growth (which always caused by entrepreneurial activities and behavior) was demonstrated by McClelland (1958, 1961, 1987, 1990) such that business founders have a greater level of Need for Achievement (Kock, 1965; McClelland, 1965; Wainer and Rubin, 1969; Morris and Fargher, 1974; Durand and Shea, 1974; Hansemark, 1998). On the other hand, those founders often have a founder personality and entrepreneurial passion for founding, this NACH that founders have with the help of the entrepreneurial passion for founding work together to encourage them to start their new business; because entrepreneurs with a founder identity are always passionate about entrepreneurial activities associated with venture creation (Cardon et al., 2009; Cardon et al., 2013).

Additionally, entrepreneurs in their way of creating their new business will face many barriers that sometimes lead to business abandonment, in this case, Need for achievement via entrepreneurial passion for founding support them to overcome these barriers; because need for achievement integrated with the entrepreneurial passion to overcome barriers that entrepreneurs face as well as helping them utilize resources and improve their abilities (Collins et al., 2004). Furthermore, entrepreneurial passion for founding fuel individuals achievement motivation which triggers their daily work and encourages them to continue in the face of barriers and hardships (Chen et al., 2009; Breugst et al., 2012).

It was claimed by McClelland et al. that high achievers are more likely than low achievers to participate in vigorous and innovative tasks that involve future planning and involve the accountability of an individual for task results (Collins et al., 2004). These types of tasks have similar characteristics to entrepreneurial activities; which implies that those with a greater need for achievements prefer to engage in entrepreneurial activity and behavior, however persisting in these activities require more passion, so the entrepreneurial passion for founding will encourage entrepreneurs to persist and achieve their results (e.g. start up a new business); because entrepreneurial passion encourages and motivates entrepreneurs to persist in the face of barriers (Chen et al., 2009; Breugst et al., 2012). According to this, we can propose that entrepreneurial passion for founding functions as a mediator in this relationship between the entrepreneurs NACH and EB.

In conclusion, a high need for achievement would have a positive relationship with entrepreneurial passion for founding that results in EB leading to the start-up of new business, because founding activities need additional responsibility, planning for the longer term, and engaging in innovative activities these attributes are

found with high achievers (Unger et al., 2015), these arguments aligned with Katz, Gartner and Cardon's argument as they argued that entrepreneurs' need for achievement will manifest itself within the establishment activities, something that they are doing as entrepreneurial (Katz and Gartner, 1988; Cardon et al., 2013).

Furthermore, Because of their high NACH founder entrepreneurs (McClelland, 1958, 1961, 1987, 1990; Hansemark, 1998) will be looking for accomplishment satisfaction through pursuing entrepreneurial tasks. McClelland claims that A strong need for achievement leads an individual to pursue an entrepreneurial position to gain more satisfaction than other types of jobs could derive from (Stewart et al., 2003, p. 29; Carraher et al., 2010). At the same time, this strong need for achievement push them to start up their new business; as Brandstaetter (1997) argued that achievement motivation found to be available prior to the actual start-up process which works as a driver to start the new venture (Brandstaetter, 1997; Carraher et al., 2010). In this situation, entrepreneurial passion for founding along with need for achievement drive entrepreneurs' behavior and help them to set up their new enterprise because the entrepreneurial passion for founding is linked to the actions engaged in starting up a venture (Cardon et al., 2009; Cardon et al., 2013), Thus, build on the above discussion we hypothesize the following:

H3: Entrepreneurial passion for founding mediate the relationship between Need for achievement and EB.

#### 2.4. PEX as a Moderator

Past experience is a key element affecting EB; it impacts venture creation behavior in significant ways (Dick and Rallis', 1991). Before starting their existing business, most of the present entrepreneurs had experiences, several of whom said they were often put in positions of accountability within the family business at a very early age (Dyer and Handler, 1994). These experiences are probably considered to be the main component in constructing the knowledge requirement and behavioral abilities needed for working as an entrepreneur and having a self-employment job (Carr and Sequeira, 2007).

Furthermore, people with previous experience in the field of entrepreneurship will have the opportunity to prevent mistakes in their future entrepreneurial efforts because they have learned from their previous experience and since their previous experience provides them direct and indirect information which helps them familiarize themselves with the role and expands their social networks to support them to translate their entrepreneurial motivations into actual entrepreneurial activities (MacMillan, 1986; Farmer et al., 2011). Additionally, prior experience help in encouraging entrepreneurs to work early on entrepreneurial startup activities in this context Alsos and Kolvereid (1998) found that individuals with prior experience inclined to take actions on early startup activities than those without experience (Farmer et al., 2011).

Interestingly, Starting a new business has a positive relationship with the prior experience; in this context, Davidsson and Honig noticed that experience has been positively linked to the likelihood of starting a new venture and looking for entrepreneurial

opportunities (Farmer et al., 2011). Likewise, Ucbasaran, Westhead, and Wright (2009) discovered that people with prior experience are able to realize more chances and take advantage of further creative possibilities (Farmer et al., 2011).

