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Haddoud, MY, Onjewu, A-KE, Al-Azab, MR and Elbaz, AM (2021) The Psychological Drivers of Entrepreneurial Resilience in the Tourism Sector. Journal of Business Research. ISSN 0148-2963

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The Psychological Drivers of Entrepreneurial Resilience in the Tourism Sector

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Abstract

Although resilience is assumed to play a crucial role in entrepreneurship, the factors leading to entrepreneurial resilience in the tourism sector remain relatively unknown. To address this issue, this study adopts a novel configuration approach to assess psychological traits that are likely to result in resilient entrepreneurial behaviour in tourism. It approaches this by conceptualising personality traits through the big five model which is widely espoused in the psychology discipline. Then, using fuzzy-set analysis, a sample of 180 bazaar owner/managers in Egypt is investigated from which three distinct profiles likely to exhibit high levels of entrepreneurial resilience are determined. The findings of this paper advance scholars' theoretical understanding and offer intelligence to policymakers and training institutions in the Egyptian tourism scene. Particularly, they help bazaar owner/managers reflect on their predispositions as a means for increasing resilience.

Key Words: *Entrepreneurial Resilience; Bazaars; Big Five Traits; fsQCA; Egypt.*

1. Introduction

Tourism entrepreneurship plays an important role in driving job creation, economic welfare and the development of destinations (Fu *et al.*, 2019). Yet, the sector is also highly vulnerable and

easily disrupted by political, geological and climatic hazards (Prayag *et al.*, 2020; Fang *et al.*, 2020). During crises, its volatility is accentuated by the preponderance of self-employed personnel (Pappas & Brown, 2020). Thus, personal resilience is known to be a key characteristic in entrepreneurs for driving performance and sustaining economic activity in difficult periods (Santoro *et al.*, 2021; Sharma *et al.*, 2021). Korber and McNaughton (2018) also press the point that resilience enhances individuals' desire to start or pursue new ventures. Particularly, resilience boosts entrepreneurs' ability to reflect and rebuild by exploring and enacting new opportunities in order to 'bounce forward' (Muñoz *et al.*, 2019: 428). To this extent, resilience has been defined as 'the capacity to rebound or bounce back from adversity, conflict, failure or even positive events' (Luthans, 2002: 702).

Despite the importance of resilience to entrepreneurial success, it is still under-researched in the extant literature (Lee & Wang, 2017). So far, studies have mainly focused on the influence of resilience on entrepreneurial decision (Corner *et al.*, 2017). Hence, the antecedents of resilience are relatively unknown in the tourism entrepreneurship literature. It is recognised that 'tourism scholars have been somewhat slow to adopt the recent conceptual ideas related to community resilience that have been published in other disciplinary areas' (Lew, 2014:14). Similarly, Orchiston, Prayag and Brown (2016: 145) argued that 'there are no studies that quantitatively evaluate the resilience of tourism organizations'. In fact, the gap seems to be persisting as Prayag *et al.* (2020), Fang *et al.* (2020) and Sobaih *et al.* (2021) recognise that studies on the resilience of small tourism firms remain limited. Precisely, 'how organizational resilience is developed post-disaster is less clear for small tourism enterprises' (Fang *et al.*, 2020: 2). This is surprising as Bakas (2017) posits that tourism entrepreneurs exhibit higher resilience in comparison to other sectors due to being independent risk-taking individuals.

According to Korber and McNaughton (2018), entrepreneurial resilience could be determined by several conditions including psychological traits, organisational characteristics and macro-level factors. In the present study, the focus is on psychological traits as Sarubin *et al.* (2015: 197) affirm that ‘a person’s individual characteristics are more related to resilience than other investigated factors like interpersonal relationships, environmental factors and maltreatment’. Also, Nakaya *et al.* (2006) and Fayombo (2010) suggest that individual traits are particularly important for developing resilience. Citing the big five personality model comprised of neuroticism (or emotional stability), extraversion, openness, agreeableness and conscientiousness, Fayombo (2010) argues that the construct can explain the dynamics of resilient personalities. Oshio *et al.* (2018) assert that these traits provide a common framework for understanding personality types and predisposition towards resilience. At the same time, they add that ‘it is unknown whether the correlations between resilience and the Big Five personality traits are consistent across studies’ (Oshio *et al.*, 2018: 56).

In terms of how the big five traits manifest in practice, Williams and Shepherd (2016) contend that they are more likely to operate in combination than in isolation. Despite this, it is surprising to note that very few studies have attempted to capture the complexity underlying the personality traits-resilience nexus. Therefore, the current paper attempts to ascertain the combinations of personality traits that are likely to produce entrepreneurial resilience. From the outset, we espouse the twofold premise that (1) traits are stable over time and (2) traits directly influence behaviour (Matthews *et al.*, 2009). To capture this, we adopt a fuzzy-set qualitative comparative analysis (fsQCA) technique that has the capacity to estimate how different conditions or traits produce a measured outcome; known as equifinality. Increasingly, tourism and hospitality management (e.g. Pappas and Glyptou, 2021; Robinot *et al.*, 2021) and entrepreneurship (e.g. Kraus *et al.*, 2018) scholars are adopting fsQCA as they recognise the

value of understanding the combined rather than the net effects of variables. In this sense we follow Şahin *et al.*'s (2019) thinking that the big five personality traits are causal conditions with multiple configurations that are sufficient to predict the intensity of a behaviour. Therefore, the current paper is aimed at addressing the question: '*what are the psychological drivers of entrepreneurial resilience among bazaar owner/managers in Egypt?*'.

