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Impact of Entrepreneurial Leadership, Entrepreneurial Self-Efficacy, Basic Psychological Needs Satisfaction, and Training Effectiveness on Entrepreneur Resilience in Malaysian SMES

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Abstract

The COVID-19 Pandemic has impacted industries worldwide, affecting virtually every industry and business field as it spreads. Small and medium-sized businesses, in particular, have been particularly hard hit due to a scarcity of funding and a lack of entrepreneurial skills such as resilience. However, research on resilience at an individual level is underexplored, with even less attention on resilience in the context of entrepreneurs. Thus, this study examined entrepreneur resilience in Malaysian SMEs related to entrepreneurial leadership, entrepreneurial self-efficacy, basic psychological needs satisfaction, and training effectiveness. Social cognitive and self-determination theories underpin the study framework. Integrating both theories can provide a motivating lens to facilitate a more holistic understanding of resilience factors. Indeed, addressing the entrepreneurs' basic psychological needs and satisfaction can help entrepreneurs overcome their fear of failure. The study used a quantitative approach to collect primary data from 221 Malaysian small and medium-sized enterprises (SME) entrepreneurs through an online questionnaire. Partial Least Squares-Structural Equation Modeling (PLS-SEM) was used to analyze the data. The findings reveal that entrepreneurial self-efficacy is statistically significant and positively impacts entrepreneur resilience. Meanwhile, basic psychological needs satisfaction mediates the relationship between entrepreneurial leadership, entrepreneurial self-efficacy, and entrepreneur resilience. The second contribution of this study is that it establishes a moderating impact on training effectiveness. As a result, this study discovered that entrepreneurial self-efficacy, basic psychological needs satisfaction, and training effectiveness directly or indirectly impacted entrepreneur resilience. Entrepreneurial leadership, on the other hand, is the inverse. Many previous studies on the factors influencing resilience yielded inconsistent and incoherent findings. Therefore, this study contributes to the theoretical debate on exploring resilience concepts, measures in SMEs, and the factors that influence resilience at the entrepreneur level.

Keywords: Entrepreneurial Leadership, Training Effectiveness, Entrepreneurs' Resilience, Entrepreneurial Self-Efficacy, Basic Psychological Needs Satisfaction

Introduction

Throughout history, the world has experienced several economic crises that significantly impacted entrepreneurs in SMEs, including the Great Depression of the 1930s, the financial crisis of the early 2000s, and, most recently, the COVID-19 global crisis (Tsilika et al., 2020). COVID-19 has had a detrimental effect on economies and supply chains, affecting millions of business owners and entrepreneurs (IDB, 2020a, 2020b) and causing negative consequences in all aspects of life, with economic, political, social, and psychological ramifications (Bretas & Alon, 2020). The World Health Organization (WHO) declared COVID-19 a pandemic on March 11, 2020 (World Health Organization, 2020). COVID-19's spread compelled governments to take drastic measures, including the closure of large social and economic sectors, creating global pressures across all industries and causing economies to crash (Kuckertz et al., 2020). On the other hand, the duration of this crisis and its long-term effects on businesses and entrepreneurs are unknown. As a result, businesses and entrepreneurs must assess, react, and recover quickly in the face of these disruptions.

For new start-ups and SMEs, the repercussions of COVID-19 are much more severe (Brown & Rocha, 2020). On the other side, the requirement for governments to avoid disease spread through social segregation and border closures has resulted in business failures and employment losses, particularly among entrepreneurs in SMEs (Portuguez Castro et al., 2020). Malaysian SMEs saw a more than 50% decline in business within the first week of the MCO's implementation, and 92% of SMEs had a falling exposure to the Malaysian economic outlook for the remainder of the year (Marie, 2020). As a result, COVID-19 adds operational stress to entrepreneurs in Malaysian SMEs, leading them to struggle. As per the Entrepreneurs Survey for Post COVID-19, which was conducted from July 15 to July 31, 2020, by the Ministry of Entrepreneur Development and Cooperatives (MEDAC), more than half of entrepreneurs in Malaysian SMEs (54.2%) expect negative business revenue in 2020 when compared to the previous fiscal year. Some recent statistics indicate that approximately 80% of SME operations will cease by the end of the fiscal year 2020 (SME Malaysia, 2020).