Therefore, we believe that PEX influences NACH and EB relationship as well as EPF and EB relationship; such that prior experience will strengthen these relationships because this experience and knowledge that they have already had will encourage them to take entrepreneurial action and behaviors and then eventually start their new business; because this knowledge provides them with a clear understanding of what needs to be done as well as a perception of their identity aspirations and help them to be quick and intelligent in taking appropriate entrepreneurial action (Farmer et al., 2011). in addition to that we propose that PEX strengthen EI and EB relationship; As past researches indicate that prior experience (like a family business background) has an important influence on entrepreneurial interest such that those with this experience are more likely to have more interest in establishing their own venture (Karhunen and Ledyeva, 2010). Build on the previous discussion we hypothesize the following:

- H4a: PEX moderates NACH and EB relationship, such that prior experience strengthen this relationship
- H4b: PEX moderates EPF and EB relationship, such that prior experience strengthen this relationship
- H4c: PEX moderates EI and EB relationship, such that prior experience strengthen this relationship

### 2.5. Entrepreneurial Interest as a Mediator between NACH and EB

In the literature, there is an argument that suggests interests as a very influential driver of work-related results, which include the entrepreneurial field (Schmitt-Rodermund, 2004; Almeida et al., 2014). Though, there has been inadequate experimental proof to back up this assumption. there are some few research which investigates this assumption particularly exploring entrepreneurship further off venture creation (e.g., Fraboni and Saltstone, 1990; Schmitt-Rodermund, 2004; Almeida et al., 2014).

Therefore, this study, try to fill this gap by examining the validity of Entrepreneurial interest in initiating and starting a new business Of predicting EB and mediating the relationship between need for achievement and EB. We believe that Entrepreneurial interest sparks EB and inspires people to choose activities that fulfill their

interests; because people always inclined to careers that match their interests and identities (Almeida et al., 2014).Therefore, When individuals are interested in entrepreneurial activities, this entrepreneurial interest encourages them to translate this concern into action that takes them into EB and push them to create a new enterprise; because entrepreneurial Interest considered to be a very significant predictor of EB; as well as interest lead people to professional duties and vocational activities and then after a period of time vocational or occupational areas are created according to these coherent inclinations (Staggs et al., 2007).

The interaction between the need for achievement and interest is an incorporated relationship so that individuals with a strong need for achievement are highly inclined towards EB; as Stephen et al. (2011) asserted that individuals with a strong need for achievement will be highly motivated and successful in starting their new ventures. In the meantime, entrepreneurial interest influences this EB, as it has been argued by Chamorro-Premuzic (2011) that the behavior of individuals is impacted by their interests; Such that Interests attract individuals to certain actions and impact the behavioral tendencies and abilities they develop (Almeida et al., 2014). Entrepreneurial Interest will, therefore, assist in translating the high need for achievement into EB (Figure 1). following the arguments above, we hypothesize that:

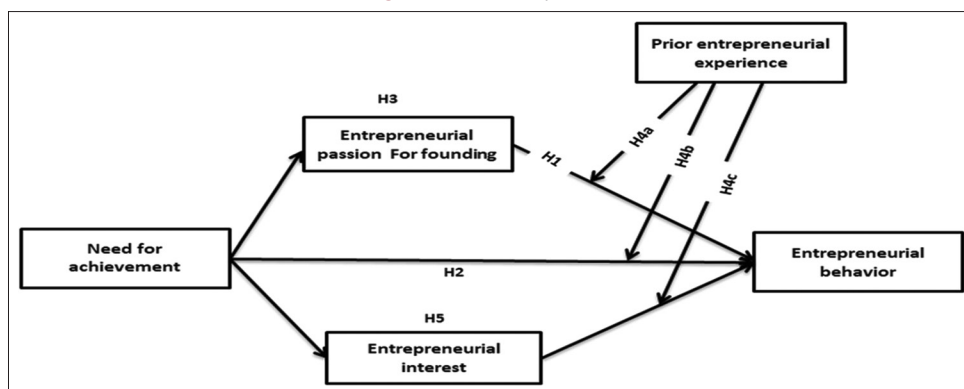
- H5: EI mediates the relationship between NACH and EB

## 3. METHODS

### 3.1. Data Collection

In our study, we sampled 223 as a net sample of potential and actual entrepreneurs from across china. our samples contain Chinese entrepreneurs and foreign entrepreneurs who are living in china. For actual entrepreneurs we sent questionnaires to entrepreneurs who have registered companies and has been working for more than one year; The questionnaire was written in Chinese and English, Using the Brislin (1980) back-translation method: the survey questionnaire was translated into Chinese language then back-translated into English by a separate set of translators (Chinese professors with Chinese and English qualifications). To verify that the translation is reliable, We sent out the translated questionnaire to Chinese academics who were skilled both in Chinese and English as well as have experience in the entrepreneurship area. to differentiate between real entrepreneurs and potential

Figure 1: The study model





entrepreneurs we included a variable in our questionnaire called “Entrepreneur type” which contains this question “Are you currently working on your own business?”. Previous studies have concluded that the intention is a significant factor influencing the individual decision to start a new business (Ozaralli and Rivenburgh, 2016). Therefore, we identify those who are not potential entrepreneurs by asking the following question: “Do you have any intention to start your own business in the future and to be an entrepreneur?” those who answered no, we considered them as not potential entrepreneurs, therefore, we didn’t include them in our samples. For the actual entrepreneurs’ response rate was around 55% we sent 85 questionnaires to entrepreneurs in the field; 24 refused or apologized to participated in this study. 15 responses were excluded due to missing data. a total of 46 who responded to the whole questionnaire, for the potential entrepreneurs we sent questionnaires to MBA and EMBA students some of them already graduated and some in their last year and other students from different departments; the response rate was around 73.5% we sent to around 241 students, 56 excluded because they were not considered as potential entrepreneurs because they don’t have any intention towards being entrepreneurs; 8 were excluded due to missing data, the total correct responses that we received from potential entrepreneurs were 177.

### 3.2. The Demographics of our Final Sample are as the Following

In this study 39% of the participants were female, whilst 61% were male. 20.6% of our total sample were actual entrepreneurs and 79.4% were potential entrepreneurs. Our sample has been blended with Chinese and foreigners residing in China; 46.6% of the participants in this study were Chinese, and 53.4% were foreigners. The age of the participants was range between 20 years and 50 years old; the percentage was 42.6% between 20 and 26 years old, 41.3% between 27 and 33 years old, 15.2% between 34 and 40 years old and only 0.9% between 41 and 50 years old.

