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## Mediating Effects of Entrepreneurs' Work Performance on the Relationship between Their Psychological Capital and Growth Intentions: A Study on Malaysian Entrepreneurs

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Mediating Effects  
of Entrepreneurs'  
Work Performance

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## Abstract

**Research Aims** - This study proposes to fill the gap in entrepreneurship literature by focusing on the relationship between entrepreneurs' psychological capital and growth intention mediated by their work performance.

**Design/Methodology/Approach** - This research used cross-sectional quantitative research and employed convenience sampling technique. A total of 275 Small and Medium Enterprise (SME) entrepreneurs participated and answered the survey questionnaires.

**Research Findings** - The findings confirmed the direct relationships between psychological capital and work performance; and psychological capital and growth intention of entrepreneurs. However, this study found no mediating effect of work performance in the relationship between psychological capital and growth intention of the entrepreneurs.

**Theoretical Contribution/Originality** - This study enhanced the understanding on the importance of psychological capital as influential psychological resource for entrepreneurs as it has positive effects on attitudes and their work performance. These findings advocate the inclusion of psychological capital in entrepreneurial studies as important resource for work performance improvement and positive attitudes.

**Managerial Implications in the Southeast Asian Context** - The government and SMEs supporting agencies need to give attention to psychological capital in their entrepreneurship development policy and programmes. Further, universities and training providers should also focus on psychological capital resources in entrepreneurial education and training modules.

**Research Limitations and Implications** - This study is confined to Malaysian SME entrepreneurs only and uses convenient sampling technique. Therefore, generalization of the findings is limited. Future research can investigate the related variables in different countries and contexts to examine the importance of psychological capital in entrepreneurial setting.

**Keywords** - Entrepreneur, SME, psychological capital, work performance, growth intention, Malaysia

## INTRODUCTION

It is acknowledged that better work performance determines venture success and these high performing and thriving entrepreneurial small firms also contribute in

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terms of job creation, poverty alleviation and economic revival (Delmar et al., 2003; Estrin et al., 2013). Consequently, work performance and venture growth has captured significant deliberation in the field of entrepreneurship (Delmar et al., 2003). It has been identified that venture creation is a result of founder's thoughtful decision (Delmar, 1996) and the ventures' growth is also a deliberate entrepreneurial decision (Verheul & Mil, 2011; Wiklund & Shepherd, 2003). On the other hand, it is a practice of successful organizations to efficiently use resources to become more effective, productive, and gain better performance and greater yields for stakeholders. Conventionally, organizations adopt reengineering and quality control checks and recently have started focusing on human and social asset for refining their output. In relation to human and social capital, the attention is now centring on securing positive psychological resources (e.g. psychological capital) for better productivity and competitive edge (Luthans & Youssef, 2004). Furthermore, psychological capital has been found to have substantial positive effects on work performance and desirable attitudes (Luthans & Youssef, 2004; Norman et al., 2010) and substantial negative impacts on individuals' undesirable attitudes and behaviours (Avey et al., 2011; Beal et al., 2013).

Interestingly, psychological capital (PsyCap) is known as an important individual trait of entrepreneurs for their businesses (Hmieleski & Carr 2008). However, literature is still limited in examining the application of psychological capital on entrepreneurs. As, positive psychological capital is found to be positively associated with desirable attitudes and work performance; and negatively associated with undesirable attitudes and undesirable behaviours, hence it is important to expand the investigation of its impact to entrepreneurs' work performance and their growth intention (i.e. desirable attitude). Past literature mostly highlighted the relationship of psychological capital with performance and negative intentions of employees (e.g. quitting intention) while the relationships of psychological capital with work performance and positive intentions (i.e. growth intentions) of entrepreneurs have been largely been neglected.

Furthermore, it is timely and important to discuss psychological capital in entrepreneurship field as past discussion concentrates on employees of organizations. Being an entrepreneurial firm, psychological capital of the entrepreneur/founder is an important asset that will determine the sustainability of the organization. In addition to this, psychological capital has been scarcely examined in Asian, specifically Malaysian context. Thus, this study aims to fill these conceptual and contextual gaps through investigating the relationships among PsyCap, work performance and growth intentions of Malaysia SME entrepreneurs. Specifically, the objective is to examine whether work performance mediates the relationship between psychological capital and growth intentions of entrepreneur.

## LITERATURE REVIEW

### *Work Performance*

In general work performance is defined as the effectiveness of individuals in performing activities which contribute to the technical work of the firm (Borman &

Motowidlo, 1997). Williams (2002) further expanded the definition of work performance into work related activities and work outcomes. Work related activities refer to the behaviour which is essential for performing a task while work outcomes refer to the accomplishment of a task. Furthermore, work performance has been explained in different aspects for example performance by behaviour, performance by value and performance by results. Performance by value refers to the elements which affect firm goals (Schmidt & Kaplan, 1971). On the other hand, performance by behaviour refers to what is done by individuals (Campbell, 1990) while performance by result refers to what is generated by people (O'Boyle & Aguinis, 2012). On another note, contextual performance and task performance are defined as two dimensions of work performance (Aguinis, 2006; Borman & Motowidlo, 1997). Contextual performance is not directly associated with basic technical work of a firm (Li et al., 2012). It refers to the responsible behaviour of individuals which they show towards the firm (Aguinis 2006; Borman & Motowidlo, 1997) like inspiration of an individual to perform surplus duties over and above his/her basic work requirement. Conversely, task performance is directly associated with basic technical work of a firm (Borman & Motowidlo, 1997; Li et al., 2012). It includes all activities (e.g. expertise, technical knowledge etc.) which are used to accomplish a task in a job (Aguinis, 2006).