Besides that, the findings of SME Corp. Malaysia polls (2020) revealed that disruptions in cash flow for entrepreneurs in Malaysian SMEs were the most challenging obstacle they faced during the COVID-19 crisis, followed by weaker demand, supply chain disruption, and legal concerns. Entrepreneurs in Malaysian SMEs are forced to temporarily cease operations due to these issues, putting them in danger of enormous losses. The critical reasons for cash flow problems are decreased sales, insufficient cash on hand, and high overhead costs. Thus, nearly 60% of entrepreneurs in Malaysian SMEs reported no sales during the MCO period, with 39% reporting fewer sales. Entrepreneurs in Malaysian SMEs have also cited cash flow issues when paying employee salaries and benefits, repaying business loans, paying rent and utilities, and acquiring raw materials and packaging materials.

Consequently, more than 90% of them were expected to last only five months on their current cash reserves (SME Corp. Malaysia, 2020). Only 34% of them could continue as essential service providers (SME Malaysia, 2020). The majority of entrepreneurs in Malaysian SMEs have also undertaken various alternative actions, including negotiating with employees on salary and benefits cuts (37%), retrenching employees (34%), limiting business trips (33%), and working from home (33%) (SME Malaysia, 2020). Moreover, the survey reveals that entrepreneurs in Malaysian SMEs require assistance in addition to commercial loans to reclaim their pre-crisis growth momentum. This package includes soft loans, tax breaks for corporations and businesses, and a dedicated government agency to act as a focal point. Rather than that, a crisis like COVID-19 necessitates urgent action (Sawalha, 2020),

demanding entrepreneurs in SMEs to be more resilient to respond to obstacles and seize opportunities as they arise (Thukral., 2021; Cankurtaran & Beverland, 2020; Liu et al., 2014). Even entrepreneurs in SMEs should be viewed as key economic drivers, and their long-term sustainability is critical for the global economy (Ates & Bititci, 2011); nonetheless, they are understudied from a resilience standpoint (Alberti et al., 2018). Doern et al (2019) add the concept of resilience to their discussion, stating that it enables entrepreneurs and businesses to continue operating reliably in times of crisis (Williams et al., 2017) and the ability of entrepreneurs to survive, adapt, and develop in the face of adversity (Kuckertz et al., 2020). Numerous elements may contribute to an entrepreneur's resilience in SMEs; however, research findings are mostly inconclusive (Saad et al., 2021). Most research on entrepreneur resilience focuses on individual factors (de Vries & Shields, 2005; Bullough & Renko, 2013). Self-efficacy is one of entrepreneurship's most commonly studied internal factors (Boyd & Vozikis, 1994; Wilson et al., 2007; Bullough & Renko, 2013).

In contrast, flexibility, motivation, perseverance, and optimism are resilience-enhancing, as De Vries and Shields (2005) suggested. Meanwhile, business development training, networking, lectures, and mentoring opportunities also help entrepreneurs build resilience (Bullough & Renko, 2013). Moreover, Duchek (2018) also claims that individual factors (skills and abilities), situational factors (behavior and experience of parents), and process-related factors (entrepreneurial learning and work attitudes and behavior) are mutually dependent and shape entrepreneur resilience. But, Duchek (2018) notes that entrepreneur resilience and the factors contributing to entrepreneur resilience have received little attention despite the critical role entrepreneurs play in economic development and innovation.