Considering the above, the inherent contribution resides in appraising the psychology literature on the big five personality traits to understand how entrepreneurial resilience is attained among actors in the tourism sector. Specifically, the extant literature is advanced in three ways. First, we fill the empirical void in tourism firms' resilience alluded to by Prayag *et al.* (2020), Fang *et al.* (2020) and Pathak and Joshi (2021) by investigating Egyptian bazaar entrepreneurs. On the lack of research on organisational resilience in tourism, Pham *et al.* (2021: 213) maintain that "this creates ample opportunities for tourism researchers to further explore the mechanism of resilience building for STHBs [small tourism and hospitality businesses]". Hence, we advance the extant tourism literature by rendering first-hand evidence from a largely neglected sector as far as resilience is concerned. In the same way, we report from the under-researched setting of Egypt. Notably, Sobaih *et al.* (2021) alleged a disproportion in the volume of developed country studies over those in developing contexts such as Egypt. Beyond advancing theoretical understanding, this will also yield insights for developing sustainable tourism in the country. Second, we address Fang *et al.* (2020) and Pathak and Joshi's (2021) gap vis-à-vis the factors triggering small firms' resilience by exploring the psychological factors likely to boost this outcome. In this regard, Pathak and Joshi (2021: 2399) assert that it is "crucial to understand the influence of psychological capital and individual resilience on the overall organizational resilience". Hence, by exploring the psychological coping mechanisms adopted by tourism entrepreneurs to build resilience, we offer a rare indication of the attributes needed to sustain

business activity. Third, we address methodological limitations in the psychological traits-entrepreneurial resilience nexus by heeding calls for a timely shift towards a more complex approach (Khedhaouria and Cucchi, 2019). In this manner a configuration analysis procedure is applied to capture the combinations of psychological traits driving the complexity of tourism entrepreneurs' resilience. Accordingly, we offer a novel perspective on the personality profiles driving entrepreneurial resilience.

2. Egyptian Bazaars

The specific context of this study is the Egyptian bazaar scene. Bazaars, such as the Khan El Khalili market in Cairo, are a major tourist attraction in Egypt (Radwan & Jones, 2015). They are swarms of stores usually numbering into thousands in different locations holding a diversity of inventory ranging from jewellery to clothing to food (AbuElEnain & Yahia, 2017). For tourists seeking an authentic experience, bazaars are ideal for purchasing souvenirs and local craft (Ramkisson & Uysal, 2010). It is said that tourists' shopping experience represents a significant amount of total expenditure after paying out for lodging, food and entertainment (Shen, 2011); and this is mostly transacted at bazaars.

Bazaar entrepreneurs operate specialist enterprises with operations that cooperate closely with peers in the same location (Rusu *et al.*, 2017). They are a social and cultural set-up that encompass an informal mode of commerce as well as a way of life (Dana & Wright, 2015). Bazaar shops interact mainly on the basis of individual connections and personal relationships, and are more focused on interrelationships than on impersonal transactions (Dana and Wright, 2015). Together, they play an important role in service delivery, job creation, economic growth, balanced destination development and reputation building (Hallak *et al.*, 2015).

Owing to being a visitor hub in a tourism-reliant country, Egyptian bazaars are an index of economic activity (Dana, 2000) and, possibly, of resilience. For this reason, commentators have regularly observed the enterprise of bazaar entrepreneurs operating within the informal economy as a yardstick for Egypt's economic performance as the sector generates 30-40% of GDP and 63% of total employment (Elkhashen *et al.*, 2020). Yet, Egyptian bazaars directly bear the brunt of political instability (AbuElEnain & Yahia, 2017), economic recession (Moussa & Moussa, 2010) and terrorist attacks (Gina *et al.*, 2017). Hence, the current interest in bazaar owner/managers is informed by Singh and Rahman's (2013) contention that the performance of an SME depends on the quality human capital. SMEs are, in effect, a reflection of the owner/managers' personality and attitudes (Lee-Ross & Lashley, 2009). Recently, Mhlanga (2019) called for more understanding on how personality traits affect entrepreneurial performance in tourism, and there is certainly growing interest in the personal characteristics and motivations of tourism entrepreneurs (Peters & Kallmuenzer, 2018). Therefore, research into the traits and motivations of bazaar owners is a timely pulse check in view of expanding understanding of resilience in Egypt's key informal economy.

3. Theoretical Background

Resilience is an important theme in positive psychology (Ercan, 2017). The experience of negative events on a personal or extrinsic level is both a natural and unavoidable occurrence that warrants 'psychological adjustment' or resilience (Nakaya *et al.*, 2006: 927). In their meta-analysis, Oshio *et al.* (2018) illustrate the complexity of resilience and identify ego and traits as two sub-types. On the one hand, ego is concerned with individuals' attentive impulses (Oshio *et al.*, 2018) while, on the other hand, traits underscore people's ability to adapt (Ong *et al.*, 2006). Focusing on traits rather than ego, this review appraises the psychological characteristics that underlie who a person is (Mount *et al.*, 2005). A trait is a personality dimension used to

categorise individuals according to the degree to which they exhibit particular characteristics (Burger, 2019). Yet, personality reflects not only individual traits, but also the traits of the society or community they belong to (İrengün & Arikboğa, 2015). Economists and psychologists have long opined that entrepreneurs' personality has a strong effect on firms' success, especially those run singlehandedly or with a few employees (Caliendo & Kritikos, 2008). Moreover, 'healthy' personality traits like being 'hard working, getting along with others, (being) intellectually curious and assertiveness' have a bearing on psychological reliance (Fayombo, 2010:10). Relatedly, Nakaya *et al.* (2006) suggest that personality traits are the basis of individuals' self-control and goal orientation. Hence, the current study attempts to test and validate the influence of the big five personality traits on entrepreneurial resilience with evidence from bazaar actors. This follows the long-held indication that the density of networks in Egyptian bazaars makes entrepreneurs in these setting more resilient and their firms more durable (Denoeux, 1990). As a country, individuals' propensity to absorb disturbance without shifting to an alternative state is also well recorded in Egypt (Daoud *et al.*, 2016). Thus, similar to Presenza and Petruzzelli (2019), we believe that the mindset of entrepreneurs determines their ability to compete over time.

3.1. The Big Five Personality Traits

Researchers have a peculiar interest in entrepreneurs' psychology because of its strong influence on entrepreneurial action (Wiklund *et al.*, 2011). Five main psychology variables considered in extant studies are attitude, cognition, emotion, personality and self, of which attitude, cognition and personality draw the most attention (Omoredede *et al.*, 2015). The logic here is that entrepreneurship is guided by entrepreneurs' decision-making, and this is in turn conditioned by personality traits (Shane *et al.* (2003). Therefore, personality determines the

quality of opportunity recognition, exploitation, innovation and value creation in the entrepreneurial process (Leutner *et al.*, 2014).

The big five construct has emerged as a foremost model for understanding entrepreneurial attributes (Utsch & Rauch, 2000; İrengün & Arikboğa, 2015). The model's popularity is helped by its simplification and capacity to explain several behaviours through one configuration (Setia, 2018). It is comprised of five sub-dimensions namely: agreeableness, conscientiousness, extraversion, neuroticism and openness (İspir *et al.*, 2019).