### ***Growth Intentions***

According to Bird (1988), intention is a mind state that directs a person's attention towards a specific goal in order to get something. Furthermore, Angelle (2006) points that intention is an attitudinal construct which depends on beliefs and morals. She explained intention as a person's resolve to act in a prescribed manner. Primarily, intention is suggested as a main indicator of succeeding behaviour (Adriaanse et al., 2011; Ajzen, 1991). It is also argued as a vital idea in entrepreneurship (Fitzsimmons & Douglas, 2011) and is a signal of entrepreneurial successive behaviour (Shane et al., 2003). While growth is considered as important measure for firm success (Gartner, 2003), hence, growth intention is an indispensable characteristic of the behaviours of entrepreneurs that plays crucial role in firms' growth (Sadler-Smith et al., 2003; Wiklund & Shepherd, 2003). Likewise, it is considered as a significant feature of entrepreneurs' behaviour (Sadler-Smith et al., 2003) as positive relationships are suggested among growth intentions, performance and future entrepreneurial business growth (Baum et al., 2001; Delmar & Wiklund, 2008; Kolvereid & Bullvag, 1996). Importantly, previous literary work gives limited attention to this notion (Krueger et al., 2000) and there is an impending need to investigate the factors affecting intentions (i.e. growth intention) of entrepreneurs.

### ***Psychological Capital***

Prior literature advocates that positive psychological constructs of hope, optimism, resilience, compassion, forgiveness, and virtue are influencing positive behaviour that explains outcome at organizational level (Sweetman, Luthans, Avey & Luthans, 2010). For example, the work of Seligman (1999) that stressed on positive qualities for beneficial functioning of organizations, has drawn attention towards positive psychology that covers personal characteristics, subjective experiences,

and organizations Luthans (2002a, 2002b) initiated a stream of literature and introduced Positive Organizational Behaviour (POB) that emphasizes on state-like constructs which are at individual level and positive in nature; influential to work related performance; have robust theoretical background and are backed by valid tools to measure (Luthans, 2002a, 2002b; Youssef & Luthans, 2007). As a result, subsequent researchers put more focus on the practices capable to enhance work related performance in relation to positive behaviour.

Psychological capital has a multidimensional construct comprises of hope, optimism, self-efficacy and resilience (Avey et al., 2011). Hope theory defines hope as the perceived ability or positive motivational state to produce pathways, sustain movement to achieve desired goals (Snyder et al., 1991). On the other hand, according to attribution theory, optimism is referred to attribution approach where an individual considers positive happenings as persistent and internal. In addition, it explains that negative happenings are external, situation-specific with no persistency (Seligman, 1998). Consequently, those who are optimist exhibit positive outlook for future, irrespective of existing adverse circumstances (Seligman, 2002), whilst those who are pessimists anticipate negativity about future (Scheier & Carver, 2009). Masten (2001) explained resilience as a manifested competence that brings positive adaptation in spite of considerable risks. In addition, according to Luthans (2002a), resilience is a positive psychological capacity to rebound from adversity in work settings. On another note, Stajkovic and Luthans (1998: 66) defined self-efficacy as an individual's "convictions (or confidence) about his or her abilities to mobilize the motivation, cognitive resources, and courses of action needed to successfully execute a specific task within a given context." It is one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997: 3).

Nevertheless, these constructs which are state-like can be developed further. Seligman (1990) suggested optimism could be inculcated in individuals through training. While Scheier and Carver (2009) suggested that optimism might be acquired by cognitive therapies. In terms of resilience, Masten (2001) suggested that resilience can emerged through adaptive procedures. Self-efficacy is also a state-like construct; and performance attainment and experience build on self-efficacy (Bandura, 1997). More importantly, these constructs have significant associations with work related performance. For instance, many studies show that hope has a positive impact on workplace performance (Adams et al., 2002; Luthans et al., 2005; Youssef & Luthans, 2007); optimism show positive effects on performance of workers and salesmen, higher commitment with the organization and improved productivity (Luthans et al., 2005; Seligman, 1998; Youssef & Luthans, 2017); and resilience also showed positive impact on employees' work performance (Luthans et al., 2005); job satisfaction and commitment (Youssef & Luthans, 2007). It was also found that self-efficacy has strong relationships with performance of employees (Johnson & Delmar, 2010).