Similarly, Zamfir et al (2018) proposed that internal and personal characteristics, structural and external factors, and environmental variables influence resilience. It is consistent with previous research indicating that personal and internal factors (such as personal characteristics, human satisfaction, leadership, and social capital) influence the resilience of a business and its entrepreneurs (Bullough & Renko, 2013; Duchek, 2018; Hedner et al., 2011; Korber & McNaughton, 2018; Miller, 2015). However, individual resilience in the context of entrepreneurs has received very little attention in the literature, indicating that more research is needed (Walsh & McCollum, 2020). Particularly, entrepreneurs' resilience seems impacted by various cognitive, behavioral, and psychological aspects (Hayward et al., 2010); thus, it is necessary to holistically view the factors affecting entrepreneur resilience as new research on the aspects necessary to construct resilience is required (Alberti et al., 2018).

This study adds a new contribution to the body of knowledge by studying the resilience factor through the motivational lens of basic psychological need satisfaction and focusing on training effectiveness as another external factor that strengthens resilience among entrepreneurs in Malaysian SMEs. It is significant because entrepreneurs in SMEs have failed to plan for and invest in long-term resilience, which would have provided them with a competitive edge. Hence, entrepreneur resilience is a crucial component of local and regional business development (Apostolopoulos et al., 2020) and is critical to sustained success (Lee & Wang, 2017). Resilience is also critical for survival in the business environment, given the economy, society, and technology are changing at a breakneck pace (Ruiz-Martin et al., 2018). Still, most entrepreneurs in SMEs lack resilience and are disproportionately affected by external shocks (Branicki et al., 2018). Until now, there is still unclear what factors exist to assist the entrepreneur in developing resilience and how this skill is discovered (Salisu et al., 2020). That is why resilience has grown in popularity among academics and practitioners alike

over the last few years, and the trend is predicted to continue (Corner et al., 2017; Bullough et al., 2014; Shepherd et al., 2020).

Entrepreneur resilience has recently been recognized as a critical factor in explaining entrepreneurial behavior, particularly when overcoming discomfort, coping with uncertainty, and learning from past failures (Hamedi & Mehdiabadi, 2020). Thus, resilience seems to be a useful framework for evaluating an entrepreneur's ability to change (Salisu et al., 2020) and how an entrepreneur recovers from adversity (Kitsos & Bishop, 2018), especially during pandemics (Cankurtaran & Beverland, 2020). However, the extent to which resilience can help entrepreneurs overcome extreme hardships, such as pandemics, has not been adequately researched (Dijk, 2020; Longstaff & Yang, 2008).

Theoretical Contribution

Social cognitive theory (SCT) explains human behavior by examining environmental, personal, and behavioral factors or theory sets (Bandura, 1991, 1998, 2001). Given the importance of understanding and assessing an entrepreneur's motivation and behaviors, this research incorporates social cognitive, and self-determination theories. In the Social Cognitive Theory (SCT), Bandura (1986) emphasizes the reciprocal causality between three factors impacting human behavior (individuals, behavior, and environment). SCT examines the psychosocial determinants of human thoughts, feelings, and behavior to establish reciprocal, three-way, and dynamic causation between individuals, behaviors, and the environment. SCT's central tenet is reciprocal determinism, and numerous studies examine the interaction of various factors in light of this triadic relationship. However, there is still a need for consistent operationalization of the relationships, as many studies focus exclusively on one aspect, such as the effect of self-efficacy on behavior (Yakut, 2019). This approach is inconsistent with the SCT's broad scope and overlooks some underlying factors in the behavior formation process (Yakut, 2019).

As an SCT (sub)set, self-efficacy represents a self-regulatory mechanism that denotes the skill or capability of performing and the self-belief in the capability of being efficacious, that is, being able to enhance motivation and problem-solving efforts (Bandura, 1998). Individuals are motivated to do a certain behavior if they are driven, whereas self-efficacy is concerned with one's perceptions of one's ability to learn and act appropriately in a given situation (Schunk & Pajares, 2009; Young et al., 2005). Similarly, it is critical for this study to consider whether entrepreneurs may be more motivated to pursue behavioral objectives such as self-satisfaction and resilience if they perceive themselves to be more self-efficacious.

