

# Emotional Intelligence in Small and Medium Enterprises: Exploring its Effect on Ambidextrous Behaviours and Firm Performance

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**Abstract**--This paper contributes to the growing body of research that focuses on the antecedents of ambidextrous behaviours, that is, understanding the role of emotional intelligence influencing ambidextrous behaviours. One central challenge caused by ambidextrous behaviours is the divergence mindset catering to the contradiction of exploitative and explorative behaviours. The manner in which owner-managers recognise with and act out contradictory demands provides an insight in to the balancing act of ambidextrous behaviours. Following theory of dynamic capability, the present paper simultaneously analyzes antecedents and consequences of ambidextrous behaviours. Regarding the antecedents, the present study sought to identify the dimensional roles of emotional intelligence (EI) influencing ambidextrous behaviours. With regard to consequences, the paper analyses the impact of ambidextrous behaviours on firm performance among owner-managers from small and medium enterprises (SMEs) in Kuala Lumpur and Selangor, Malaysia. Out of 1,000 invited respondents, a total of 220 owner-managers participated in this research. 183 useable data were analysed using Partial Least Squares (SmartPLSv3.2.7), result indicates that all four dimensions of EI positively influence ambidextrous behaviours and there is a positive impact of ambidextrous behaviours on firm performance among SMES in Malaysia. This study adds to the limited theoretical and empirical understanding of the role of EI and ambidextrous behaviorus. This present study concludes by highlighting scope and significance of these findings for theory, managerial practice, and future research.

**Keywords**--Ambidextrous behaviours, Emotional Intelligence, Business Performance, Small and Medium Enterprises, Malaysia

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## I. INTRODUCTION

SMEs are faced with the ever-growing threat of not only domestic competitions but also international competitions. As the nation develops, foreign multinational companies make substantial investments in the country that could drive domestic SMEs out of business. Due to such competitiveness, marketplace against SMEs is constantly shifting. Other than financial constraints, SMEs experience a lack of managerial skills,

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marketing issues, product/service innovation, knowledge management and internationalisation (Rahman, Yaacob and Radzi, 2016). With SMEs contributing 37.1% to Gross Domestic Product (GDP), 66.0% of employment and a total of 17.3% of export for Malaysia (SME Masterplan, 2012-2020), a primary focus on ensuring the continual survival of SMEs are extremely important.

Zahra, Sapienza and Davidsson (2006) argued that for SMEs to be successful, continuous changes would need to be made, such as skill and competencies of the firm need to be enhanced and new capabilities need to be developed accordingly to ensure for long-term survival. Choi and Shepherd (2004) suggest that owner-managers' ability plays a critical role, especially in a dynamic business environment by fully exploring surrounding opportunities and exploiting its internal resources. It has been argued that owner-managers must both explorative and exploitative behaviours and hence the combination of high levels of both these behaviors would result in ambidextrous behaviours (AB) allowing for higher job performance (Alghamdi, 2018). The theory of ambidexterity posits that individual that engage in AB, i.e., explorative and exploitative behaviours, are necessary to maintain short-term returns and long-term gains (O'Reilly and Tushman, 2013; Junni et al., 2013).

Any successful organisation requires flexible leaders that possess unique capability to juggle internal and external demands (Poon et al., 2018b) in order to maintain short-term returns and long-term gains. Owner-managers that has the ability to search for new opportunity to create innovative product breakthroughs while improving upon existing services are key element in determining the success and failure of the business (Kauppila and Tempelaar, 2016). Owner-managers that can seamlessly integrate conflicting action and respond adequately to these changes are able to navigate the organisation through hostile business environment. For such reasons, the importance of emotional intelligence (EI), which makes human relationships more flexible and improves job performance, is increasing. Researchers such as Hahn, Choi and Lee (2013) have argued that complex "relationships" are very important in achieving social success. Goleman (2006) argued that EI and innovative performance will lead the twenty-first century. This scenario has promoted a new subject among researchers, in which directs researchers to expand the idea by looking from the perspective of EI and AB among SMEs in developed and developing countries (Hahn, et al., 2013; Koryak et al., 2018).