In conclusion, psychological capital has a multidimensional construct in which the first order discriminant constructs comprise of hope, optimism, self-efficacy and



resilience (Avey et al., 2011). These first order constructs were portrayed in a way that demonstrates their shared mechanism/variance. For instance, it is contended that accomplishments of individuals require “optimistic sense of personal efficacy” (Bandura, 1998: 56). Likewise, resiliency serves as the “personal efficacy that counts” to be successful after unsuccessful endeavours (Bandura, 1998: 62). Additionally, it is argued that, similar to hope, optimism is also a process which is based upon target-oriented cognition (Snyder, 2002). Hence, these four constructs serve as the first-order dimensions of psychological capital which share the combined variance/mechanism of these dimensions. Past research also proved that psychological capital has much stronger relationships with work performance, attitudes and behaviour than its first order constructs (Avey et al., 2011; Luthans et al., 2008). In relation to this, a study of 384 entrepreneurs in Uganda found that psychological capital is a better predictor of entrepreneurial success (Baluku, Kikooma & Kibanja, 2016). An extension of the concept of growth, psychological capital has also been examined from the lens of entrepreneurial resilience, and a systematic literature review concurs that psychological constructs that comprises of individual traits or qualities including flexibility, motivation, perseverance, optimism, self-efficacy, and hope amalgamates the conceptualization of entrepreneurial resilience (Kauber & McNaughton, 2018). Therefore, this study took psychological capital as a core construct and investigates its relationships with related constructs of the study.

### Hypotheses Development

Psychological capital is modelled to have significant positive effects on individuals' positive attitudes and behaviours and their work performance (Luthans et al. 2015; Youssef & Luthans, 2010). Previous studies have found significant and positive relationship of psychological capital with work performance (Avey et al. 2011; Avey et al. 2009; Carmona-Halty et al., 2019; Luthans et al., 2015; XiZhou & XiaoYan 2013). Similarly, Polatci and Akdogan (2014) and Rabenu (2016) found significant and positive relationship between psychological capital and performance. With respect to entrepreneurial context, Hmieleski and Carr (2008) contended that psychological capital of entrepreneurs has positive relationship with performance of their new ventures. Moreover, psychological capital was found positively influence on desirable attitudes (e.g. intentions) (Avey et al. 2011; Luthans et al. 2015; Youssef & Luthans, 2007) but negatively influences quitting intention of employees (Avey et al. 2011; Avey et al. 2009). Hence, on the bases of the above relationships and empirical findings this study hypothesizes that psychological capital has positive relationships with entrepreneurs' work performance and growth intention.

H1: Psychological capital of entrepreneurs is positively and significantly related with their work performance.

H2: Psychological capital of entrepreneurs is positively and significantly related with their growth intention.

Moreover, Ajzen (1991) suggested the influence of past behaviour (e.g. performance behaviour) on future behaviour of individuals (e.g. growth intention). Further, it is contended that performance outcomes and attainment of tasks/goals bring feeling

of pride and encourage a person for achievement of subsequent goals/tasks (Locke, 1969). The integrated expectancy theory (Porter & Lawler, 1968) also recognized the influence of past performance on satisfaction and satisfaction on future efforts. It is suggested that higher performance brings higher rewards, thus increases satisfaction among individuals which then motivates individuals to strive harder for future achievements. Based on this justification, it can be argued that higher performance of entrepreneurs will bring satisfaction which in turn motivate entrepreneurs to strive for future growth of their ventures (i.e. growth intentions). Hence, this study hypothesizes that:

H3: Work performance of entrepreneurs is positively and significantly related with their growth intention.

Finally, the focus of previous studies was mainly on the direct effects of psychological capital on work outcomes (e.g. Abbas & Raja 2015; Luthans, Avolio, et al. 2005; Peterson et al. 2011). Nevertheless, researchers recently shifted their focus on studying different moderating and mediating mechanisms in psychological capital studies to further understand the effects of psychological capital on growth intentions. For instance, Polatci and Akdogan (2014) tested work-family spillover and psychological wellbeing as the mediators between the relationship of psychological capital and work performance of employees. They found significant direct relationship between psychological capital and work performance and also found that work-family spillover and psychological wellbeing mediate this relationship. Ding et al. (2015) found a significant mediating influence of coping styles on the relationship between psychological capital and burnout. Similarly, Avey et al. (2008) tested positive emotions as a mediator in their study and found that it mediates the relationship between psychological capital and employees' attitudes and behaviours. Based on that premise, this study argue that work performance could influence the relationship between psychological capital and positive or desirable attitudes. However, there is lacked of research on the mediating effects of work performance on the relationship between psychological capital and desirable attitudes (i.e. growth intention). To address this gap in psychological capital literature, this study aims to examine the mediating effect of work performance on the relationship between psychological capital and growth intention. Therefore, this study presents following hypothesis:

H4: Work performance of entrepreneurs mediates the relationship between their psychological capital and growth intention.

## RESEARCH METHOD

This study will examine the direct relationships among psychological capital and growth intentions, psychological capital and work performance, and work performance and growth intentions. It will also investigate the mediating effects of entrepreneurs' work performance on the relationship between the entrepreneurs' psychological capital and their growth intentions. This study employed a quantitative methodology and a cross-sectional study. The respondents are the SME entrepreneurs in Selangor and Kuala Lumpur regions of Malaysia who are also the active



owners/managers since at-least for the last one year. A reasonably large sample of 275 SME entrepreneurs was drawn (Garver & Mentzer, 1999; Hoe, 2008) with the help of convenience sampling technique.