Both Zhao *et al.* (2010) and Kerr *et al.* (2018) corroborate the significance of entrepreneurs' personality on performance, especially as personality rationalises entrepreneurial success in divergent economic, social and personal circumstances (Caliendo & Kritikos, 2008). Generally, personality research in entrepreneurship focusses on what traits define an entrepreneur, and the ensuing effect on performance (Omoredede *et al.*, 2015). However, while there is a high volume of studies tracking specific entrepreneurial traits in various industries, there is a shortage of similar inquiries in tourism. Yet, there is interest for papers in this regard because personality has been recognised as an important dimension in tourism development (Jaafar *et al.*, 2011). Also, Russell and Faulkner (2004) suggest that the nature of tourism entrepreneurs' involvement is dependent on individual characteristics, environmental conditions and the development stage of the destination. Thus, there is consensus that successful entrepreneurs possess high achievement motivation, independence and locus of control as fundamental attributes (Lerner & Haber, 2000). It is tenable that the big five factors aid understanding of the effect of personality on entrepreneurial resilience. Against this backdrop, proposition development is commenced.

3.1.1 *Extraversion and entrepreneurial resilience*

Extraversion describes individuals with a warm, optimistic, assertive, talkative, outgoing and friendly personality (Mhlanga, 2019). Extraverts are lively, sociable, talkative, self-confident and congenial in their relationships (Ercan, 2017). They have more friends, handle situations with optimism and assertiveness, while showing an interest in others' welfare (Feiler, & Kleinbaum, 2015). In contrast, introverts are shy and calm, preferring isolation and low social involvement (İrengün & Arikboğa, 2015; Hachana *et al.*, 2018), although they may not be antisocial nor inactive (İrengün & Arikboğa, 2015). Hence, Costa & McCrea (1992) write that introverted persons are not cold but shy, not spectators but independent, and not lazy but reserved (Lewellyn & Wilson, 2003).

In context, we posit that when entrepreneurs possess high extraversion, entrepreneurial performance is increased. They exhibit a high expectation for rewards (Zhao & Seibert, 2006), and contrive effective solutions for goal achievement (Zadel, 2006). Extraverts are predisposed to entrepreneurship by forging good personal relationships with customers, suppliers, marketers and other stakeholders (İrengün & Arikboğa, 2015). Entrepreneurship requires individuals to assume the leadership of new ventures (Vecchio, 2003); thus, they are thrust into positions to optimise employees' commitment and motivation, and to create a conducive work environment (Hachana *et al.*, 2018). Therefore, antecedents of extraversion such as energy, assertiveness and sociability bode well for entrepreneurial resilience.

Taking stock of the reported effect of extraversion on resilience in the literature, Nakaya *et al.* (2006), Fayombo (2010) and Oshio *et al.* (2018) determined positive correlations between both variables. Due to its mostly positive influence, several studies have operationalised extraversion as either a mediator or moderator leading to resilience (Tse & Kwon, 2018; Nurani & Astriani,

2019; McDonnell & Semkowska, 2020). This is because high extraversion enables individuals to leverage social support to overcome challenges faced during entrepreneurship (Ercan, 2017).

3.1.2. Agreeableness and entrepreneurial resilience

Agreeableness gauges one's attitude and behaviour towards others and their needs (Tonetti, 2011). It assesses the tendency to be altruistic and compliant (Mhlanga, 2019). Highly agreeable individuals are helpful, courteous, trusting, selfless and modest (Zhao *et al.*, 2010; Ercan, 2017). They prefer positive interpersonal relationships (Zhou *et al.*, 2019), choose cooperation over competition (Burger, 2019), and evade quarrel to create a stress-free environment (İrengün & Arikboğa, 2015). On the contrary, disagreeable individuals are described as manipulative, selfish, doubtful and ruthless, prioritising personal gains over collective goals (Hachana *et al.*, 2018).

Linked to the current study, intrinsically, entrepreneurship compels the establishment of a for-profit venture predicated on the entrepreneur's needs and interests (Singh & DeNoble, 2003). Some entrepreneurs find it difficult to adapt or accept the workplace behaviour of others (Antoncic *et al.*, 2015). Hence, with high levels of agreeableness, entrepreneurs may struggle for survival because it limits their readiness to make tough calls and drive a hard bargain. The pursuit of one's interest over those of others as well as a manipulative tendency are essential in entrepreneurship (Zhao & Seibert, 2006). Yet, there is counter evidence suggesting that agreeableness positively correlates with resilience. Fayombo (2010) believes that only conscientiousness inspires greater resilience than agreeableness, while Oshio *et al.* (2018: 57) maintain that resilience is 'consistently associated with agreeableness'. Theoretically, this is because 'higher levels of agreeableness contribute to resilience when faced with environmental stressors' (Nieuwenhuis, 2018: 87).

3.1.3. *Conscientiousness and entrepreneurial resilience*

Conscientiousness reflects a person's self-control and discipline (Nakaya *et al.*, 2006; Burger, 2019), as well as self-regulation in both a proactive and inhibitory mode (Tonetti, 2011). It foretells an individual's drive of achievement, work motivation, organisation, planning, morality and responsibility towards others (Mei *et al.*, 2017). People who score high in conscientiousness are detail-oriented, dutiful, orderly and resourceful (Erçan, 2017). Therefore, they are highly committed to rules and pursue perfectionism (İrengün & Arikboğa, 2015). People who score low in conscientiousness tend to be carefree and easily distracted, they are considered less steadfast and hardly dependable (Burger, 2019).

High conscientiousness is driven by a strong sense of responsibility and need for achievement, therefore it plays a critical role in entrepreneurs' ability to lead the enterprise as a going concern (Ciaverella *et al.*, 2004). There is an assumption that people with high conscientiousness perform better, are more organised and conform to norms and rules which lead to superior performance. The highly conscientious are able to build beneficial and profitable relationships with suppliers, investors and stakeholders. Zhao and Seibert (2006) even argue that conscientiousness may have the strongest effect on entrepreneurship among the big five traits; it could also be a good predictor of performance (Burger, 2019). Similarly, Fayombo (2010: 105) assert that conscientiousness is the 'best predictor' of resilience. However, Nakaya (2006) find the impact of conscientiousness on resilience to be only moderately positive. Overall, there is extensive evidence of positive links between conscientiousness and resilience. Hence, Oshio *et al.* (2018) affirm that high conscientiousness is both a theoretical and empirical characteristic of resilience.