Therefore, this paper attempts to investigate the relationship between dimensional roles of EI, AB and business performance. This study aims to extend the body of knowledge relating to the influences of EI in the cultivation of AB. This research has important implications for SMEs companies in the development of low-cost competitive advantage. The rest of this article is outlined as follows: theoretical background, followed by research model and hypotheses and then moves on to research methodology and data analysis and finally, concludes with a discussion.

## II. THEORETICAL BACKGROUND

Dynamic capability (DC) is an extension of resource-based view (RBV) (Ambrosini, Bowman, and Collier, 2009; Teece, 2007) that treats the firm's resources as heterogeneous to achieve sustainable competitive advantage (Helfat and Peteraf, 2009; Barney, 2001). DC encapsulate the evolutionary nature of resources and capabilities,

which enhance RBV (Teece et al., 1997; Eisenhardt and Martin, 2000; Zahra and George, 2002). For this reason, the assumptions used in RBV also apply to DCs (Ambrosini, Bowman, and Collier, 2009) as they share many similar features (Webb and Schlemmer, 2008) such as competitive advantage being created with the resources or capabilities (Barney, 2001). On the other hand, although DCs are extended from RBV and share many similar features, they are different in three aspects. Firstly, the advantage of RBV is achieved in equilibrium, while in DCs they are made in disequilibrium (Webb and Schlemmer, 2008). Secondly, RBV focuses on the best way of utilising the firm's resources, while DCs focused on the best way of integrating, renewing, reconfiguring, and recreating resources (Kusunoki, Nonaka, and Nagata, 1998). Thirdly, RBV is static and insensitive to environmental change, while DCs are responds to environmental change (Webb and Schlemmer, 2008; Teece et al., 1997).

DC acts as a transformer for converting resources into improved performance (Lin and Wu, 2014). Borch and Madsen (2007), proposed that DC refers to the capability to exploit internal and external competencies as well as establishing new routines for the firm. DC emphasis is the urgent need to reconfigure current skills and create new skills to respond to the dynamic business environment. In fact, Luo (2000) and Teece (2014) stressed that DC is an essential component for companies to be effective and efficient in their operations in an unstable business environment. Kurtmollaiev (2015) proposed that DCs lie exclusively in people who use them to manage and change personal and organisational capabilities in achieving an efficient result. Tushman and O'Reilly (1996) argues that for firms to develop DCs, firms should develop ambidexterity. The capability is described as an organisational process that concerns with simultaneous activities in exploring and exploiting business competencies, to respond to the rapidly changing business environment (Teece et al., 1997; Lubatkin et al., 2006; O'Reilly and Tushman, 2013).

### **III. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

#### **3.1 Ambidextrous Behaviours (AB)–Performance**

The past twenty years have witnessed increasing interest in the theory and research on ambidextrous behaviours – that is, the behaviours to explore new opportunities while exploiting existing competencies (Cao et al. 2009; Tushman and O'Reilly, 1996). Explorative behaviour is required for the generation of new ideas, searching, variation, risk taking, experimentation, play, flexibility, discovery and innovation; exploitative behaviour is required for the implementation of these ideas, refinement, choice, production, efficiency, selection, implementation, and execution (Anderson, Potočnik, & Zhou, 2014; Bledow et al., 2009; March, 1991). The need for an organisation to accommodate to both explore and exploit was first mentioned by Robert Duncan (1976 as cited in O'Reilly and Tushman, 2013), who argues that there is a need for the firm to shift to execute innovation to be successful. March (1991) suggested that primary adaptive challenge firms face is the exploitation (e.g. efficiency, control, certainty and variance reduction) of existing assets and capabilities while providing sufficient resources to exploration (e.g. searching, discovery, autonomy and innovations) to avoid being rendered obsolete by the accelerated changes in markets and technologies. March (1991) believes that firms are confronted with the need to undertake sufficient exploitative activities to ensure short-term survivability while at the concurrently devote sufficient resources for explorative activities in ensuring long-term survivability. The inability for organisation to reconcile these differences risk falling into a downward spiral of mediocrity (March, 1991).