Self-motivation and self-recognition result in self-leadership that adds to the personal processes set of SCT. Keys & Wolfe (1998) highlight that intrinsic motivation and self-regulatory components enable self-leadership. In addition, self-leadership possesses outlooks of self-determination and competence (Deci & Ryan, 2000). Neck and Houghton (2006) discussed that the self-leadership approach is related to personal attributes, such as the mechanism of self-efficacy and self-regulation. This study can provide insight into which leadership aspect is more effective and conducive to entrepreneur resilience. The entrepreneurial leader is likelier to foster resilient and positive behavior during adversity by modeling entrepreneurial behaviors to followers and encouraging them to engage in entrepreneurial activity (Bandura, 1986). It adds to the literature by examining the critical role of leadership qualities as an adequate boundary condition that can influence entrepreneur behavior and their level of resiliency. The interaction of individual, behavioral, and environmental factors affecting entrepreneur resilience enables a complete understanding of

how entrepreneurial leadership can foster resilience in the face of adversity. Thus, determining and managing resilience behaviors helps entrepreneurs improve their business success. This study developed two independent construct components: entrepreneurial self-efficacy and entrepreneurial leadership, representing self-motivation and self-leadership.

On the other hand, the Self-Determination Theory (SDT) provides a broad framework for studying motivation to persuade oneself or others to act or behave in a particular way (Deci et al., 1994). According to this theory, various intrinsic and extrinsic factors affect individuals' motivators, propelling them toward social and cognitive development (Deci & Ryan, 2000). This theory is a meta-theory of human motivation and personality. It contrasts the processes that lead all individuals to believe their behavior is self-motivated and self-determined (autonomous) with the strategies that motivate individual behavior due to external pressures (controlled behavior). According to the theory, to be autonomously motivated and experience psychological well-being while engaging in a behavioral activity (such as an entrepreneurial activity), a person must satisfy three fundamental, universal psychological needs (Deci & Ryan, 2000, 2008). These three requirements are autonomy, competence, and connectedness, inherent and universal (Deci & Ryan, 2002). The connection between self-determination and an individual's outcomes, experiences, and behaviors has been extensively studied (Deci & Ryan, 2008; Ng et al., 2012; Ryan et al., 2008). Across a range of contexts (e.g., education, health care, etc.), it is possible to agree that high levels of self-determination are viewed positively while low grades are viewed negatively.

Additionally, it has been demonstrated that self-determination affects individuals' activity and exercise-related behaviors (Mata et al., 2011), adherence to prescribed treatments (Mitchell, 2007), and persistence in the face of adversity (Lavigne et al., 2007). While there appears to be a growing body of knowledge demonstrating the efficacy of SDT in various settings, additional research is necessary. While much of the literature has established a connection and influence between SDT constructs and tenets (e.g., motivation, need for support), a more focused lens on resilience has lacked to date (Perlman et al., 2018). Perlman et al. (2018) examined the effect of critical basic psychological needs satisfaction on resilience in individuals with mental illness. They discovered that relatedness predicted resilience but that competence and autonomy did not impact resilience.

However, the basic psychological needs satisfaction consists of autonomy, competence, and relatedness, significantly and positively predicting resilience and marital satisfaction in a study (Naemi, 2018). Although the perception of autonomy, competence, and a sense of relatedness with others is central to entrepreneurial research, this has been explored infrequently in previous studies on entrepreneurship, implying that the mechanisms underlying motivations have been overlooked (Baluku et al., 2019). In this regard, viewing resilience through a motivational lens can aid in identifying the factors that contribute to its development. Although there do not appear to be many studies directly applying self-determination theory to entrepreneurship, this theory has significantly contributed to behavioral disciplines directly or indirectly related to entrepreneurial behavior.

Thus, incorporating these two pertinent theories into a theoretical framework may assist in entailing a complex interaction between the individual and their environment. For example, internal and external elements such as leadership, problem-solving abilities, motivation, self-efficacy, and training (social support antecedents) are all considered (Stuntzner & Hartley, 2014). Moreover, the proposed training effectiveness as a moderator of the association between basic psychological needs satisfaction and entrepreneur resilience

contributes to understanding whether training effectiveness is relevant in entrepreneurial research and strengthens entrepreneur resilience.