### 3.3. Measures

First the dependent variable.

### 3.4. EB

This variable was measured by adopting four items of (Farmer et al., 2011) scale ( $\alpha = 0.79$ ) For each item, participants were asked to confirm whether or not they have performed any of the specific behaviors, response range from (1 = did engage) or (2 did not engage), a sample of these items was “I have engaged in a deliberate, systematic search for an idea for a new business.”

### 3.5. Second Independent Variables

Need for achievement variable: was assessed by adapting four items ( $\alpha = 0.89$ ; Hermans, 1970). A sample item for the need for achievement was “Working’s something: (1) I would rather not do, (2) I don’t like doing very much, (3) I don’t like doing, (4) Neutral, (5) I would rather do now and then, (6) I like doing (7) I like doing. 5-I like doing very much.”

Entrepreneurial passion for founding: we measured this variable by adapting ( $\alpha=0.84$  Cardon, et al., 2013) six-items with seven Likert scales; Participants were asked to state the degree to which

they agree with each of the given expression (1 = SD; 7 = SA). A sample of these items was “Establishing a new company excites me” to “I frequently think about starting/founding a business.”

### 3.6. Entrepreneurial Interest

was measured by adapting (Krueger et al., 2000) and (Baughn et al., 2006) five items ( $\alpha=0.87$ ) these items start with “Is starting your own business an attractive idea to you?” the participants were asked to choose between (1 = very unattractive to 7 = very attractive) these items end with “If you started a business in the near future, what is the probability that it would succeed?”; participants were asked to select between the range of (1 = very unlikely to 7 = very likely)

PEX: was assessed by adapting Davidsson and Honig (2003) item, participants were asked if they had ever started a business or worked as an entrepreneur? The answers were (1 = yes, 0 = no).

### 3.7. Control Variables

In this study, we have controlled for these variables: the first variable we have controlled was gender; Which has been controlled in a similar study conducted by (Chen et al., 2009; Vallerand et al., 2003; Vallerand et al., 2007). We also controlled for education, country of origin (cultural background) and age; to Address potential causes of variability in the dependent variables which might be generated by these variables.

## 4. DATA ANALYSIS AND RESULTS

### 4.1. Reliability and Validity

In order to test our model constructs’ reliability and validity we calculated Cronbach’s alpha (CA) to test the reliability, and then we computed average variance extracted (AVE), as well as composite reliability (CR) to test the validity, then we calculated factor loadings for our all variables items to test the internal consistency of the main constructs (Fornell and Larcker, 1981; Hair, Sarstedt et al., 2012); we used SPSS 22.0 to calculate CA, CR, AVE and factor loadings. Table 1 shows the results of reliability and validity.

From the above table, we can see that all major variables in our study fulfilled the standards. CA was found to achieve the threshold values of which varied between (0.789 and 0.895); Whilst the values for CR differed from (0.824 to 0.90), those values above the acceptable value of 0.7 (Henseler et al., 2009; Neneh, 2019). Likewise, the loading factor also exceeded the acceptable limit value of 0.60 as was proposed by (Fornell and Larcker 1981). Those values verify the internal stability of the major variables that we have applied in this study. the AVE values differed between (0.530 and 0.684) which are higher than the acceptable 0.5 limits (Sekaran, 2003). Therefore, the symmetric validity of the model structure is verified (Henseler et al., 2009; Neneh, 2019). Finally, the square roots of the AVE values can be seen in Table 2 (Diagonal values) for all the main structures in the model, the corresponding inter-construct correlations are substantially higher; thereby the discriminant validity of the major model constructs are verified (Fornell and Larcker, 1981).

To measure our model fitness, We implemented a confirmatory factor analysis (CFA) by using AMOS software. Confirmatory

factor analysis results indicate that our model is appropriate and the standard rate fitness index criteria proposed by Hu and Bentler (1999) and Hair et al. (2007) have been met. the CFA results showed an acceptable model fit, ( $\chi^2 = \text{CMIN}/df = 337.178/146 = 2.309, P < 0.001$ ) this value located within the proposed interval of [1, 3]; the RMSEA's value is 0.07 and SRMR's value is 0.05 which are also acceptable and meet the standards, as they are less than the proposed values of 0.08 for RMSEA and 0.06, for SRMR. in the meantime, the GFI's value is 0.864, and NFI's value is 0.84, as well as IFI's value is 0.90, TLI's value is 0.88, and CFI's value is 0.90 that are all at acceptable level. All indicators loaded significantly ( $P < 0.001$ ) on their respective constructs.

### 4.2. Correlation

The means, standard deviation, and Pearson correlations matrix of all of the variables used in our study are shown in Table 2.

As seen in Table 2 all independent variables significantly correlated with the dependent variable (EB), and all of these correlations are positive. This correlation preliminary support our first hypothesis (H1) which state that entrepreneurial passion for founding significantly associated with EB ( $r = 0.391$  and  $p < 0.01$ ), and our second hypothesis (H2) which states that need for achievement significantly associated with EB ( $r = 0.403$  and  $p < 0.01$ ).

### 4.3. Hypothesis Testing

To analyze the effects between independent variables and the dependent variable as well as to test our hypotheses we ran Process macro that was proposed by Hayes (2013) in SPSS 22.0; in Table 3 we can see the direct and indirect effect results. Our first Hypothesis proposed that EPF positively associated with EB. As we can see in Table 3, the EPF and EB' relationship is significant as well as positive ( $\beta = 0.095, P < 0.01$ ; and 95% CI [0.0598, 0.131] which not including zero). Thus confirmed our first hypothesis. The second Hypothesis in our study proposes that the NACH positively associated with EB. Table 3 shows that the NACH and EB's relationship was also significant as well as positive ( $\beta = 0.091, P < 0.01$ ; and the 95% CI [0.057, 0.124] which not including zero). Thereby supported the second hypothesis.