SMEs are plagued by intensive competitions and rapidly changing business environment which directly affects business performance. Organisation needs to be proactive in anticipating changes in the market and innovatively design new products and services to address these external threats. While the innovation process is possible with large support of financial and human resources (see O'Reilly and Tushman, 2013), SMEs often faced with limitation of these resources. Researchers argues that too much focus on exploitation leads to “success trap” while focusing too much on exploration leads to “failure trap” which may trap them in an “endless cycle of failure and unrewarding change (Levinthal and March, 1993). These companies are destined to a downward cycle of search and unrewarding change (Raisch and Birkinshaw, 2008). Similarly, companies that focus solely on exploitation are at risk of being obsolete (March, 1991). By exclusively focusing on exploitation, firms may gain short-term performance regarding company efficiency but would not be able to adequately change and respond to the business environment in the long-run. Hence, having an ambidextrous perspective provides the optimal blend of exploitation and exploration ensuring short- and long-term success (March, 1991).

The ability to adapt is found to be a compelling factor in determining performance (Lubatkin et al., 2006; Raisch and Birkinshaw, 2008). While the link between ambidextrous behaviours and firm performance among SMEs is not uncommon (Cao et al., 2009; Patel et al., 2013), Malaysian perspective remains vague. SMEs that deftly pursue both exploitative and explorative behaviours would most likely drive the firm to better performance. The present study expects that same significant impact for ambidextrous behaviours on SME business performance. Thus, drawing from the evidence, this paper hypothesised that ambidextrous behaviours will positively affect firm's performance.

H1. AB has a positive impact on firm performance

### **3.2 Emotional Intelligence (EI) - AB Relationship**

The notion that there are forms of intelligence, not captured by IQ and which are important in life skills and life chances, has been long established. Salovey and Mayer (1990) were the first to argued that EI refers to one's ability to take into consideration of others' and own's emotion, using the information to process and control others' and own's actions and thought. There is evidence that owner-managers' EI positively accounts for differences in individual outcomes. Studies show that EI is positively related to individual's performance, team satisfaction, energise the surrounding people, recognising and expressing feelings. (Relajo, Janice and Dela Rosa, 2015). In general, researchers agreed that EI should be individual's ability in dealing with emotions and its domains should include the following four distinct dimensions (1) self emotional appraisal (SEA), (2) others' emotional appraisal (OEA), (3) regulation of emotion (ROE) and (4) use of emotion (UOE) (Wong and Law, 2002).

SEA points to an individual's ability to understand their deep emotions and be able to express them naturally. People who have high ability in this area will be able to acknowledge and sense their emotions well before most people. OEA refers to an individual's ability to discern and understand the emotions of the people around them. People who are high in this ability are much more sensitive to the feelings of emotions of others. ROE describes the ability of a person to control their emotions, hence enabling a more rapid recovery from emotional climax and discomfort. A person who has high ability in ROE can keep their behaviour under control when they emotionally

challenged. UOE depict one's ability to make use of their emotions by directing them toward constructive activities and personal improvements. A person with great ability in this area maintains positive emotions most of the time. They make the very best use of their emotions to facilitate high performance in the workplace and their personal lives (Wong and Law, 2002).

Owner-managers that can regulate their emotion through response-focused emotion regulation by intensifying, diminishing, prolonging, or curtailing certain emotions. Observing the significance of EI, the notion of EI has emerged as a significant predictor to work performance outcomes (e.g., creative performance and voluntary tasks) (Wong and Law, 2002), organisational citizenship behavior (OCB), job satisfaction, safety behavior, profitability, innovation, creativity and deviant workplace behavior (Darvishmotevali et al., 2018) but few studies are done on the direct relationship between EI and AB. Rosing et al., (2011) postulate that EI is an antecedent of AB, that EI may be helpful with respect to owner-managers' sensitivity in recognising suitable behaviours for any given situation and regulating their emotions accordingly as ambidextrous demands paradoxical behaviours. Regarding the relationship between SEA, OEA, ROE and UOE and AB, this paper, therefore, proposes that if owner-managers have high levels of SEA, OEA, ROE and UOE, they will exhibit AB.