A survey questionnaire was developed based on valid, reliable and known measures of study constructs and were distributed to the respondents. The psychological capital was measured using 24 items psychological capital questionnaire (PCQ) developed by Luthans et al. (2007). The reliability was ensured by Avey et al. (2008) who found 0.95 reliability coefficient for this scale. Further, Fishbein and Ajzen (1975) suggested that the future intentions could be measured by asking an individual that does he/she intent to perform specific task in future or not. Delmar et al. (2003) suggested that employment generation and sales growth are important indicators of venture growth. Hence, entrepreneurs were asked about their intention to expand their business, employment generation and sales volume. These questions were adapted from the scales and discussion of Cassar (2006), Delmar and Wiklund (2008) and Fishbein and Ajzen (1975). Finally, the work performance of entrepreneurs was measured with the help of four items scale adapted from Podsakoff et al. (1990) and Williams and Anderson (1991). The reliability of this scale was 0.94.

## RESULTS AND DISCUSSIONS

The questionnaire was initially distributed to two subject/research experts to check for content validity. The suggestions and recommendations of these experts were taken into consideration to prepare the final version of questionnaire. A pilot testing was launched with thirty-five respondents selected from the study population with the help of convenience sampling technique. The pilot study data revealed the internal consistency of above 0.90 for all the study constructs. This demonstrates the reliability of the study scale.

In actual data collection, a total of 357 questionnaires were distributed, out of which 284 were returned with a response rate of 79 percent. Preliminary data analyses reveal that only six responses had missing values and none had above 5% missing values. The MCAR test shows insignificant p values which demonstrate that the data was missing completely at random and hence, following the recommendations of Hair et al. (2010), these values were replaced with the mean values. Further, standardized scores and Mahalanobis distance were used to detect the univariate and multivariate outliers respectively. A total of seven cases were found to be univariate and multivariate outliers and were subsequently removed from the data. Remaining 275 responses were further utilized for data analyses.

The visual inspection of Histograms detected a nicely bell-shaped curve while the results of skewness-kurtosis test reveals that these values are within the range of  $\pm 2.58$ . Hence, it was concluded that the data is reasonably normally distributed (Hair, et al. 2010). The scatter plots were used to ensure the fulfilment of linearity and homoscedasticity assumptions of multivariate data analyses. Even and random dispersion of residuals were observed on the scatter plot of residuals, while accumulation of data points around best fit line was evident on the bivariate scatter plot.

These results ensure the fulfilment of linearity and homoscedasticity assumptions (Hair et al., 2010; Tabachnick & Fidell, 2007). Moreover, to check the multicollinearity issue, tolerance and variance inflation factor (VIF) values were analysed. As all the tolerance values were above 0.10 and all VIF values were below 5 hence, it was concluded that, for this study, multicollinearity does not exist (Hair et al., 2010; Norusis, 2008).

Finally, Cronbach alpha values were examined to check the internal consistency/reliability. The alpha values were found to be more than 0.80 for all the constructs and for items which ensures acceptable internal consistency/reliability of instruments and data (Hair et al., 2010; Norusis, 2008). Similarly, the validity was also found to be high as the Bartlett's Test results were significant and Kaiser-Meyer-Olkin's value for all variables was above 0.80 (Kaiser, 1974 in Norusis, 2008).

Results of descriptive analysis show that around 52 percent respondents were male while 76 percent were married and 55.6 percent were Malay. It was also found that majority of the entrepreneurs are young and are at 31 to 40 years of age. The data revealed that entrepreneurship is a popular career choice among educated individuals, as 49 percent of the entrepreneur respondents were found to have first degree/professional qualification or higher degrees. Further, it was also identified that most of the entrepreneurs had medium to high experience (66%) and are related to service sector including ICT (66%).

The Pearson's correlation analysis was conducted to examine the correlations among study constructs (Sekaran & Bougie, 2010; Tabachnick & Fidell, 2007). The correlation results are demonstrated in Table 1. It is evident from these results that relationships among psychological capital, work performance and growth intentions are positive and significant at 0.01 level. The correlation coefficient was 0.54 (psychological capital and growth intentions), 0.77 (psychological capital and work performance) and 0.55 for (growth intentions and work performance). These coefficient values demonstrate higher effect size (Cohen, 1992). Hence it can be concluded that these constructs are positively and strongly correlated with each other.

### *Hypothesis Testing*

Multiple Regression analysis was conducted to test the study hypotheses. Firstly, to test hypothesis 1, the regression analysis was run for work performance as depend-

		Psychological Capital	Growth Intention	Performance
Psychological Capital	Pearson Correlation	1	0.542**	0.774**
	Sig. (2-tailed)		0.000	0.000
	N	275	275	275
Growth Intention	Pearson Correlation	0.542**	1	0.554**
	Sig. (2-tailed)	0.000		0.000
	N	275	275	275
Performance	Pearson Correlation	0.774**	0.554**	1
	Sig. (2-tailed)	0.000	0.000	
	N	275	275	275

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

**Table 1**  
Correlations

ent construct and psychological capital as independent construct. The results are shown in table 2, 3 and 4. The R square value was 0.599 (table 2) which demonstrates that around 60 percent variation in work performance has been explained by psychological capital. According to Cohen (1988), it is a large effect size. Further, it is also found that psychological capital has positive and significant relationship with work performance of entrepreneurs ( $\beta=0.77$ ,  $t=20.18$ ,  $p<0.001$ ). This result confirms the high magnitude effect of exogenous variable (psychological capital) on the endogenous variable (work performance). Therefore, hypothesis 1 is accepted.