### 4.4. Test of Mediation Effect

From Table 2 (correlation matrix) we can see that the relationship between our independent variable (NACH) and our mediators (EPF) and entrepreneurial interest (EI) are significant as well as the relationship between our mediators and our dependent variable (EB) were both significant, according to these significant relationships we ran mediation tests to test our third and fifth hypotheses. We have embraced the suggested technique of bootstrapping, which is feasible for small sample sizes and does not depend on the ordinary

**Table 1: Reliability and validity results**

| Variables                            | Items | Factor of loadings | CA    | CR    | AVE   |
|--------------------------------------|-------|--------------------|-------|-------|-------|
| Entrepreneurial behavior             | EB1   | 0.736              | 0.789 | 0.824 | 0.541 |
|                                      | EB2   | 0.649              |       |       |       |
|                                      | EB3   | 0.728              |       |       |       |
|                                      | EB4   | 0.814              |       |       |       |
| Need for achievement                 | NA1   | 0.816              | 0.895 | 0.90  | 0.684 |
|                                      | NA2   | 0.864              |       |       |       |
|                                      | NA3   | 0.818              |       |       |       |
|                                      | NA4   | 0.807              |       |       |       |
| Entrepreneurial passion for founding | EPF1  | 0.793              | 0.843 | 0.87  | 0.53  |
|                                      | EPF2  | 0.634              |       |       |       |
|                                      | EPF3  | 0.706              |       |       |       |
|                                      | EPF4  | 0.707              |       |       |       |
|                                      | EPF5  | 0.704              |       |       |       |
|                                      | EPF6  | 0.808              |       |       |       |
| Entrepreneurial interest             | EINT1 | 0.753              | 0.858 | 0.871 | 0.58  |
|                                      | EINT2 | 0.810              |       |       |       |
|                                      | EINT3 | 0.766              |       |       |       |
|                                      | EINT4 | 0.786              |       |       |       |
|                                      | EINT5 | 0.671              |       |       |       |

CA: Cronbach's Alpha, CR: Composite reliability, AVE: Average variance extracted

**Table 2: Mean, standard deviations and correlations matrix**

| Main constructs          | Mean  | SD    | 1              | 2              | 3              | 4              | 5        | 6       | 7       | 8      | 9 |
|--------------------------|-------|-------|----------------|----------------|----------------|----------------|----------|---------|---------|--------|---|
| 1.EB                     | 1.423 | 0.385 | <b>(0.735)</b> |                |                |                |          |         |         |        |   |
| 2.NACH                   | 4.298 | 1.403 | 0.403**        | <b>(0.827)</b> |                |                |          |         |         |        |   |
| 3.EPF                    | 3.940 | 1.269 | 0.391**        | 0.234**        | <b>(0.728)</b> |                |          |         |         |        |   |
| 4.EI                     | 4.349 | 1.142 | 0.415**        | 0.474**        | 0.286**        | <b>(0.761)</b> |          |         |         |        |   |
| 5.PEX                    | 0.668 | 0.472 | 0.651**        | 0.266**        | 0.298**        | 0.360**        |          |         |         |        |   |
| <b>Control variables</b> |       |       |                |                |                |                |          |         |         |        |   |
| 6.Gender                 | 1.390 | 0.489 | 0.131          | 0.030          | 0.125          | 0.096          | 0.095    |         |         |        |   |
| 7.Age                    | 1.744 | 0.743 | -0.183**       | 0.039          | -0.099         | 0.041          | -0.192** | -0.158* |         |        |   |
| 8.Education              | 2.874 | 0.700 | -0.070*        | 0.160          | 0.115          | 0.118          | 0.064    | -0.041  | 0.597** |        |   |
| 9.Country                | 1.534 | 0.500 | 0.011          | 0.051          | -0.032         | -0.111         | 0.067    | -0.063  | -0.007  | -0.091 |   |

\*\*Correlation is significant at the 0.01 level (2-tailed). \*Correlation is significant at the 0.05 level (2-tailed). Diagonal values in bold represent the square root of the AVE values