Hypotheses Summary

Table 1

Summary of Hypotheses Testing

No	Hypotheses	Results
H1	Entrepreneurial leadership has a positive impact on basic psychological needs satisfaction.	Supported
H2	Entrepreneurial self-efficacy has a positive impact on basic psychological needs satisfaction.	Supported
H3	Basic psychological needs satisfaction has a positive impact on entrepreneur resilience.	Supported
H4	Entrepreneurial leadership has a positive impact on entrepreneur resilience.	Not Supported
H5	Entrepreneurial self-efficacy has a positive impact on entrepreneur resilience.	Supported
H6	Basic psychological needs satisfaction mediates the relationship between entrepreneurial leadership and entrepreneur resilience.	Supported
H7	Basic psychological needs satisfaction mediates the relationship between entrepreneurial self-efficacy and entrepreneur resilience.	Supported
H8	Training Effectiveness strengthens the relationship between basic psychological needs satisfaction and entrepreneur resilience.	Supported

Recapitulation of Findings

The study investigates the predictors of entrepreneur resilience. Specifically, it examines the impact of entrepreneurial leadership and entrepreneurial self-efficacy. It also investigates the mediation effects of basic psychological needs satisfaction on the relationship between entrepreneurial leadership and entrepreneur self-efficacy on entrepreneur resilience. Besides that, the moderator effect of training effectiveness on the relationship between basic psychological needs satisfaction and entrepreneur resilience has also been investigated.

The findings supported seven out of eight hypotheses. Entrepreneurial leadership and entrepreneurial self-efficacy positively impacted basic psychological needs satisfaction. Thus, **H1** and **H2** were supported. Furthermore, basic psychological needs satisfaction and entrepreneurial self-efficacy positively impacted entrepreneur resilience, indicating that **H3** and **H5** were also supported. The results also found that entrepreneurial leadership does not

considerably impact entrepreneur resilience; thus, **H4** was not supported. The findings of this study indicated basic psychological needs satisfaction mediated the relationship between entrepreneurial leadership and entrepreneurial self-efficacy toward entrepreneur resilience. Hypotheses **H6** and **H7** thus were supported. The results found that training effectiveness strengthens the relationship between basic psychological needs satisfaction and entrepreneur resilience. Therefore, **H8** was supported.

Moreover, the findings indicate that the substantial variance in basic psychological needs satisfaction and entrepreneur resilience is explained by proposed predictors, with R^2 values ranging from 0.540 to 0.521. Similarly, entrepreneurial leadership and self-efficacy explained 54.0% ($R^2 = 0.540$) of the basic psychological needs satisfaction construct variance. The R^2 value of 0.540 is more than 0.26, as Cohen (1988) stated, indicating a significant model. Therefore, basic psychological needs satisfaction could account for 52.1% ($R^2 = 0.521$) of the variance in entrepreneur resilience. As Cohen (1988) recommended, the R^2 value of 0.521 is greater than 0.26, indicating a substantial model.

Discussion of Findings

Hypothesis 1 proposed that entrepreneurial leadership positively impacts basic psychological needs satisfaction. This finding is also consistent with previous research indicating that an increasing number of studies on leadership approaches use self-determination theory to explain the relationship between these approaches and positive outcomes by addressing three basic psychological needs: autonomy, competence, and relatedness (e.g., Hetland et al., 2015; Kovjanic et al., 2012). Simultaneously, basic psychological needs satisfaction is seen as a promising mechanism (e.g., Van den Broeck et al., 2008) or even the primary explanation for effective and improved leadership (Solansky, 2014). Thus, an entrepreneur who practices entrepreneurial leadership appears to flourish, self-develop, make a meaningful contribution, and perform well due to basic psychological needs satisfaction (Ryan & Deci, 2017). According to Ryan and Deci (2017), entrepreneurs may meet their needs for competence and relatedness through their autonomy as leaders. Moreover, as Ryan and Deci (2017) asserted, in many instances, the satisfaction of the needs for relatedness and competence depends on the person's capacity to initiate action and self-organize (Ryan & Deci, 2017). As a result, this result is unsurprising, as it is consistent with the findings of previous comparable studies.