3.1.4. *Neuroticism and entrepreneurial resilience*

Neuroticism is a measure of balance in individuals' emotions (Llewellyn & Wilson, 2003), or emotional stability. It is the extent to which a person harbours negative feeling like depression, anxiety, insecurity, hostility, impulsiveness and anger (Zhao *et al.*, 2010; Ercan, 2017). Scholars believe that people possessing high neuroticism are prone to sadness, anger and anxiety (Costa & McCrae, 1992) and are more likely to experience depression and low self-confidence (Burger, 2019). In addition, they are sensitive to negative feedback, worry and appear hopeless in difficult situations. These qualities are not desirable in entrepreneurship (Zhao *et al.*, 2010).

In contrast, successful entrepreneurs are described as calm, strong, optimistic and steady in the face of stress, social pressure and uncertainty (Locke, 2000), demonstrating emotional stability. Entrepreneurship incurs psychological and physical stress from excessive workloads, inconducive work environments and the financial risks associated with new ventures (Hachana *et al.*, 2018, Zhou *et al.*, 2019). To this extent, the highly neurotic suffer mood swings and lack the ability to overcome obstacles and manage stress. Neurotics are also more likely to influence employees negatively and have poor relations with stakeholders, which undermines entrepreneurial resilience.

Empirically, scholars have generally reported a negative correlation between neuroticism and resilience (Nakaya *et al.*, 2006; Oshio *et al.*, 2018). In fact, Gong *et al.* (2020) consider neuroticism to be a risk factor for developing resilience, and Amstadter *et al.* (2016) find that neuroticism altogether attenuates the other big five traits as well as resilience. This could be explained by the emotional instability triggered by neuroticism which in turn generates negative outcomes (Bornstein, 1992).

3.1.5. *Openness and entrepreneurial resilience*

Openness refers to interest in new experiences (Burger, 2019). It describes individuals who are intellectually curious and creative, and seek out fresh ideas and novelty (Zhao *et al.*, 2010; Zhou *et al.*, 2019). It also depicts the expansion, depth, originality and complexity of a person's mental and experiential life (Nadkarni & Herrmann, 2010). Costa and McCrae (1992) state that openness includes an appreciation for experience and art. People who are open are flexible and have the capacity to succeed in situations that require adaptability (Mhlanga, 2019). These individuals court innovation and adventure, and have an appetite for risks which is considered fundamental to entrepreneurship (Zhao *et al.*, 2010, İrengün & Arikboğa, 2015). In comparison, individuals who score low on openness embrace familiarity over novelty (Burger, 2019).

Several studies examining the relationship between personality and entrepreneurship have found openness to be a significant factor (Singh & De Noble, 2003). Resilience manifests through openness to new ideas, imagination, creativity and day-to-day problem-solving while expending minimal resources (Ciavarella *et al.*, 2004). To echo Zhao *et al.* (2010: 396), 'successful entrepreneurial performance is facilitated by a disposition towards new or unconventional ideas, values and actions'. In addition, openness is considered essential to entrepreneurial resilience because it plays a critical role in opportunity recognition (Antoncic *et al.*, 2015). More to the point, opportunity recognition precedes entrepreneurial resilience (Matricano, 2016), and is integral to it (Shane & Eckhardt 2005). Hence, high performing entrepreneurs have a knack for sensing profit-generating versus loss-making opportunities in order to decide whether to exploit or exclude them (Matricano, 2016). The overriding assumption is that entrepreneurial resilience is evident in individuals who face up to new challenges with a high degree of creativity. Therefore, people who score high on openness are more likely to adapt to new situations, and therefore embody greater entrepreneurial resilience.

Considering previous findings, Gong *et al.* (2020) have indicated a positive association between openness to experience and high levels of resilience. In the same vein, Farradonna *et al.* (2019) have recognised the contributions of openness to self-regulation that is fundamental to resilience. Not too dissimilarly, Balgiu (2017) determined that there is a moderately positive correlation between the two variables. Indeed, Fayombo (2010) argues that openness is a secondary predictor of resilience. So far, scholars have not determined negative associations between openness to experience and resilience.

3.2. *Big five personality traits and entrepreneurial resilience: A configuration view*

This inquiry takes a configuration approach which implies that personality traits vary independently and interact dynamically. Whereas a contingency approach investigates two-way interactions with a solitary moderating variable at any time, ‘in reality many moderating variables act simultaneously’ (Gupta & Sebastian, 2017: 1265). Thus, Zhou *et al.* (2019: 156) acknowledge that ‘a configuration of personality traits within an individual would have different impact on entrepreneurial outcomes’. Similarly, Şahin *et al.* (2019) demonstrate that interdependencies between personality traits constitute combinations of behaviours that subsequently produce an outcome. Moreover, Pflügner *et al.* (2020) advance the premise that personality traits interact interdependently when influencing human behaviour, rather than individually. The authors explain that the impact of one attribute on an outcome would depend on others because ‘the effect of one personality trait can be buffered by another one’. This is based on the view that individuals exhibit more than one trait (Misirlis *et al.*, 2018). The interdependence of traits is also confirmed by Khedhaouria and Cucchi (2019) and Maier *et al.* (2020). Hence, in this study, entrepreneurial resilience is deemed dependent on a configuration of personality traits that no single behaviour can exclusively generate. In other words, the influence of the personality traits is more nuanced and depends on the interplay of various traits

(Pflügner *et al.*, 2020). In this vein, we distinguish two main effects in this relationship, namely necessity and sufficiency. Consistent with configurational thinking, we argue that while certain psychological traits may be necessary to achieve entrepreneurial resilience, their “single” influence is not sufficient to achieve this behaviour [resilience]. Rather, as supported by prior evidence [in Khedhaouria and Cucchi (2019); Şahin *et al.* (2019); Maier *et al.* (2020) and Pflügner *et al.* (2020)], it is the combined effect of these psychological traits that is likely to produce sufficient entrepreneurial resilience. Accordingly, the following propositions are put forward for fuzzy analysis:

Proposition 1: The adoption of a single personality trait may be necessary but not sufficient for predicting entrepreneurial resilience.