**Table 3: Mediation effect**

|  | Entrepreneurial passion for founding |           |                  |                  | Entrepreneurial interest        |           |           |           |
|--|--------------------------------------|-----------|------------------|------------------|---------------------------------|-----------|-----------|-----------|
|  | $\beta$                              | SE        | t                | 95% CI           | $\beta$                         | SE        | t         | 95% CI    |
| Constant   | 3.030**                              | 0.257     | 11.785           | 2.523            | 2.690**                         | 0.213     | 12.621    | 2.270     |
| Need for achievement                                   | 0.212**                              | 0.056     | 3.788            | 0.102            | 0.386                           | 0.041     | 9.377     | 0.305     |
|  | <b>Entrepreneurial behavior</b>      |           |                  |                  | <b>Entrepreneurial interest</b> |           |           |           |
|  | $\beta$                              | SE        | t                | R <sup>2</sup>   | LL 95% CI                       | LL 95% CI | LL 95% CI | UL 95% CI |
| Constant   | 0.658**                              | 0.065     | 10.141           | 0.260            | 0.5300                          | 0.786     |           |           |
| Entrepreneurial passion for founding                   | 0.095**                              | 0.018     | 5.290            |                  | 0.0598                          | 0.131     |           |           |
| Need for achievement                                   | 0.091**                              | 0.0171    | 5.292            | 0.227            | 0.0568                          | 0.124     |           |           |
| Constant   | 0.684**                              | 0.098     | 6.956            |                  | 0.490                           | 0.878     |           |           |
| Entrepreneurial interest                               | 0.097**                              | 0.029     | 3.389            |                  | 0.0408                          | 0.154     |           |           |
| Need for achievement                                   | 0.073**                              | 0.019     | 3.897            |                  | 0.036                           | 0.110     |           |           |
|  | <b>Effect</b>                        | <b>SE</b> | <b>LL 95% CI</b> | <b>UL 95% CI</b> |                                 |           |           |           |
| Direct effect (Entrepreneurial passion for founding)   | 0.091                                | 0.0171    | 0.057            | 0.124            |                                 |           |           |           |
| Direct effect (Entrepreneurial interest)               | 0.073                                | 0.019     | 0.036            | 0.110            |                                 |           |           |           |
| Indirect effect (Entrepreneurial passion for founding) | 0.020                                | 0.007     | 0.009            | 0.036            |                                 |           |           |           |
| Indirect effect (Entrepreneurial interest)             | 0.038                                | 0.011     | 0.016            | 0.059            |                                 |           |           |           |
|  | <b>Effect</b>                        | <b>SE</b> | <b>z</b>         |                  |                                 |           |           |           |
| Indirect effect (Entrepreneurial passion for founding) | 0.020                                | 0.007     | 3.044            |                  |                                 |           |           |           |
| Indirect effect (Entrepreneurial interest)             | 0.038                                | 0.012     | 3.172            |                  |                                 |           |           |           |

Note: \*\*p<0.01, Bootstrap sample size =5000, CI: Confident interval, LL: Lower limit, UL: Upper limit

sampling distribution; in these tests We used, a bootstrapping process with a bootstrapping sample size = 5000, as suggested by MacKinnon, Lockwood, and Williams (2004), to create the asymmetrical confidence intervals for indirect relations. Mediation results are showed in Table 3 by using the bootstrapping method.; we hypothesize that EPF mediates the relationship between NACH and EB, the indirect effect of need for achievement on EB via entrepreneurial passion for founding is significant and positive (the indirect effect = 0.020, 95% CI = 0.009–0.036). Therefore, we found support for our third Hypothesis. Similarly, the indirect effect of a need for achievement on EB via Entrepreneurial interest is significant and positive ( the indirect effect = 0.038, 95% CI = 0. 016, 0. 059). thereby, we accept our fifth Hypothesis as it was supported.

**4.5. The Moderating Effect of PEX**

We ran Process macro that was proposed by Hayes (2013) in SPSS 22.0 to test our moderation hypotheses. the IV and moderating variables were centralized Implementing a standard deviation plus-minus (+ 1 SD/-1 SD) from the mean as proposed by Aiken, West, and Reno (1991). The moderating effect of prior experience results is shown in Table 4, hypothesis 4a. suggested that PEX moderates NACH and EB relationship, such that this relationship becomes stronger for those with PEX as shown in Table 4; this relationship is moderated by PEX (  $\beta$ =0.088, P<0.01, t= 3.663, CI=0.406 to 0.135) which supports hypothesis 4a. the second moderation hypothesis (H4b.) in our model stated that Prior experience moderates the relationship between EPF and EB, such that prior experience strengthen this relationship, this interaction was significant as well ( $\beta$ =0. 077, P <0.01, t= 3.281, CI=0.031 to 0.123) this supports H4b as well. Regarding entrepreneurial interest, we hypothesized that PEX moderates the relationship between entrepreneurial interest and EB such that prior experience strengthens this relationship. this interaction was significant as well as positive ( $\beta$ =0.122, P<0.01, t= 3.150, CI=0.046 to 0.198), which gives support to our hypothesis H4c.

The graphical illustrations of the moderation effects of prior experience are presented in Figures 2-4. Figure 2 shows that PEX moderates NACH and EB relationship. such that When prior experience is high, the relations become stronger, while with low prior experience, these relations become weaker

Additionally, Table 5a shows that the positive relationship between need for achievement and EB is stronger and significant for those who have prior experience ( $\beta$  = 0.097, t = 4.97, CI = 0.058-0.135), in the same time this relationship become weaker and insignificant for those who have no prior experience ( $\beta$  = 0.009, t = 0. 62, CI = -0.019 to 0.036), thereby these results suggests further supports for the moderation hypothesis.

Similarly, we can see in Figure 3a the relationship between EPF and EB is moderated by PEX, such that when the prior experience is high this relationship becomes stronger and when the prior experience is low the relationships become weaker.

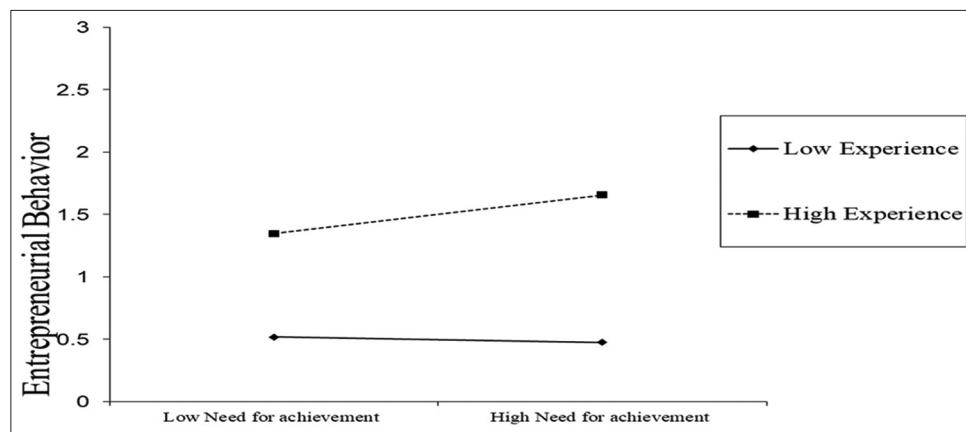
Furthermore, Table 5b shows that the positive relationship between EPF and EB is stronger and significant for those who have prior experience ( $\beta$  = 0.085, t = 4.312, CI = 0.046-0.123), on the other hand, this relationship becomes weaker and not