Furthermore, the impact of entrepreneurial self-efficacy on basic psychological needs satisfaction is consistent with the research conducted by (Mayoral & Carmen, 2014), emphasizing that the relationships between life satisfaction and entrepreneurial self-efficacy make sense in light of the tests. The basic psychological needs satisfaction employed in this study demonstrates that autonomy is a term that relates to the sense that one's behavior is self-congruent and voluntary. Competence refers to the belief that one can beneficially affect the environment. Relatedness entails a sense of meaningful proximity and connection with others (Weinstein & Ryan, 2011). Each of those three innate needs is claimed to have intrinsic worth for the self and be necessary for the well-being and behavioral perseverance (Teixeira et al., 2012). Historically, entrepreneurs as individuals whose behaviors are determined by intrinsic characteristics rather than external factors (Ahmed, 1985; Brockhaus, 1980; Cromie, 2000; Hull, Bosley & Udell, 1980; McClelland, 1965; Sánchez, 2003; Winslow & Solomon, 1989). Self-efficacy is an intrinsic characteristic that refers to individuals' expectations of their abilities to complete a future task that results in desirable outcomes (Bandura, 1977). Thus, hypotheses posited that entrepreneurial self-efficacy positively impacts basic psychological needs satisfaction.

According to Hypothesis 3, the study discovered that basic psychological needs satisfaction positively impacts entrepreneurial resilience. Following this, Vansteekiste and Ryan (2013) suggest that basic psychological needs satisfaction and engagement with intrinsic pursuits are significant facilitative psychosocial components that support the expression of resilient personality characteristics. The study's findings indicate that basic psychological needs satisfaction is associated with resilience characteristics such as effective self-regulation and constructive self-determined action (Vansteenkiste & Ryan, 2013). Besides that, there is a significant association between entrepreneurial leadership and achievement for both for-profit and non-profit businesses. Consistent with Anthony et al (2015), a leader must be resilient to lead transformation and change successfully.

Kasim and Zakaria (2019) also point out the dimension of entrepreneurial leadership that recognizes resilience. They additionally discovered a direct correlation between the stress of the leader's job and their ability to endure extended adversity to maintain resilience in the face of prolonged contact with trouble. In this study, hypothesis 4 proposed a positive impact of entrepreneurial leadership on entrepreneur resilience. However, contrary to the predictions made by the variables in this study and past research, the study discovered that entrepreneurial leadership has no impact on entrepreneur resilience. Hence, SME entrepreneurs cannot rely on entrepreneurial leadership to propel them to success or be resilient in the future. SMEs in Malaysia may not reap the benefits of entrepreneurial leadership and entrepreneur resilience integration, but larger firms may.

Meanwhile, entrepreneurial self-efficacy enables entrepreneurs to believe in their ability to deal with stressful situations; thus, entrepreneurs who believe in taking the necessary actions for business success in difficult circumstances will strengthen their resilience (Walsh & McCollum, 2020). Hypothesis 5 proposed that entrepreneurial self-efficacy has a positive impact on entrepreneur resilience. The findings indicated that entrepreneurial self-efficacy has a positive impact on entrepreneur resilience. It is consistent with the results of prior studies (Paul, 2017), which discovered a positive correlation between resilience and self-efficacy.

According to Bullough et al (2014), entrepreneurs rely heavily on their self-efficacy and sense of resilience in the face of adversity. Previous research shows that entrepreneurs have strong self-efficacy and resilience and better handle challenges (Walsh & McCollum, 2020). Individuals mostly reported with a high level of self-efficacy are more resilient to stressful situations, as they have the attitude "I can do this" (Telef, 2011). The findings also suggest entrepreneurial self-efficacy contributes to successful business strategies and actions and has emerged as a significant predictor of entrepreneur resilience. Entrepreneurial self-efficacy enables business strategy development and paths to success for SME entrepreneurs, while resilience motivates entrepreneurs to overcome obstacles. In the face of adversity, SME entrepreneurs rely heavily on their self-efficacy and sense of resilience. As a result, entrepreneurs are better prepared with a strong sense of self-efficacy and resilience to develop strategies and plans for dealing with adversity.