To test hypothesis 2 and hypothesis 3, the regression analysis was again run for growth intentions as depended construct while psychological capital and work performance as independent constructs. The results are demonstrated in tables 5, 6 and 7. Table 6 (ANOVA) results reveals the model significance while table 5 (Model Summary) reveal that 33.9 percent variation in growth intentions was due to psychological capital and work performance (R square = 0.339). This is a reasonably large effect size (Cohen, 1988). The results in table 7 demonstrate the positive

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.774 <sup>a</sup>	0.599	0.597	0.30620

**Table 2**  
Model Summary

a. Predictors: (Constant), Psychological Capital

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	38.167	1	38.167	407.075	0.000 <sup>b</sup>
Residual	25.596	273	0.094		
Total	63.763	274			

**Table 3**  
ANOVA<sup>a</sup>

a. Dependent Variable: Performance

b. Predictors: (Constant), Psychological Capital

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	0.763	0.179		4.256	0.000
Psychological Capital	0.818	0.041	0.774	20.176	0.000

**Table 4**  
Coefficients<sup>a</sup>

a. Dependent Variable: Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.582 <sup>a</sup>	0.339	0.334	0.58297

**Table 5**  
Model Summary

a. Predictors: (Constant), Performance, Psychological Capital

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	47.468	2	23.734	69.836	0.000 <sup>b</sup>
Residual	92.440	272	0.340		
Total	139.908	274			

**Table 6**  
ANOVA<sup>a</sup>

a. Dependent Variable: Growth Intentions

b. Predictors: (Constant), Performance, Psychological Capital

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.187	0.352		3.370	0.001
1 Psychological Capital	0.442	0.122	.282	3.630	0.000
Work Performance	0.498	0.115	.336	4.318	0.000

**Table 7**  
Coefficients<sup>a</sup>

a. Dependent Variable: Growth Intention

and significant relationship of psychological capital ( $\beta=0.28$ ,  $t=3.63$ ,  $p<0.001$ ) and work performance ( $\beta=0.34$ ,  $t=4.32$ ,  $p<0.001$ ) with growth intentions. Therefore, the hypothesis 2 and hypothesis 3 are accepted.

Finally, Preacher and Hayes macro was used to test the mediating effect of work performance on the relationship between psychological capital and growth intentions (hypothesis 4). The results of Preacher and Hayes test (Table 8) shows that both lower and upper bounds are positive and do not include zero between them. Hence, it is concluded that work performance does not mediate the relationship between psychological capital and growth intention of entrepreneurs. Therefore, hypothesis 4 has been rejected.

### MANAGERIAL IMPLICATIONS IN THE SOUTH EAST ASIAN CONTEXT

Based on the results, the government and SME supporting agencies need to give attention to psychological capital aspects in their entrepreneurship development policy and programme. Previous and current entrepreneurship policy and programme have given emphasis on human capital and social capital as important background and characteristics of successful entrepreneur. In future, psychological capital needs to be integrated in entrepreneurship programme organized by government and SME support institutions. Further, university and training providers should also pay consideration to psychological capital resources in entrepreneurial education and training modules, especially on how to incorporate and develop psychological capital as an important attribute among entrepreneurs. In addition, would-be entrepreneurs need to understand their own psychological capital before becoming entrepreneur or how to enhance their psychological capital as this factor is positively associated with work performance and growth intention.

For other South East Asia countries, as majority of the countries are developing countries as Malaysia, considering entrepreneur psychological capital factor in policy development and entrepreneurship programme is considered crucial. For example, psychological capital can become as one of the yardsticks for choosing and selecting would-be entrepreneur training and development. Moreover, SME related agencies that are offering financing products also can take into account psychological capital as one of the measures in assisting and enhancing entrepreneurs' performance.

### THEORETICAL IMPLICATIONS

These results show that the psychological capital is an important and influential psychological resource for entrepreneurs as it has positive effects on their positive

	Bias Corrected Confidence Interval	
	Lower	Upper
Total	0.2041	0.6454
Performance	0.2041	0.6454

**Table 8**  
Mediation Results

Independent: Psychological Capital  
Dependent: Growth Intention

attitudes and their work performance. These findings advocate the inclusion of psychological capital in entrepreneurial studies as important resource for performance improvement and positive attitudes may be among the earlier research to study the impact of psychological capital on work performance and growth intention in entrepreneurial setting. Since previous studies give small attention on what factors influence entrepreneurs' intentions during entrepreneurial endeavour (Krueger et al. 2000), this study shows that entrepreneurial growth intention can be explained by their psychological capital. Thus, this research has fulfilled the scarcity of psychological capital research in entrepreneurship field and within Asian context.