**Table 4: Moderation effect**

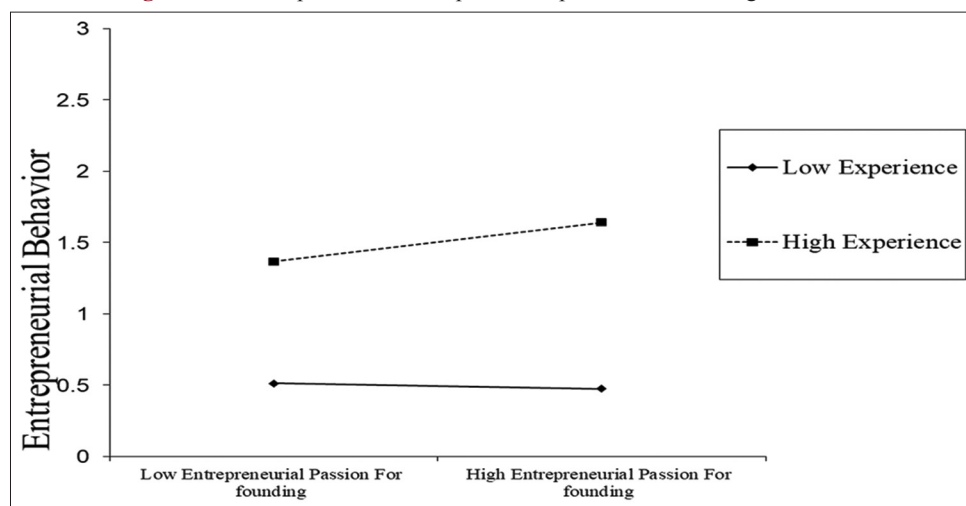
| Outcome: Entrepreneurial behavior                        | $\beta$ | SE     | t      | R <sup>2</sup> |
|--|---------|--------|--------|----------------|
| Constant   | 1.407** | 0.0199 | 70.767 | 0.501          |
| Prior experience   | 0.502** | 0.036  | 13.886 |                |
| Need for achievement                                     | 0.067** | 0.014  | 4.890  |                |
| Need for achievement $\times$ Experience                 | 0.088** | 0.024  | 3.663  |                |
| Constant   | 1.409** | 0.020  | 70.006 | 0.480          |
| Prior experience   | 0.505** | 0.036  | 13.948 |                |
| Entrepreneurial passion for founding                     | 0.059** | 0.014  | 4.300  |                |
| Entrepreneurial passion for founding $\times$ Experience | 0.077** | 0.023  | 3.281  |                |
| Constant   | 1.400** | 0.022  | 63.723 | 0.490          |
| Prior Experience   | 0.501** | 0.037  | 13.681 |                |
| Entrepreneurial interest                                 | 0.076** | 0.025  | 3.062  |                |
| Entrepreneurial interest $\times$ Experience             | 0.122** | 0.039  | 3.150  |                |

\*\*P<0.01, \*P<0.05 Bootstrap sample=5000

**Figure 2: Prior experience  $\times$  Need for achievement interaction**



**Figure 3: Prior experience  $\times$  Entrepreneurial passion for founding interaction**



significant for those who have no prior experience ( $\beta = 0.008$ ,  $t = 0.632$ ,  $CI = -0.0169-0.0329$ ), thereby these results provide further supports for the moderation hypothesis.

Finally, Figure 4 shows that the relationship between EI and EB is moderated by PEX, such that this relationship becomes stronger when the PEX is high and weaker when the PEX is low.

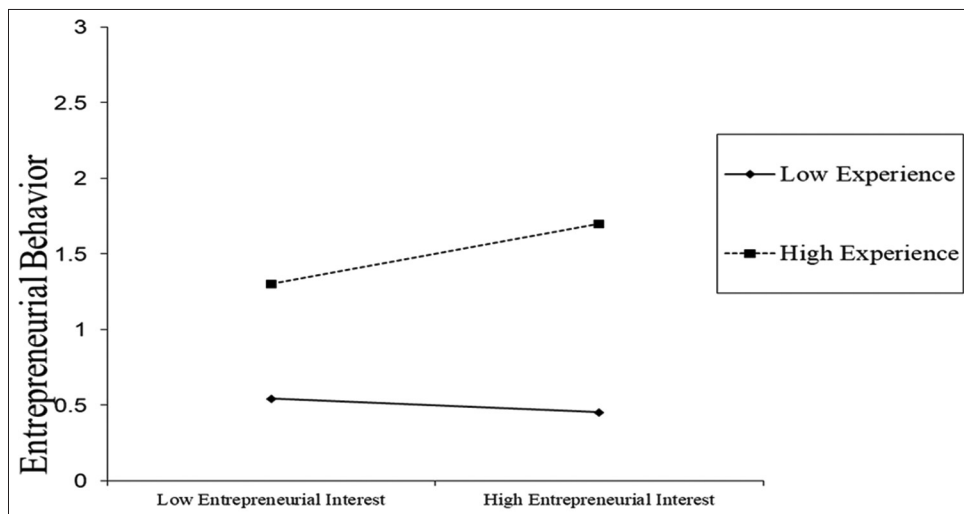
Moreover, Table 5c shows that the relationship between EPF and EB is significant and positive for those who have prior experience

( $\beta = 0.116$ ,  $t = 3.18$ ,  $CI = 0.044-0.188$ ), while this relationship become not significant for those who have no prior experience ( $\beta = -0.006$ ,  $t = -0.439$ ,  $CI = -0.031-0.019$ ), which provide supports for the moderation hypothesis (H4c).