Proposition 2: A combination of personality traits is more likely to enhance entrepreneurial resilience, than the adoption of a single behaviour.

4. Data and Methods

The personality traits were captured through statements on a 5-point Likert scale based on Schmitt *et al.*'s (2007) adaptation of Benet-Martínez and John's (1998) inventory. Furthermore, entrepreneurial resilience was measured using Seborá & Tantiukoskula's (2011) three-item scale, which was in turn sourced from Luthans *et al.* (2007).

The targeted population was the estimated 19,000 bazaars operating in Egypt (Albawabh News, 2019). We target bazaar owner/managers with sole or shared oversight over the planning, management and operations of the small tourism firm. The focus on this group is informed by three reasons. First, in comparison to other hospitality and tourism units of analysis such as hotel and restaurant owner/managers, bazaar owner/managers are a much overlooked faction in the entrepreneurship literature (Light *et al.*, 2013). Second, underreporting the activities of this group has the adverse effect of socially undervaluing local networks as well as the ‘trans-local

flow of goods, people and ideas that run together and consequently constitute the bazaar' (Alff, 2015: 250). To correspond, Mazaheri (2006) described bazaars as being more of an 'economic barometer' as a trading community. Third, there is growing evidence that the quality of relationships that obtains in the social environment promotes resilient behaviour (Pérez-López *et al.*, 2016). According to Dana and Wright (2015), this characteristic (of quality relationships) is highly evident among bazaar's owner/managers. Moreover, understanding behaviours in the traditional bazaar economy can enhance our capacity to manage the relationships and multipolarity that underlie modern and highly networked economies (Dana and Wright, 2015). To this end, Del Vecchio *et al.* (2018) also believe that collaboration and trust are essential factors in interconnected tourism destinations.

To access bazaar owner/managers, paper-based questionnaires were distributed with the assistance of two researchers, between November and December 2019. A total of 191 forms were returned with 180 deemed usable and valid. We expect that the majority of the respondents to be owners of their bazaars as this is often the case in Egypt. In terms of sampling, non-probability convenience sampling was used and, although this may impair generalisability, it is the convention in entrepreneurship studies due to access challenges encountered when approaching entrepreneurs (Haddoud *et al.*, 2020; Nowiński *et al.*, 2020). As shown in table 1, slightly over a third of the participants were aged 26 - 35 (35%), followed by the 36 - 45 bracket (27.2%). As for gender, an exceptionally high percentage of males were surveyed (approx. 92%). This is common in the Middle-East where men far outnumber women participating in the economy (Elbaz *et al.*, 2020). Specifically in Egypt, the involvement of women in the workforce is between 20-25%, much below the international average of 52%. The European Training Foundation (2010) even estimated women's participation in the Egyptian economy to

be a mere 10%. In terms of academic qualification, two-thirds of the participants held at least a bachelor's degree (67.2%).

Furthermore, additional tests revealed no significant differences in the five personality traits between (1) male and female participants, (2) participants aged 35 or younger vs. those older than 35, and (3) participants with undergraduate vs. postgraduate degrees (Diploma, Masters and PhD). The t-test scores [available upon request] showed that the only significant differences were in the openness to change of younger versus older owner/managers and neuroticism of males vs females. For resilience, no significant differences were observed across the three grouping variables. The mean scores are shown in table 2.

Table 1 about Here

Table 2 about Here

Lastly, to assess common method bias that may arise in survey-based studies, a post-hoc Harman's one-factor test was employed (Lings *et al.*, 2014). The single factor accounted for less than 50% of the total variance, so it can be concluded that the measurement method has no major implications on the results.

5. Reliability and Validity

The reliability and validity of all constructs in the study were assessed preparatory to fuzzy analysis. A structural equation approach was adopted here using WarpPLS (Kock, 2020). Table 3 presents values for composite reliability (CR), Cronbach's alpha (α) and average variance extracted (AVE). All variables are deemed reliable and valid from a measurement perspective, notwithstanding two (EXT and ENR) scoring slightly below the 0.7 Cronbach's alpha cut-off value. To achieve these scores, several items were removed. Respectively, five items each were dropped from conscientiousness, openness, and extraversion, four items from agreeableness

and three items from neuroticism. Despite discarding these items, the reflective nature of the construct suggests that item removal does not reduce applicability. The final list of items is presented in the appendix.

Table 3 about Here

6. Configurational Analysis (fsQCA)

As a technique, fsQCA is based on a Boolean algebra system (Ragin, 2000). It is proficient in identifying combinations of conditions sufficient for given outcomes (Ordanini *et al.*, 2014). By capturing cases that do not fit with a general trend, fsQCA addresses the issue of unobserved heterogeneity at the same time as capturing equifinality (Schneider & Wagemann, 2010). Thus, using fsQCA, scholars are able to predict different combinations of conditions on the basis of underlying configurations (Tóth *et al.*, 2015). In other words, the combinations are substitutable as they may be sufficient but not necessary to reach the sought outcome (Ragin, 2006). This tool has been adopted in recent entrepreneurship studies including Pickernell *et al.* (2019) and Stroe *et al.* (2018). The specific software used in this study is fsQCA.3.1b (Ragin & Davey, 2016).

To commence fsQCA analysis, calibration is required wherein Likert scales are converted to fuzzy scores. Accordingly, three qualitative thresholds representing fuzzy-set scores are represented through the identification of three corresponding values in the data (Ragin, 2009). The three thresholds set here are (1) for full membership, (0.5) for cross over point and (0) for full non-membership (Ragin, 2009). In five-point Likert scales, researchers may use 5, 3 and 1 or 4,3 and 2 as the thresholds. However, in this study, upon inspecting the data distribution, we decided to use the 5th, 50th and 95th percentiles as thresholds representing full non-membership, cross over and full membership respectively (Beynon *et al.*, 2016). Table 4 depicts the thresholds used.