Finally, this study has few limitations as it employed cross-sectional research design and future studies may use longitudinal research design as it will assist us in understanding the variation in relationship over a period of time. Furthermore, the data was collected from SME entrepreneurs in Malaysia and future researches may be conducted in other contextual settings. Further studies are recommended to confirm and validate the importance of psychological capital in entrepreneurship studies. More and more dependent variables such as opportunity recognition, strategic thinking, and empirical data in business performance can enrich the importance of psychological capital in entrepreneurship studies.

## CONCLUSION

The objectives of this study were: to examine the relationship of psychological capital with work performance (H1); to examine the relationship of psychological capital with growth intentions (H2); to examine the relationship of work performance with growth intentions (H3) and to examine the mediating effect of work performance on the relationship between psychological capital and growth intentions (H4). The results of data analyses reveal that hypotheses 1 and 2 are accepted as there are positively significant relationships of psychological capital with work performance and growth intention of entrepreneurs. It is also found that hypothesis 3 is accepted as there is a positive and significant relationship between work performance of entrepreneurs and their growth intention. These results show that the psychological capital is an important and influential psychological resource for entrepreneurs as it has positive and influential effects on their positive attitudes and work performance. Hence, it can be said that psychological capital can act as resource for improving entrepreneurial performance and positive attitudes. On the other hand, the mediation analysis reveals that work performance do not mediate the relationship between psychological capital and growth intention. Therefore hypothesis 4 has been rejected. This finding stressed that psychological capital has positive, significant and direct relationships with work performance and growth intentions while work performance has positive, significant and direct relationships with growth intention however, there is no mediation between the relationship of psychological capital and growth intention caused by work performance of entrepreneurs.

The high performing and growing entrepreneurial venture are important for employment generation, poverty alleviation and economic development and the find-

ings of this study demonstrate that psychological capital has the tendency to support entrepreneurial performance and their growth intention. Hence, the findings of this study are important addition to the current knowledge of entrepreneurship and psychological capital. Further, the findings of this study are important as these findings advocate the inclusion of psychological capital in entrepreneurial studies as important resource for performance improvement and positive attitudes. In the same vain, the entrepreneurship education and training should also pay more consideration to psychological capital resources and these should be incorporated in entrepreneurial education and training modules. These findings are also significant for prospect and existing entrepreneurs as they will understand the importance of psychological resources and this may help them improving their work performance and bringing positive change into their attitudes.

### References

- Abbas, M., & Raja, U. (2015). Impact of psychological capital on innovative performance and job stress. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, 32(2), 128-138.
- Adams, V. H., Synder, C. R., Rand, K. L., King, E. A., Sigmon, D. R. and Pulvers, K. M. (2002) Hope in the workplace (pp. 367–377). In R. Giacolone and C. Jurkiewicz (Eds.), *Handbook of workplace spirituality and organizational performance*. New York, NY: Sharpe
- Adriaanse, M. A., Gollwitzer, P. M., De Ridder, D. T., De Wit, J. B., & Kroese, F. M. (2011). Breaking habits with implementation intentions: A test of underlying processes. *Personality and Social Psychology Bulletin*, 37(4), 502-513.
- Aguinis, H. (2006). *Performance management*. Denver, CO: Prentice Hall, Inc.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior And Human Decision Processes*, 50(2), 179-211.
- Angelle, P. S. (2006). Instructional leadership and monitoring: Increasing teacher intent to stay through socialization. *NASSP Bulletin*, 90(4), 318-334.
- Avey, J. B., Luthans, F., & Jensen, S. M. (2009). Psychological capital: A positive resource for combating employee stress and turnover. *Human Resource Management*, 48(5), 677-693.
- Avey, J. B., Reichard, R. J., Luthans, F., & Mhatre, K. H. (2011). Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance. *Human Resource Development Quarterly*, 22(2), 127-152.
- Avey, J. B., Wernsing, T. S., & Luthans, F. (2008). Can positive employees help positive organizational change? Impact of psychological capital and emotions on relevant attitudes and behaviors. *The Journal of Applied Behavioral Science*, 44(1), 48-70.
- Baluku, M.M., Kikooma, J.F., & Kibanja, G.M. (2016). Psychological capital and the startup capital–entrepreneurial success relationship, *Journal of Small Business & Entrepreneurship*, 28(1), 27-54
- Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. New York, NY: W. H. Freeman.
- Bandura, A. (1998). Personal and collective efficacy in human adaptation and change. *Advances in Psychological Science*, 1, 51-71.