H2: SEA has a positive impact on AB

H3: OEA has a positive impact on AB

H4: ROE has a positive impact on AB

H5: UOE has a positive impact on AB

## **IV. METHOD**

### **4.1 Participants and procedure**

A questionnaire survey was used to collect data and to test the hypotheses. The population of interest was owner-managers from SMEs located in Selangor and Kuala Lumpur. The list of SMEs located in Selangor and Kuala Lumpur was obtained from SME Corporation Malaysia. SMEs were approached based on a list of randomised SPSS cases. Although the use of a single respondent would not be ideal for organization level, this approach is common among recent empirical research such as those measuring organizational culture (e.g., Liu et al., 2008; Stock et al., 2007). However, these key respondents were deemed appropriate in the current research because as active owner-managers, they have a good understanding of their firm and that they played an active role in making strategic decisions. A self-administered online questionnaire was emailed to potential respondent after their willingness to take part in the survey has been ascertained. Respondents were assured of their confidentiality and given two weeks to complete the survey. Between December 2015 to April 2016, a total of 220 questionnaire were collected with 183 usable responses.

As the data collected are self-reported, the presence of method variance may cause systematic measurement error and further bias the estimates of the actual relationship among the constructs (Podsakoff et al., 2003). In ensuring that there is no Common Method Bias in the survey, Harman's single factor test was performed which revealed that the first factor accounted for 23.51% of variance, less than the suggested threshold level of 50% of

total variance explained (Podsakoff et al., 2003). To test non-response bias, both Chi Square and independent *t*-test were carried out to compare if no significant difference exists between early and late respondents, non-response bias is not expected to affect the result of the study. The results reveal that there was no significant difference in early and late responses based on Chi Square value of 3.22 and sig. (*p*-value) of 0.626.

**Table 1** summarises the demographic profiles of the respondents and SMEs.

Profile		
<b>Gender</b>	Male	118 (64.50%)
	Female	65 (35.50%)
<b>Ethnicity</b>	Malay	20 (10.90%)
	Chinese	144 (78.70%)
	Indian	12 (6.60%)
	Indigenous	7 (3.80%)
<b>Types of Industry</b>	Service	148 (80.90%)
	Manufacturing	13 (7.10%)
	Others(Agriculture, Construction, Mining & Quarrying)	22 (12.00%)
<b>Position</b>	Owner	73 (39.90%)
	Manager	110 (60.10%)

## 4.2 Measures

A structured questionnaire, comprising major constructs (i.e. SEA, OEA, UOE, ROE, AB and business performance), was distributed among owner-managers of SMEs in Klang Valley region. The instrument was adapted from WLEIS scale to measure emotional intelligence (Wong and Law, 2002). AB was measured using items and methods developed by Lubatkin et al., (2006). Finally, four items for business performance was adopted from Gibson and Birkinshaw (2004) where respondents are required to reflect on the firm's performance over the last five years and indicate the degree to which they agreed with the statement. The items for each construct were measured using a 7-point Likert scale of 1=strongly disagree to 7=strongly agree.

## V. DATA ANALYSIS

### 5.1 Assessment of Measurement (Outer) Model

PLS-SEM technique was used to achieve our research objectives and analyze the measurement and structural model. To ensure validity and goodness of the measurement model, indicator loadings, composite reliability (CR), average variance extracted (AVE) and discriminant validity were assessed (Hair et al., 2017). To reach an acceptable indicator reliability, the indicator loading must be higher than 0.60 (Chin, 1998). As for CR and AVE, a value above 0.70 and 0.50 respectively indicating that the measurement model achieves sufficient convergent validity (Hair et al., 2017). Table 2 depicts the results of assessment of measurement model for first-order constructs. In addition, HTMT was used to examine discriminant validity. The most conservative criterion,

HTMT is used to assess discriminant validity at the cut-off value of 0.85 (Henseler et al., 2009; Voorhees et al., 2016), if the value is greater, then it signifies a problem with discriminant validity. Table 3 depicts the summary of Heterotrait-monotrait Ratio (HTMT) analysis.