Table 4 about Here

6.1. Sufficiency Analysis for High Entrepreneurial Resilience

The combinations leading to entrepreneurial resilience are investigated in this paper. Hence, to identify relevant combinations, frequency and consistency thresholds need to be observed. The frequency threshold reflects the minimum cases that a combination needs to include to be worthy of investigation. In this study, this is set at 1 case as appropriate for small samples (Kraus *et al.*, 2018). Consistency is defined as ‘*the degree to which the cases sharing a given combination of conditions agree in displaying the outcome in question*’ (Ragin, 2008:44). Ragin (2008) adds that consistency scores of at least 0.75 are recommended, and researchers may obtain values 0.80 and 0.90 for higher consistency. In this study, we use a conservative cut-off value of 0.90 consistent with Jiang *et al.*’s (2016) recommendation. Furthermore, to assess the empirical relevance of each combination, coverage values need to be inspected (Ordanini *et al.*, 2014). Coverage reflects ‘*the degree to which a cause or causal combination 'accounts for' instances of an outcome*’ (Ragin, 2008:44), and can be raw or unique. Raw coverage shows the proportion overlapping with other combinations, while unique coverage indicates the proportion exclusive to a combination (Beynon *et al.*, 2016). An overall solution coverage can also be deduced to explain the extent to which outcomes can be determined by a set of configurations (Woodside, 2014). Lastly, core versus complementary/peripheral conditions can be distinguished. By definition, core conditions exhibit strong causal association with the outcome, whereas peripheral elements have weaker association (Fiss, 2011). Table 5 depicts the combinations leading to high entrepreneurial resilience. For clarity, we offer a simple graphic representation in table 5 where black circles indicate the presence of a condition and white circles indicate absence. Also, larger circles indicate core conditions while smaller circles symbolise peripheral conditions.

Table 5 about Here

As per table 5, three configurations are likely to lead to entrepreneurial resilience. The first configuration includes the combination of extraversion, conscientiousness, and openness, with all three being core. The second and third solutions comprised low neuroticism, extraversion, and agreeableness in common (all as core). Yet additionally, the second configuration integrates conscientiousness (as peripheral), while the third solution involved openness instead (as peripheral). In short, the findings seem to suggest that (1) extraversion is key to entrepreneurial resilience, (2) agreeableness will foster resilience if accompanied with extraversion and emotional stability as well as openness OR conscientiousness, and (3) even with low emotional stability (neuroticism), entrepreneurs can still be resilient provided they exhibit extraversion, conscientiousness, and openness altogether.

6.2. Necessity Analysis for High Resilience

Necessity analysis enables identification of conditions that are necessary but not sufficient for sought outcomes (Kent, 2015). A minimum consistency score of 0.9 and a coverage exceeding 0.75 must be achieved for conditions to be necessary (Legewie, 2013). Hence, as shown in table 6, none of the big five traits are necessarily independent conditions for resilience.

Table 6 about Here

7. Discussion and Conclusion

A configuration approach has been adopted to understand the relationship between the big five personality traits and entrepreneurial resilience. The fsQCA analysis confirmed both propositions made in this study and showed that entrepreneurial resilience is indeed a complex behaviour associated with multiple paths and combinations of traits rather than single attributes. This concurs with Pflügner *et al.*'s (2020) finding that no single personality trait affects behaviour. It also validates Williams and Shepherd's (2016) view that the antecedents of entrepreneurial resilience are more likely to operate in combination. Likewise, it aligns with

findings by Şahin *et al.* (2019) who demonstrated the complex nature underlying the influence of psychological traits, although in their case, the traits were linked to entrepreneurial intention, as opposed to entrepreneurial resilience. Therefore, our findings extend extant knowledge by showing that this complex relationship does also apply when predicting entrepreneurial resilience. Using first-hand evidence, three configurations that increase resilience have been determined and the following key conclusions are drawn:

First, extraversion is an important trait for entrepreneurial resilience. Although it is believed that this study is the first to affirm this association, it aligns with other studies that have examined the relationship with alternate entrepreneurial outcomes (Antoncic *et al.*, 2015). It has been established that extraverts are more likely to seek effective solutions to achieve their goals (Zadel, 2006). During transactions, they tend to build and leverage good personal relationships with customers, suppliers, marketers and other stakeholders (İrengün & Arikboğa, 2015). In effect, these attributes make them more resilient as they can garner the support of networks to complement their own abilities for enterprise development when faced with challenges. Additionally, the extraversion-resilience nexus has been proven in the extant psychology literature. Indeed, the current results echo Nakaya *et al.*'s (2006) findings reporting significantly positive correlations between extraversion and adolescents' resilience. The authors explained this link by alluding to the alignment of self-expression and interest in the future with a resilient outlook. Similarly, the present finding is consistent with Ercan's (2017) suggestion that extraverts exhibit resilient attributes such as positive emotions and interpersonal skills. However, the results contradict Fayombo (2010) who found that, for Caribbean adolescents, extraversion was not a significant predictor of resilience. This could be explained by extraversion not being sufficient for entrepreneurial resilience. It needs to be complemented by agreeableness and emotional stability, as well as openness or conscientiousness.

Secondly, for agreeableness, there is inconsistency with prior studies arguing that high levels may limit individuals' readiness to make tough calls and drive a hard bargain. It has been said that agreeableness limits the pursuit of own interests which is essential in entrepreneurship (Zhao & Seibert, 2006). This study goes against previous works investigating general entrepreneurship behaviour (e.g. , Antoncic et al (2015), Ahmed et al (2020), Awaad and Al-Aseer (2021)). It is thought that the bright side of this trait (e.g. sympathy, kindness and warmth) can impede entrepreneurship. However, informed by inherent findings, it is now argued that agreeableness may hold a positive influence when combined with extraversion and emotional stability. This is because actors in a network will be more likely to reciprocate goodwill when there is a measure of agreeableness. To be sure, agreeable individuals prioritise positive interpersonal relationships (Zhou *et al.*, 2019) and cooperation (Burger, 2019). Hence, being extraverted and agreeable would make people more likely to gain support from their network. In this regard, the general psychology literature affirmed that the social skills of extraverts as well as the helpful and cooperative nature of agreeable individuals attract social and emotional support during hardship (Ercan, 2017). Moreover, revisiting Zhao & Seibert (2006) contention, we argue that negative influences of agreeableness could be offset by emotional stability, since extraversion and agreeableness need to be complemented with emotional stability. Here, it seems that emotionally stable bazaar owners and managers exhibit calmness and greater confidence when dealing with setbacks emerging from agreeableness. In fact, this also echoes findings in the psychology literature indicating that neuroticism is negatively associated with psychological resilience (Nakaya *et al.*, 2006; Ercan, 2017; Oshio *et al.*, 2018). Nakaya *et al.* (2006) acknowledged that resilient individuals are less prone to exhibiting neurotic tendencies such as anxiety and depression. Likewise, Fayombo (2010: 111) suggested that neurotic individuals tend to exhibit 'poor reactions to environmental stress and are more likely to

interpret ordinary situations as threatening and minor frustrations as hopelessly difficult', which would make them less resilient in truly challenging situations. Ercan (2017) confirms that neurotic people suffer more from emotional stress.