## 5. DISCUSSION AND IMPLICATIONS

In this study, we examined the direct and indirect relationship between need for achievement and EB. we proposed two new mediators (entrepreneurial passion for founding and entrepreneurial

**Figure 4:** Prior experience × Entrepreneurial conditional interest interaction



**Table 5a: conditional effect of need for achievement on entrepreneurial behavior**

| EXP         | Effect | SE    | t     | P     | LLCI   | ULCI  |
|-------------|--------|-------|-------|-------|--------|-------|
| No EXP (0)  | 0.009  | 0.014 | 0.619 | 0.537 | -0.019 | 0.036 |
| Have EXP(1) | 0.097  | 0.019 | 4.972 | 0.000 | 0.058  | 0.135 |

CI: Confident interval, LL: Lower limit, UL: Upper limit

**Table 5b: Conditional effect of EPF on entrepreneurial behavior**

| EXP         | Effect | SE    | t     | P     | LLCI   | ULCI  |
|-------------|--------|-------|-------|-------|--------|-------|
| No EXP (0)  | 0.008  | 0.126 | 0.633 | 0.528 | -0.017 | 0.033 |
| Have EXP(1) | 0.085  | 0.020 | 4.312 | 0.000 | 0.046  | 0.123 |

CI: Confident interval, LL: Lower limit, UL: Upper limit

**Table 5c: Conditional effect of entrepreneurial interest on entrepreneurial behavior**

| EXP         | Effect | SE    | t      | P     | LLCI   | ULCI  |
|-------------|--------|-------|--------|-------|--------|-------|
| No EXP (0)  | -0.006 | 0.013 | -0.439 | 0.661 | -0.031 | 0.020 |
| Have EXP(1) | 0.116  | 0.036 | 3.186  | 0.002 | 0.044  | 0.188 |

CI: Confident interval, LL: Lower limit, UL: Upper limit

interest) that mediate this relationship as well as one moderator (prior experience). The results show that there is a positive and significant relationship between EPF and EB, so this passion triggers entrepreneurs’ behavior and encourages them to involve in business-related activities. these results answer the first research question in this study and support our first hypothesis. This finding is also aligned with Cardon’s argument that entrepreneurial passion harmonizes entrepreneurs’ mental actions and their behavior and trigger their inspiration (Cardon et al., 2017). Additionally, This finding can be explained by Vallerand et al. (2003) definition of entrepreneurial passion as a high tendency or predisposition that people have towards activities that they realize salient and in which they spend more time and effort (p. 757; Gielnik et al., 2017). So those individuals with entrepreneurial passion will have tendency towards certain salient activities and because they have passion for founding so these activities will be related to starting up new business because Entrepreneurial passion for founding reflects the passion of entrepreneurs for activities related

to establishment process of a new business (Cardon et al., 2009; Breugst et al., 2012).

In response to the second hypothesis, results show that need for achievement significantly predict EB which also aligned with the previous literature in this context; According to McClelland (1961) The need for achievement found to be affiliated with EB, Therefore, many studies emphasize the significance of the need for achievement as a trait of entrepreneurs and an impact on the performance of the venture (Barba-Sánchez and Atienza-Sahuquillo, 2012). Additionally, these results confirm what has been found by Collins, Locke, and Hanges (2000) who carried out a meta-analysis which considered to be the first NACH and entrepreneurship meta-analysis research, they analyzed 63 NACH and entrepreneurship research, they found that NACH is importantly linked to the establishment of a business (Shane et al., 2003). Furthermore, This result is also consistent with Collins et al. (2004) founding, who found that EB and performance significantly associated with achievement incentives; and these achievement motivations remarkably drive entrepreneurial activities.

In regard to the second research question and to our third hypothesis which proposed that entrepreneurial passion for founding mediate the relationship between need for achievement and EB; this mediation was proposed based on entrepreneurship literature which suggests that entrepreneurial passion -as major predictor of EB- has a significant intellectual and behavioral elements (Chen, et al., 2009), that impact one’s behavior (Cardon, et al., 2009b; Murnieks, et al., 2011; Nasiru et al., 2015). Similarly, the need for achievement found to predict EB and this motivation probably comes before the startup process (Brandstätter, 1997; Carraher et al., 2010).in this study we studied how these two constructs work together and what is their impact on EB; mediation results show that EPF significantly mediates the relationship between NACH and EB. the regression results support our third hypothesis. These results considered to be a significant contribution to entrepreneurship literature and the need for achievement literature.

Previous studies argued that interest has an important impact on work-related results including entrepreneurship (Schmitt-Rodermund,

2004). Additionally, Decker et al., (2012) found that there is a positive relationship between positive incentive needs with an entrepreneurial interest. In this study we made a significant contribution by studying the impact of need for achievement together with entrepreneurial interest on EB; the regression results show support for this mediating impact of entrepreneurial interest in the relationship between need for achievement and EB; this result supports our fifth hypothesis as well as give an answer for the second question in this study. This result means that the need for achievement push individuals to EB because this behavior offers them more possibilities to take advantage of the characteristics associated with their high motivation need (Holland, 1985; Collins et al., 2004). Meanwhile, entrepreneurial interest mediates this relationship and sparks high achievers' behavior because individuals always inclined to what suits their interests and identities (Almeida et al., 2014).