**Table 2.** Results of assessment of measurement model for first-order constructs

<b>First-order Construct</b>	<b>Items</b>	<b>Loadings</b>	<b>AVE</b>	<b>CR</b>
<b>Ambidextrous Behaviours</b>	<b>Ambidextrous</b>	<b>SIC</b>	<b>SIC</b>	<b>SIC</b>
<b>Self Emotional Appraisal (SEA)</b>	EI1	0.679	0.655	0.882
	EI2	0.892		
	EI3	0.868		
	EI4	0.764		
<b>Others' Emotional Appraisal (OEA)</b>	EI5	0.844	0.796	0.940
	EI6	0.917		
	EI7	0.878		
	EI8	0.928		
<b>Utilization of Emotions (UOE)</b>	EI9	0.866	0.744	0.921
	EI10	0.801		
	EI11	0.892		
	EI12	0.889		
<b>Regulation of Emotion (ROE)</b>	EI13	0.905	0.805	0.943
	EI14	0.924		
	EI15	0.808		
	EI16	0.946		
<b>Busienss Performance</b>	PERFO1	0.567	0.559	0.832
	PERFO2	0.776		
	PERFO3	0.724		
	PERFO4	0.890		

Variance Inflation Factor (VIF), Average Variance Extracted (AVE), CompostiveReliabilty (CR), Single Indicator Construct (SIC)

**Table 3.**Heterotrait-monotrait Ratio (HTMT) Analysis

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
1. Ambidextrous Behaviours						
2. Business Performance	0.339					
3. Others' Emotional Appraisal	0.460	0.224				

4. Regulation of Emotions	0.486	0.375	0.319			
5. Self Emotional Appraisal	0.615	0.439	0.646	0.599		
6. Utilization of Emotions	0.546	0.337	0.556	0.588	0.658	