Moreover, Bormann and Rowold (2018) suggested that leadership concepts could be grounded in self-determination theory because this motivational theory enables a more concise description of leadership behaviors' mechanisms. H6 posited that basic psychological needs satisfaction mediates the relationship between entrepreneurial leadership and entrepreneurial self-efficacy and entrepreneur resilience. The hypotheses indicated basic psychological needs satisfaction as mediators of the relationship between entrepreneurial leadership and entrepreneurial self-efficacy and an entrepreneur's resilience. Notably, the

direct effect of entrepreneurial leadership on entrepreneur resilience was not statistically significant. As a result, the relationship between entrepreneurial leadership on entrepreneur resilience can only be described in indirect effects mediated through basic psychological needs satisfaction.

Based on this finding, it is possible to conclude that the entrepreneurial drive of the SME entrepreneur to be resilient was motivated by the alignment of entrepreneurial leadership with the satisfaction of basic psychological needs. It is also consistent with previous research examining the role of basic psychological needs satisfaction as a mediating variable (Deci et al., 2001; Van den Broeck et al., 2008). Rahmadani et al (2019) additionally demonstrated that basic psychological needs satisfaction is a mediator in the connection between leader engagement and work engagement when all three self-determination theory needs are employed in this study. On the other hand, entrepreneurs with a high level of self-efficacy believe in their ability to deal with challenging conditions. These beliefs, such as subjective well-being and life satisfaction, are connected with resilience (Salvador & Mayoral, 2011). Thus, it is crucial to understand entrepreneurial self-efficacy since it can influence both individuals' motivation to engage in entrepreneurship and the behavior of existing entrepreneurs (Mohammad, 2012). Hence, Hypothesis 7 proposed that satisfaction of basic psychological needs mediates the relationship between entrepreneurial leadership, entrepreneurial self-efficacy, and entrepreneur resilience. Notably, the present study discovered that basic psychological needs satisfaction mediate the relationship between entrepreneurial leadership and entrepreneurial self-efficacy and resilience.

This finding adds to previous research on the relationship between basic psychological needs satisfaction and well-being (Reis et al., 2000; Sheldon et al., 1996), self-esteem, and anxiety (Deci et al., 2001) by providing empirical support for the role of basic psychological needs satisfaction in mediating the relationship between entrepreneurial leadership and entrepreneurial self-efficacy and entrepreneur resilience. As a result, the findings suggest that entrepreneurs with entrepreneurial self-efficacy could benefit from basic psychological needs satisfaction, which would increase their level of resilience. On top of that, Bauer et al (2016) highlight competence refers to efficacy in performing a specific task, while self-determination relates to feelings of autonomy and connectedness to social relationships. According to the self-determination theory, if these three conditions are met, individuals' behaviors are intrinsically motivated (Bauer et al., 2016; Ryan & Deci, 2000). Mielniczuk & Laguna (2017) noted that individuals' self-motivation increases when these factors are met, particularly when satisfaction needs are met. Additionally, the self-determination theory was found applicable in training scenarios to comprehend why someone engages in these activities (Bauer et al., 2016; Mielniczuk & Laguna, 2017).

Fishman and Deterding (2013); Ryan and Deci (2000) demonstrated how the Self-Determination Theory's three needs could be linked to training effectiveness. Regarding autonomy support, it is critical to empower trainees and give them the ability to make some decisions to personalize their learning process. Regarding relatedness, the participants must feel they are a part of something larger and a community with goals similar to the instructors. And third, in terms of competence support, the training must be somewhat challenging, with learning objectives that are neither too easy nor too utopian but realistically achievable in the real world (Fishman & Deterding, 2013; Ryan & Deci, 2000). A successful training session necessitates engaged and motivated participants (Mielniczuk & Laguna, 2017; Zaniboni et al., 2011) for the session to be practical. Given the extensive research on training and development topics, studying how motivation can influence training effectiveness has been

considered relevant (Bauer et al., 2016; Colquitt et al., 2000; Bauer et al., 2016). Tai (2006) stated that training effectiveness refers to how meeting the training's objectives is determined by training and transfer outcomes.