Prior experience was used as a moderator in this study because individuals with prior experience learn from their experience and avoid mistakes in their future entrepreneurial, as well as this experience, help them to get enough information that helps them to familiarize themselves and make good social networks and relationships that help them in translating their motivation, passion and interest into actual entrepreneurial activities (MacMillan, 1986; Farmer et al., 2011). To test this claim and to answer the last research question in this study we proposed three hypothesis H4a, H4b and H4c. In regard to H4a the moderation effect was significant and H4a was supported as we found that PEX moderates the relationship between EPF and EB such that this relationship become stronger for those who have prior experience, The logical explanation for this could be that because passion is provoked as a result of engagement in activities that relate to entrepreneurs' salient self-personality (Cardon et al., 2009). And prior experience has allowed entrepreneurs to participate in these entrepreneurial activities which raise their passion and, thus strengthen the relationship between their EPF and EB.

Similarly, hypothesis 4b proposed that PEX moderates the relationship between need for achievement and EB, regression results supported this hypothesis as we found that the relationship between NACH and EB becomes stronger for those with prior experience. This can be explained as because of prior experience individuals get impression about entrepreneurial activities and starting up process which increases their level of achievement motivation; as well as individual's prior experience in the entrepreneurial start-up process gives him/her a positive impression (Davidsson and Honig, 2003; Delmar and Davidsson, 2000; Farmer et al., 2011) additionally, high achievers prefer activities with reasonable complexity (Unger et al., 2015) and innovation, on the other hand, prior experience help individuals to recognize these activities and take advantage of more creative chances (Ucbasaran et al., 2009; Farmer et al., 2011).

Finally, the moderation role of PEX on the relationship between EI and EB was significant and positive, the result of regression analysis shows support for our last moderation analysis H4c. The logic behind this result can be explained as Wilson et al. (2009) found that self-efficacy significantly impacts both entrepreneurial interest and EB. Meanwhile, Prior experience raises individuals' entrepreneurial self-efficacy (Wilson et al., 2009). This self-efficacy

enhances individuals' entrepreneurial interests and encourages them to engage in EB (arkmam et al., 2002; Wilson et al., 2009). The other reason that can explain this finding is that this prior experience is acquired as a member of an entrepreneurial family with an entrepreneurial background and that family background generates an individual's entrepreneurial interest as attempts or entrepreneurial practices carried out by parents or families deemed to be an obvious role model for that individual (Krueger, 1993; Baughn et al., 2006).

The findings of this study can be generalized because our sample covers Chinese and foreigners living in China from different countries with different cultures background.

Theoretically, this study enhanced and validated the need for achievement theory. As well as it enriched entrepreneurship literature. This study confirmed the direct relationship between EPF and EB by using samples from across China including foreigners students and entrepreneurs who are living in China, which considered to be a contextual contribution; This helps in generalizing these results and confirming this direct relationship. Additionally, the direct relationship between NACH and EB was confirmed by this study which helps in generalizing these results as well. Furthermore, this study introduced two new mediators which play a vital role in the relationship between NACH and EB and it investigated their mediating effect on this relationship; Up to our knowledge this study is among the first to explore the mediating roles of EPF as well as EI in the relationship between need for achievement and EB which considered to be a significant contribution to entrepreneurship literature as well as to need for achievement literature. More than that, this study explored the moderating effect of PEX in the direct and indirect relationship between NACH and EB.

Finally, there are important practical implications for our study, these implications are important for university educators, policymakers and those who are interested in studying EB. First, given that EB is considered to be an essential factor for starting a new business which in turn helps in economic growth this behavior is significantly derived by the entrepreneurial passion for founding, so this study call for designing training planes or programs to understand how to boost and sustain entrepreneurial passion for founding among potential entrepreneurs, as well as to engage them in entrepreneurial activities and courses that enhance their entrepreneurial passion for founding. Second, the need for achievement along with entrepreneurial interest was found to predict EB, this encourages university educators and policymakers to exploit these motivations and interests of potential entrepreneurs as well as orient and enhances potential entrepreneurs' motivation and entrepreneurial interest.

Notwithstanding our study's contributions it still has some limitations, as it is common for any study to have limitations, the first limitation in our study is the sample size was not big enough, although it covered many nationalities the response rate was not big enough, which provide opportunities for future research to use larger sample. Second For prior experience we did not specify the length of the period of this experience which



limits our understanding of the range of this period to which extent this period of experience will affect the relationship between variables, future study could investigate the range of prior experience and to which extent this period still affect the direct relationship between EPF and EB, need for achievement and EB as well as entrepreneurial interest and EB. Furthermore, the current study investigates only one type of entrepreneurial passion identities which is an entrepreneurial passion for founding this limit our study, future research can investigate other types of passions identities like entrepreneurial passion for inventing, entrepreneurial passion for developing. Additionally, the current study examined the moderation effect of PEX in the second phase of our model, unfortunately, this moderation role was insignificant in the first phase which gives a motivation for future studies to introduce new moderators in the first phase as well as in the second phase other than prior experience.

In this study, We made a significant contribution to the need for achievement literature as well as entrepreneurship literature by testing and confirming the direct relationship between NACH and EB. Additionally, we introduced two new mediators in this relationship which hasn't been investigated before, these mediators are EPF and EI. The current study showed that these two mediators significantly mediate the relationship between need for achievement and EB. Finally, we investigated the moderation effect of prior experience between entrepreneurial passion for founding and EB, need for achievement and EB as well as entrepreneurial interest and EB. The results of this moderation effects showed that prior experience significantly moderates these relationships such that these relationships become stronger with prior experience.

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