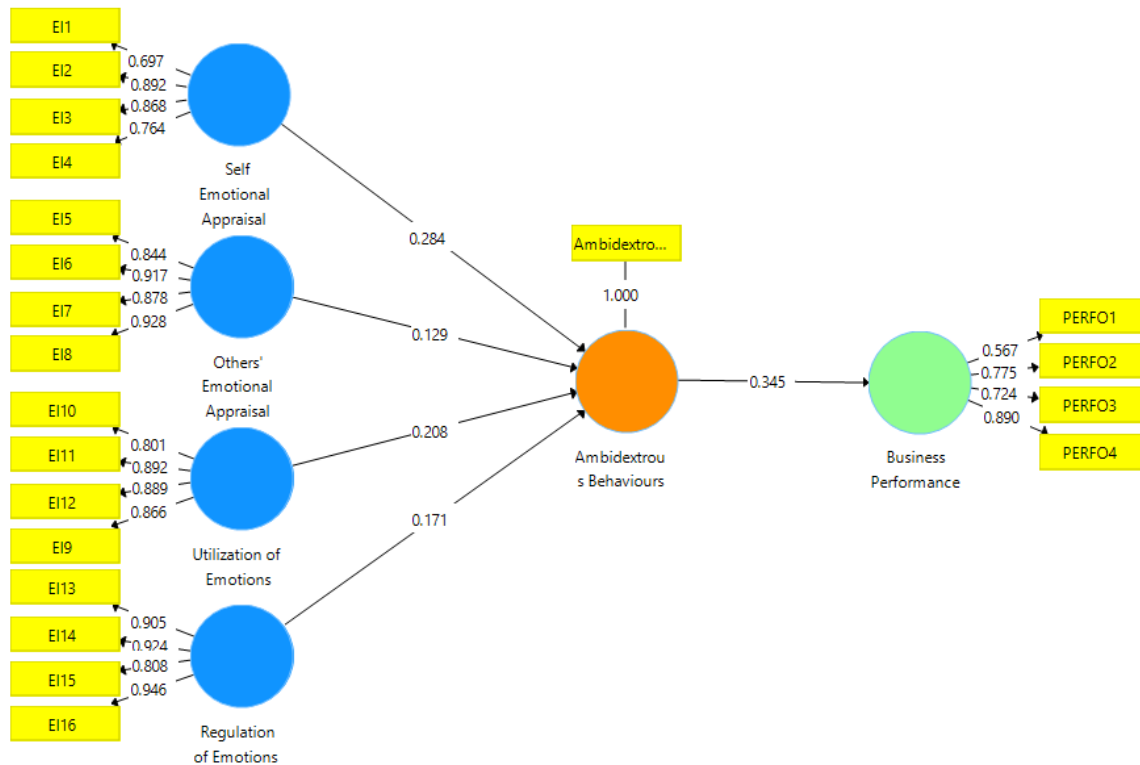


Figure 1. Results of Measurement Model

## 5.2 Assessment of Structural (Inner) Model

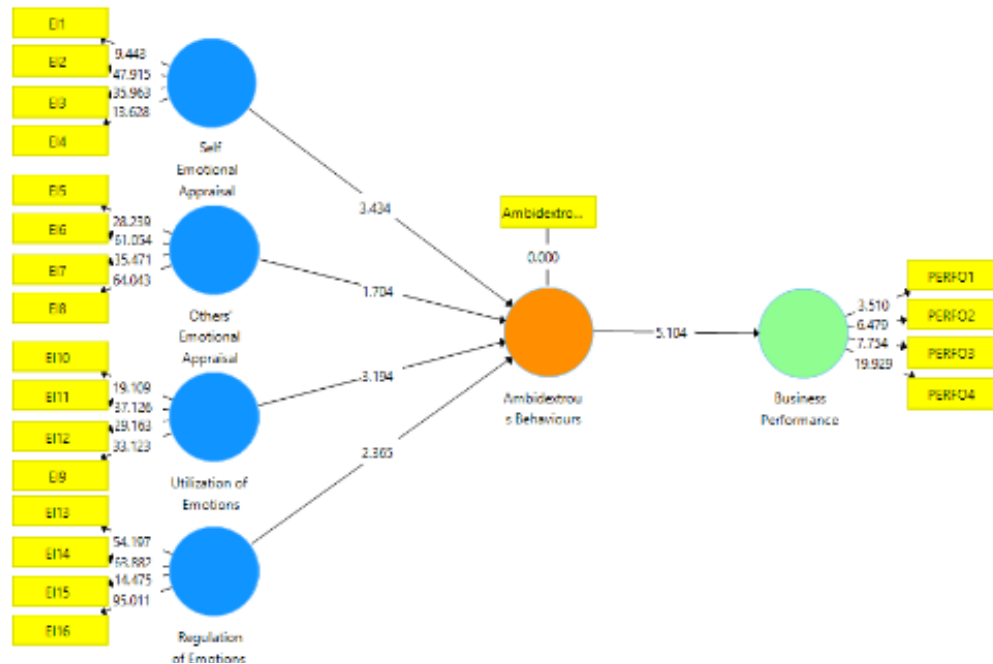
As for the assessment of structural model, bootstrapping method of 5,000 resampling procedure is used to estimate for standard errors, path coefficient and t-statistics (Hair et al., 2017) was adopted. Table 4 illustrates the results from the PLS path analysis for the structural model evaluation. AB have a positive effect on business performance. Since the conceptual model of the study has yet to be explored, researchers assume a significance level of 10% (Hair et al. 2017). Therefore, H1, H2, H3, H4 and H5 are supported. Apart from that, the results suggest that the model is capable of explaining 40.5% of the variance in AB and 11.9% of variance in business performance. Next, Hair et al., (2017) suggested that in the evaluation of the predictive relevance of the endogenous model, blindfolding procedure was applied. By using omission distance of 7, the predictive relevance ( $Q^2$ ) for business performance value of 0.051 and AB for  $Q^2$  value of 0.368. Thus, the model exhibited acceptable fit and high predictive relevance, since  $Q^2$  is greater than 0.



**Table 4.** Standard Beta, Standard Error, T-Value, Variance Explained and Predictive Relevance

	$\beta$	Std. Error	T-value	Decisions	$R^2$	$Q^2$
AB -> Business Performance	0.345	0.068	5.104***	H1 Supported	0.119	0.051
SEA -> AB	0.284	0.083	3.434**	H2 Supported	0.405	0.368
OEA -> AB	0.129	0.076	1.704*	H3 Supported		
ROE -> AB	0.171	0.072	2.365**	H4 Supported		
UOE -> AB	0.208	0.065	3.194**	H5 Supported		

Note: \*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$ ,  $R^2$  = Variance Explained,  $Q^2$  = Stone-Geisser Predictive Relevance (Bootstrapping = 5000, Omission Distance,  $D = 7$ )



**Figure 2.** Results of Structural Model

## VI. DISCUSSION

From a theoretical perspective, this research makes important and meaningful contributions to the existing literature in organisational behaviour of SMEs. To date, very few empirical studies have been conducted on AB in Malaysia, its predictors, mechanisms, and interactive effect among SMEs. Addressing this gap, this study tested SEA, OEA, UOE and ROE as a predictor of AB and consequently influencing SME's overall business performance. The finding revealed that SEA, OEA, UOE and ROE plays important role in the development of AB. While, AB plays a significant impact on the business performance of SMEs.