- Baum, R.J., Locke, E.A., & Smith, K.G. (2001). A multidimensional model of venture growth. *Academy of Management Journal*, 44(2), 292–303.
- Beal III, L., Stavros, J. M., & Cole, M. L. (2013). Effect of psychological capital and resistance to change on organisational citizenship behavior. *SA Journal of Industrial Psychology*, 39(2), 01-11.
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review*, 13(3), 442-453.
- Borman, W. C., & Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance*, 10(2), 99-109.
- Campbell, J.P., McHenry, J.J. and Wise, L.L. (1990). Modelling job performance in a population of jobs. *Personnel Psychology*, 43(2): 313-333.
- Carmona-Halty M, Schaufeli WB and Salanova M (2019). Good relationships, good performance: The mediating role of psychological capital – A three-wave study among students. *Frontiers in Psychology*, 10, 306. doi: 10.3389/fpsyg.2019.00306
- Cassar, G. (2006). Entrepreneurs opportunity cost and intended venture growth. *Journal of Business Venturing*, 21(5), 610-632.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioural Science* (2<sup>nd</sup> ed.). Hillsdale, NJ: Lawrence Associates Publishers.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155-159.
- Delmar, F. (1996). *Entrepreneurial behavior and business performance*. (Doctoral dissertation, Stockholm School of Economics, Stockholm, Sweden). Retrieved from <https://ex.hhs.se/dissertations/376004-FULLTEXT02.pdf>
- Delmar, F., Davidsson, P., & Gartner, W. B. (2003). Arriving at the high-growth firm. *Journal of Business Venturing*, 18(2), 189-216.
- Delmar, F., & Wiklund, J. (2008). The effect of small business managers' growth motivation on firm growth: A longitudinal study. *Entrepreneurship Theory and Practice*, 32(3), 437-457.
- Ding, Y., Yang, Y., Yang, X., Zhang, T., Qiu, X., He, X., & Sui, H. (2015). The mediating role of coping style in the relationship between psychological capital and burnout among Chinese Nurses. *PloS One*, 10(4), e0122128.
- Estrin, S., Korosteleva, J., & Mickiewicz, T. (2013). Which institutions encourage entrepreneurial growth aspirations?. *Journal of Business Venturing*, 28(4), 564-580.
- Fishbein, M. & Ajzen, I. (1975). *Belief, Attitude, Intention and Behaviour: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley.
- Fitzsimmons, J. R., & Douglas, E. J. (2011). Interaction between feasibility and desirability in the formation of entrepreneurial intentions. *Journal of Business Venturing*, 26(4), 431-440.
- Garver, M. S. & Mentzer, J. T. (1999). Logistics research methods: Employing structural equation modeling to test for construct validity. *Journal of Business Logistics*, 20(1), 33-38.
- Hair, J. F., Black, W. C. Babin, B. J. & Anderson, R. E. (2010). *Multivariate data analysis* (7<sup>th</sup> ed.). New Jersey: Prentice Hall.
- Hmieleski, K. M., & Carr, J. C. (2008). The relationship between entrepreneur psychological capital and new venture performance. *Frontiers of Entrepreneurship*

- Research*, 28(4), 1-15.
- Hoe, S. L. (2008). Issues and procedures in adopting structural equation modeling technique. *Journal of Applied Quantitative Methods*, 3(1): 76-83.
- Johnson, A. R., & Delmar, F. (2010). The psychology of entrepreneurs: A self-regulation perspective. In F. Lohrke, & H. Landström (Eds.), *Historical Foundations of Entrepreneurship Research* (p. 289-318). Cheltenham, UK: Edward Elgar Publishing.
- Kaiser, H. F. (1974). An Index of Factorial Simplicity. *Psychometrika*, 39, 31-36.
- Kolvereid, L. & Bullvag, E. (1996). Growth intentions and actual growth: The impact of entrepreneurial choice. *Journal of Enterprising Culture*, 4(1), 1-17.
- Korber, S. & McNaughton, R. (2018). Resilience and entrepreneurship: A systematic literature review. *International Journal of Entrepreneurial Behavior & Research*, 24(7), 1129-1154
- Krueger Jr, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5), 411-432.
- Li, X., Sanders, K. and Frenkel, S. (2012). How leader-member exchange, work engagement and HRM consistency explain Chinese luxury hotel employees' job performance. *International Journal of Hospitality Management*, 31(4), 1059-1066.
- Locke, E. A. (1969). Purpose without consciousness: A contradiction. *Psychological Reports*, 25(3), 991-1009.
- Luthans, F. (2002a). Positive organizational behavior: Developing and managing psychological strengths. *The Academy of Management Executive*, 16(1), 57-72.
- Luthans, F. (2002b). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, 23(6), 695-706.
- Luthans, F., Avey, J. B., Clapp-Smith, R., & Li, W. (2008). More evidence on the value of Chinese workers' psychological capital: A potentially unlimited competitive resource?. *The International Journal of Human Resource Management*, 19(5), 818-827.
- Luthans, F., Avolio, B. J., Walumbwa, F. O., & Li, W. (2005). The psychological capital of Chinese workers: Exploring the relationship with performance. *Management and Organization Review*, 1(2), 249-271.
- Luthans, F., Luthans, B. C., & Luthans, K. W. (2015). *Organizational Behavior: An Evidence-Based Approach* (13<sup>th</sup> Ed.). Charlotte, NC: Information Age Publishing.
- Luthans, F., & Youssef, C. M. (2004). Human, social, and now positive psychological capital management: investing in people for competitive advantage. *Organizational Dynamics*, 33(2), 143-160.
- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological Capital: Developing the Human Competitive Edge*. Oxford: Oxford University Press.
- Luthans, F., and Youssef-Morgan, C. M. (2017). Psychological capital: An evidence-based positive approach. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 339-366. doi: 10.1146/annurev-orgpsych-032516-113324.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227.
- Norman, S. M., Avolio, B. J., & Luthans, F. (2010). The impact of positivity and