Lastly, the combination of extraversion, emotional stability and agreeableness still requires either openness or conscientiousness to produce resilience. The particular value of openness as a trait is that it enables individuals to distinguish profit-generating opportunities from loss-making activities (Matricano, 2016). Thus, beyond mitigating losses that could emanate from being agreeable, openness enhances peoples' imagination and creativity (Ciavarella *et al.*, 2004). The positive role of openness in this study corresponds with previous works on entrepreneurial behaviour (Awwad and Al-Aseer, 2021). Linking this to resilience, our findings are in line with the psychology literature, which shows that individuals who are open to experience are able to blend in new situations and adjust to new ideas (Fayombo, 2010). Therefore, when combined with calmness, emotional stability and extraversion, greater entrepreneurial resilience is realised. Alternatively, if openness is absent, conscientiousness could replace this trait. In fact, people scoring high in conscientiousness would exhibit a stronger sense of organisation, responsibility and need for achievement (Ciaverella *et al.*, 2004). In turn, this offsets a lack of imagination as individuals may still succeed through a more rigorous management approach especially when surrounded by a good network from which new ideas and opportunities arise. In this vein, Nakaya *et al.* (2006) argue that conscientious people are goal-oriented and exhibit self-control which bodes well for goal achievement despite adverse conditions. Likewise, Fayombo (2010) suggest that conscientious folks tend to be better prepared than non-conscientious counterparts, and hence cope better in stressful situations.

To conclude, our findings also revealed that even when individuals lack emotional stability, they could still attain entrepreneurial resilience by possessing high extraversion, conscientiousness and openness. Effectively, emotional instability emanating from neuroticism can be mitigated by rigour and diligence, as well as support from one's network. In relation to this, it was reported that neurotic people tend to postpone their tasks (Fayombo 2010), which could potentially make them less resilient. However, when such people are conscientious, this scenario is less likely.

8. Implications

The current findings advance the extant tourism entrepreneurship literature, and provide intelligence to tourism entrepreneurship stakeholders in Egypt, and potentially neighbouring countries. Theoretically, by reviewing the psychology literature on the big five personality traits to explain entrepreneurial resilience in the tourism sector, our study somewhat relaxes Fu *et al.*'s (2019: 2) claim that hospitality and tourism entrepreneurship 'is currently rich in practice but poor in theoretical development'. Also, while it reduces the persisting shortage of studies examining small tourism firms' resilience as outlined by Prayag *et al.* (2020), Pham *et al.* (2021), and Sobaih *et al.* (2021), it also addresses recent calls by Fang *et al.* (2020) and Pathak and Joshi (2021) to explore the role of psychological factors in building small firms' resilience. Our results show that entrepreneurial resilience requires the alignment of different personality traits. Specifically, the fsQCA analysis corroborates the principle of equifinality with three distinct paths shown to yield entrepreneurial resilience in the tourism sector. Notably, the results indicate that agreeableness, erstwhile considered to reduce entrepreneurial resilience, can produce a reverse and positive effect when combined with other traits. Likewise, although extraversion has been found to be a key trait for resilience, it remains insufficient and needs to be complemented by other traits. Accordingly, the various personality traits are complementary

and no single behaviour is optimal. Thus, oscillating personalities during business transactions is a key skill for entrepreneurial resilience. Furthermore, this study suggests that extraversion subsequently combined with agreeableness, emotional stability, openness or conscientiousness is channelled during business formation when network building and creativity are most imperative. Also, individuals who are characteristically neurotic can temper the effect of this trait by practicing conscientiousness and extraversion when interacting with peers, customers, suppliers and stakeholders alike. Uncovering these complex interactions across the personality traits when influencing entrepreneurial resilience contributes to the literature by responding to Khedhaouria and Cucchi's (2019) solicitation for more complex techniques to uncover the complex role of psychological traits. By the same token, it also addresses the scarcity of evidence on the resilience of tourism businesses in developing countries such as Egypt (Sobaih *et al.*, 2021).

Practically, the proportional display of these traits will help bazaar owner/managers optimise their knowledge sourcing (Ardito *et al.*, 2020) and develop strong relationships. In the first place, when interacting with counterparts in the bazaar scene, owner/managers are encouraged to exude extraversion to be resilient. They should be more optimistic, talkative, assertive and self-confident in order to forge good personal relationships with customers, suppliers, and fellow bazaar owners. This would help them access the external social support that is availed by such networks (Ecran, 2017). Alongside this, when needed, they should embrace an altruistic and compliant behaviour when interacting with peers as this would create collegiality that helps in counteracting environmental stressors. However, it is important that compliant and altruistic behaviours are not at the expense of one's welfare and business interests. For this reason, bazaar owner/managers should also regulate their emotions so that agreeableness does not produce adverse effects in their entrepreneurial performance. Hence, in addition to altruism, they need

to be open to new experiences and creative, so that they can exploit new opportunities when existing avenues become saturated. Alternatively, owing to creativity being a rare trait among individuals, bazaar owner/managers can adopt a more rigorous and disciplined approach to overcome crises and show resilience. Likewise, when bazaar owner/managers find it challenging to regulate their emotions, being extravert, conscientious and open to new experiences could offset a shortage of emotional stability. This is because the combination of social support along with being meticulous limits the effects of emotional instability.

Furthermore, the dexterity to harness the traits for resilience can be attained through training activities (Natalicchio *et al.*, 2018). However, there is no evidence of personality training courses being offered in Egypt. In order to combine multiple traits, entrepreneurs must first be aware of alternative traits and acquaint themselves with circumstances for their application. Luca and Cazan (2011) assert that there is an association between entrepreneurial traits and training courses where the latter promotes the former. Particularly, Nabi *et al.* (2018) draw attention to practical inspiration derived from business simulation activities. In training settings in the current context, this could be used to change the hearts and minds of people to appropriate optimum personality traits. Thus, we call on training institutions in Egypt to consider these findings and design tailored courses to help tourism entrepreneurs in general to take stock of personality predispositions and improve their entrepreneurial resilience concurrently.