The findings show that SEA, OEA, UOE and ROE are an important predictor for ambidextrous behaviours among owner-managers. The finding is consistent with result from previous study and confirm that emotions plays a role in thinking and information processing (Darvishmotevali et al., 2018). Similarly, Zhou and George (2001) argued that EI enables owner-managers to understand and channel the emotions of subordinates connected to the innovation process. A high SEA, OEA, UOE and ROE enable owner-managers to be sensitive to what kind of behaviors are called for in a given situation. Owner-managers' ability to manage SEA, OEA, UOE and ROE can instinctively enable them to alternate between exploitative behaviour and explorative behaviour, enabling them to adapt to the situation with the appropriate behavior resulting in AB. For example, as both exploitative and explorative behaviours are contradictory dimension, with the careful analysis of the owner-manager's surrounding, appropriate behaviours selection enables owner-managers to be effective. In line with Rosing et al., (2011) argument that EI may be helpful for owner-managers' sensitivity in recognising what kind of behaviors suitable in a given situation and sensibly adjusting the behavior to the requirements of the innovation tasks. So, developing owner-managers SEA, OEA, UOE and ROE would benefit the development of AB in the workplace. Moreover, owner-managers reinforcement of a positive climate and positive emotions among the employees could have the same result.

Regarding the influence of AB on business performance, this research found that AB positively influencing business performance of SMEs in Malaysia. This is consistent with majority of AB literature, suggesting that ambidexterity does not only positively influencing large organisation (e.g. Pertusa-Ortega and Molina-Azorin, 2018; Popadić, Černe and Milohnić, 2015; Junni et al., 2013; O'Reilly and Tushman, 2013) but small organisational as well (e.g. Chang et al., 2011; Chang and Hughes, 2012). The findings enable owner-managers to take a new perspective the roles that AB plays in the organisation. The cultivation of AB would serve as a sustainable competitive advantage improving the chances of long-term survival for these nascent organisation. AB allows organisation to seek both long-term and short-term goals enabling firms to be more efficient in exploiting their existing knowledge while paying more attention to exploration and generating new ideas. The present study extends the finding to SMEs in developing nation, further emphasising the importance of AB among business.

## **VII. FUTURE RESEARCH AND LIMITATION**

Our results come with two limitations. The first is that our data set is based on a survey. This means that respondents self-reported all the data anonymously. Hence, we have no way of objectively checking self-reported survey data and cannot exclude the possibility of some bias: Respondents might over- or underestimate self behaviours, or not remember them correctly. For example, the use of self-reported performance might cause our study to overestimate the occurrence of socially desirable behaviours. A dyadic data collection method would paint a more holistic picture of the individual's AB.

Apart from that, the present study adopted a cross-sectional approach. While a cross-sectional research is useful, a more dynamic perspective in a mixed method study would provide deeper insight. Collecting interviews of respective owner-managers in combination with a longitudinal research would enable researchers to better appreciate the context of these complexity and contradictions. A call for future research to focus on the individual dimension to AB (e.g. explorative and exploitative behaviours) to determine factors influencing exploitative and

explorative behaviours. This perspective should enhance the understanding of antecedent of AB. However, insight on how ambidextrous tension affect individual and ultimately mechanism in resolving such tension should not be neglected. These insights would serve as a useful reference for the owner-managers of SMEs and chart out relevant training to improve individual and employee performance.

## VIII. CONCLUSIONS

Building on and extending previous literature, the result indicates that SEA, OEA, UOE and ROE plays a significant role cultivating AB. Empirically, AB positively impact business performance of SMEs in Malaysia. Therefore, the management of emotion is extremely crucial in sensing, adjusting to bring about AB. Hence, owner-managers' EI acts as a linchpin affecting the individual abilities to act ambidextrously. Understandingly, SMEs are faced with more challenges as compared to larger organisations, consequently, owner-managers are the driving force for firm performance due to the heavy involvement in the daily activities. Such capabilities would set the firm apart from its competition. For this reason, it is imperative for owner-managers to develop high EI and cultivate AB.

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