For training to be effective, participants must apply what they learned to their businesses, resulting in significant changes (Goldstein & Ford, 2002; Ployhart & Hale, 2014). Training effectiveness is the process that occurs before, during, and after training to improve its impact. Cognitive, affective, and motivational outcomes are used to evaluate training programs. This study discovered that training effectiveness moderates the relationship between basic psychological needs satisfaction and entrepreneur resilience. Previous research shows that training programs can significantly impact behavior, attitude, and perception; thus, businesses should promote training programs that address all four factors: hope, efficacy, resilience, and optimism (Owoyemi et al., 2011). Zaciwski (2001) also investigated how individual characteristics, such as motivation, attitude, and basic ability, influence the effectiveness of a training program and the likelihood of its success.

Therefore, the psychological states of trainees, such as motivation, self-efficacy, perceived control, and organizational context, all affect training outcomes. These findings are consistent with previous research by (Sahinidis and Bouris, 2008). They discovered that training could reduce anxiety or frustration, develop new job demands, and develop their skills. Training increases confidence and self-efficacy for most individuals and entrepreneurs, enhances their competencies and skills, and helps them recognize their investment; as Santos (2003), highlight determining the effectiveness of training is a complex process, but training has numerous benefits. There was little discussion in the literature to evaluate the moderator of training effectiveness on entrepreneur resilience, particularly in the case of Malaysian SMEs.

Thus, the current research significantly contributed to the literature on small and medium businesses by establishing the moderating effect of training effectiveness on the relationship between basic psychological needs satisfaction and entrepreneur resilience. Almost little previous research has investigated the moderating effect of training effectiveness on entrepreneur resilience. As a result, the study's moderating effect on training effectiveness seemed novel. These relationships have been investigated earlier, but none included self-determination theory. This study is the first to incorporate social cognition and self-determination theories to better understand Malaysian SME entrepreneur resilience. Interactions of psychological, behavioral, motivational, and environmental factors are highlighted.

Conclusion

Overall, this study met its primary objective of identifying the antecedents of entrepreneur resilience, specifically entrepreneurial leadership, entrepreneurial self-efficacy, basic psychological needs satisfaction, and training effectiveness. Although numerous studies have examined the impact of these factors on entrepreneur resilience, the investigation on basic psychological needs satisfaction as the mediator was scarce. As a result, the researcher was intrigued by the under-researched area of entrepreneurship resilience, which involved Malaysian SMEs and an unknown mediator of basic psychological needs satisfaction. The study's findings indicated that basic psychological needs satisfaction is a mediator between entrepreneurial leadership, entrepreneurial self-efficacy, and entrepreneurs' resilience.

Moreover, prior research on the moderating effect of training effectiveness on the relationship between basic psychological needs satisfaction and entrepreneur resilience has

been scant or nonexistent. On top of that, this study discovered that training effectiveness moderates the relationship between basic psychological needs satisfaction and entrepreneur resilience in Malaysian SMEs. Additionally, the final integrated framework incorporates two theories of motivation, namely the social cognitive theory and the self-determination theory. By combining these theories, researchers can gain a comprehensive understanding of entrepreneur resilience from the perspective of Malaysian SMEs. In conclusion, this study's findings demonstrate that entrepreneurial self-efficacy positively affects entrepreneur resilience among Malaysian SME entrepreneurs. This understanding will benefit the National SME Development Council (NSDC), which serves as the country's highest policy-making body for the overall development of SMEs. The findings will aid them in developing SME development strategies across all economic sectors, such as coordinating SME programs implemented by related Ministries and agencies, encouraging partnerships with the private sector, and ensuring the country's overall SME development programs effectively.

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