Finally, this study acknowledges limitations that will prompt future inquiries. Firstly, as with all single-country studies, caution should be exercised in the interpretation of our findings in other contexts. Likewise, the generalisability of our findings to the bazaar population in Egypt should be taken with caution since the study relied on a non-probability sampling approach. Moreover, the majority of the owner/managers sampled in this study were males. While this

reflects the current gender distribution in Egypt, the applicability of the findings to the female population warrants further tests. Therefore, future studies should examine our propositions with a more balanced sample to confirm the results. Secondly, the study observes subjective factors rather than data on entrepreneurs' actual performance to estimate resilience. Although Frambach *et al.* (2016) maintain that subjective data satisfactorily reflect actual performance, future studies may analyse, for example, turnover and profit figures, to extend understanding on bazaar entrepreneurs' resilience. Moreover, several items intended to capture personality traits were dropped due to low loadings. Although this does not reduce the relevance of the measures due to their reflective nature, it leaves room to improve the data quality. We therefore invite other scholars to replicate our model in Egypt to validate our results. Thirdly, while the focus on the present study was on individual factors shaping resilience, we do not exclude the important role of external environmental forces such as the seasonality and cyclicity of the tourism sector. Further studies can examine the role of these external dynamics, and perhaps uncover their intersections with internal factors. Lastly, our study investigates resilience cross-sectionally whereas a longer time period may be desirable to observe this behaviour. Thus, studies adopting a longitudinal approach are invited to validate the three personality configurations for resilience determined here.

Appendix about Here

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List of Tables

Table 1: Samples Characteristics.

Category	Valid Percent
Gender	
Male	92.7
Female	7.3
Age	
18-25 Years	21.7
26-35 Years	35
36-45 Years	27.2
46-55 Years	11.1
More than 55 Years	5
Education	
Bachelor's degree	67.2
Diploma	15.0
Master's Degree	5.6
Doctorate Degree	2.2
Others	10.0

Table 2: Big Five Traits and Resilience Across Genders, Age groups and Education Levels.

	Gender	Mean	AgeBinary	Mean	EducBinary [Excluding Others]	Mean
EXT	Male	3.1235	35 and less	3.1041	Undergrad	3.1925
	Female	2.8200	More than 35	3.1533	Postgrad	2.9507
AGR	Male	4.0085	35 and less	3.9549	Undergrad	3.9934
	Female	3.8923	More than 35	4.0385	Postgrad	4.0927
CON	Male	3.8918	35 and less	3.7990	Undergrad	3.9029
	Female	3.5192	More than 35	3.9744	Postgrad	3.9146
NEU	Male	2.4476	35 and less	2.5706	Undergrad	2.5107
	Female	3.4769	More than 35	2.4462	Postgrad	2.4878
OPE	Male	3.5000	35 and less	3.3882	Undergrad	3.5190
	Female	3.4615	More than 35	3.6410	Postgrad	3.4976
ENR	Male	3.7826	35 and less	3.7257	Undergrad	3.7907
	Female	3.4115	More than 35	3.8164	Postgrad	3.6995

Table 3: Constructs' Reliability and Validity

	CR	Cronbach's α	AVE	VIF
EXT	0.81	0.65	0.59	1.31
AGR	0.84	0.76	0.51	1.44
CON	0.82	0.71	0.54	1.44
NEU	0.84	0.76	0.52	1.34

OPE	0.83	0.74	0.50	1.23
ENR	0.80	0.63	0.57	1.17

Table 4: Calibration thresholds based on percentiles

		EXT	AGR	CON	NEU	OPE	ENR
Percentiles	5	1.6	2.8	2.5	1.2	2.6	2.3
	50	3.3	4.2	4.0	2.4	3.6	4.0
	95	4.6	5.0	5.0	4.1	4.6	5.0

Table 5: Combinations leading to entrepreneurial resilience

Solutions	EXT	CON	AGR	NEU	OPE	Raw Coverage	Unique Coverage	Consistency
1	●	●			●	0.43	0.09	0.88
2	●	●	●	○		0.39	0.05	0.90
3	●		●	○	●	0.36	0.02	0.90
Solution Coverage			0.51					
Solution Consistency			0.86					

Frequency cutoff: 1; Consistency cutoff: 0.90

Table 6: Necessary conditions for high entrepreneurial resilience.

	Consistency	Coverage
EXT1	0.69	0.68
~EXT1	0.62	0.54
AGR1	0.67	0.65
~AGR1	0.69	0.61
CON1	0.74	0.66
~CON1	0.61	0.59
NEU1	0.67	0.62
~NEU1	0.71	0.66
OPE1	0.68	0.69
~OPE1	0.66	0.57

Appendix: Retained Items and Factor Loadings

	Loadings
Agreeableness	
I see myself as someone who Is considerate and kind to almost everyone	0.793
I see myself as someone who Has a forgiving nature	0.628
I see myself as someone who Is helpful and unselfish with others	0.776
I see myself as someone who Likes to cooperate with others	0.722
I see myself as someone who Is generally trusting	0.653
Conscientiousness	
I see myself as someone who Perseveres until the task is finished	0.643
I see myself as someone who Tends to be disorganized (reversed)	0.757
I see myself as someone who Can be somewhat careless (reversed)	0.776
I see myself as someone who Is easily distracted (reversed)	0.763
Extraversion	
I see myself as someone who Is talkative	0.787
I see myself as someone who Tends to be quiet (reversed)	0.843
I see myself as someone who Is shy, inhibited (reversed)	0.676
Neuroticism	
I see myself as someone who Worries a lot	0.657
I see myself as someone who Gets nervous easily	0.735
I see myself as someone who Can be tense	0.819
I see myself as someone who Can be moody	0.752
I see myself as someone who Is depressed, blue	0.630
Openness	
I see myself as someone who Is inventive	0.668
I see myself as someone who Has an active imagination	0.758
I see myself as someone who Is original, has new ideas	0.863
I see myself as someone who Likes to reflect, play with ideas	0.578
I see myself as someone who Is ingenious, deep thinker	0.635
Entrepreneurial Resilience	
I see myself as someone who Can be “on my own,” so to speak, in preparing for my new business if I have to	0.807
I see myself as someone who Usually take stressful things required in new business preparation in stride	0.751
I see myself as someone who Can get through difficult times during my new business preparation because I’ve experienced difficulty before	0.721