- transparency on trust in leaders and their perceived effectiveness. *The Leadership Quarterly*, 21(3), 350-364.
- Norusis, M. J. (2008). *SPSS 16.0: Statistical Procedures Companion*. Upper Saddle River, NJ: Prentice Hall.
- O'Boyle E., Aguinis H. (2012). The best and the rest: Revisiting the norm of normality of individual performance. *Personnel Psychology*, 65, 79–119.
- Peterson, S. J., Luthans, F., Avolio, B. J., Walumbwa, F. O., & Zhang, Z. (2011). Psychological capital and employee performance: A latent growth modeling approach. *Personnel Psychology*, 64(2), 427-450.
- Podsakoff, P.M., MacKenzie, S.B., Moorman, R.H. and Fetter, R. (1990). Transformational leadership behaviors and their effect on followers' trust in leader, satisfaction, and OCB. *The Leadership Quarterly*, 1(2), 107-142.
- Polatci, S., & Akdogan, A. (2014). Psychological capital and performance: the mediating role of work family spillover and psychological well-being. *Business and Economics Research Journal*, 5(1), 1– 15.
- Porter, L. W., & Lawler, E. E. (1968). *Managerial attitudes and performance*. Homewood, IL: R.D. Irwin.
- Rabenu, E., Yaniv, E., & Elizur, D. (2016). The relationship between psychological capital, coping with stress, well-being, and performance. *Current Psychology*, 2(1), 1-13.
- Sadler-Smith, E., Hampson, Y., Chaston, I., Badger, B., (2003). Managerial behavior, entrepreneurial style, and small firm performance. *Journal of Small Business Management*, 41(1), 47–67.
- Schmidt FL, Kaplan LB. (1971). Compositive vs. multiple criteria: A review and resolution of the controversy. *Personnel Psychology*, 24, 419–434.
- Scheier, M.F., & Carver, C.S. (2009). Optimism. In *The encyclopedia of positive psychology* (656-663). Oxford: Wiley-Blackwell.
- Sekaran, U. & Bougie, R. (2010). *Research methods for business: A skill building approach* (5<sup>th</sup> ed.). Haddington: John Wiley & Sons Inc.
- Seligman, M.E. (1990). *Learned Optimism*. New York, NY: Knopf.
- Seligman, M.E. (1998). *Learned Optimism*. New York, NY: Pocket Books.
- Seligman, M. E. (1999). The president's address. *American Psychologist*, 54(8), 559-562.
- Seligman, M.E. (2002). *Authentic Happiness*. New York, NY: Free Press.
- Shane, S., Locke, E.A., & Collins, C.J. (2003). Entrepreneurial motivation. *Human Resource Management Review*, 13(2), 257–279.
- Snyder, C. R. (2002). Hope theory: Rainbows in the mind. *Psychological Inquiry*, 13(4), 249-275.
- Snyder, C. R., Irving, L. M., & Anderson, J. R. (1991). Hope and health: Measuring the will and the ways. In C.R. Snyder & D.R. Forsyth (Eds.), *Handbook of Social and Clinical Psychology* (pp. 285-305). Elmsford, NY: Pergamon.
- Stajkovic, A.D., & Luthans, F. (1998). Social cognitive theory and self-efficacy: Going beyond traditional motivational and behavioral approaches. *Organizational Dynamics*, 26, 62-74.
- Sweetman, D.S., Avey, J.B., & Luthans, B.C. (2011) Relationship between positive psychological capital and creative performance, *Canadian Journal of Administrative Sciences*, 28(1), 4–13.

- Tabachnick, B. G. & Fidell, L. S. (2007). *Using multivariate statistics (5<sup>th</sup> ed.)*. Boston: Pearson Education Inc.
- Verheul, I., & Van Mil, L. (2011). What determines the growth ambition of Dutch early-stage entrepreneurs?. *International Journal of Entrepreneurial Venturing*, 3(2), 183-207.
- Wiklund, J., & Shepherd, D. (2003). Aspiring for, and achieving growth: The moderating role of resources and opportunities. *Journal of Management Studies*, 40(8), 1919-1941.
- Williams, R.S. (2002), *Managing employee performance: Design and implementation in organizations*. London: Cengage Learning.
- Williams, L.J. and Anderson, S.E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship behavior and in-role behaviors. *Journal of Management*, 17(1), 601-617.
- Xizhou, T. I. A. N., & Xiaoyan, Z. U. O. (2013). The synergic effects of human, social and psychological capital on hotel employee performance and organizational commitment. *Tourism Tribune/Lvyou Xuekan*, 28(11).
- Youssef, C. M., & Luthans, F. (2007). Positive organizational behavior in the workplace: The impact of hope, optimism, and resilience. *Journal of Management*, 33(5), 774-800.
- Youssef, C. M., & Luthans, F. (2010). An integrated model of psychological capital in the workplace. *Oxford Handbook of Positive Psychology and Work*, 277-288.