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## The impact of emotional intelligence on ambidextrous behaviours in small and medium enterprises in Malaysia

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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 into the balancing act of ambidextrous behaviours. Following theory of dynamic capability, the present study sought to identify the role of emotional intelligence (EI) managing ambidextrous, exploitative and explorative behaviours 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 (SmartPLS v3.2.7), result suggests that EI positively influence exploitative and explorative behaviours. Interestingly, though, data indicates EI negatively influences ambidextrous behaviours. Furthermore, ambidextrous behaviours were found to positively influencing business performance. This study adds to the limited theoretical and empirical understanding of the role of EI and ambidextrous behaviours. This present study concludes by highlighting the implications and significance of these findings for theory, managerial practice, and future research.

**Keywords:** emotional intelligence; ambidextrous behaviours; firm performance; small and medium enterprise; SME; Malaysia.

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## 1 Introduction

Ability to create value in the present and future are highly dependent on characteristics and motivation of members in the organisation. The role of management are, therefore, extremely vital in defining the success of any organisation. Successful organisation requires flexible leaders that possess unique capability to juggle internal and external demands (Poon et al., 2018b). Owner-managers that has the ability to search for new opportunity to create innovative product breakthrough while improving upon existing services are key element in determining the success and failure of the business (Kauppila and Tempelaar, 2016). Organisation that can seamlessly integrate conflicting action and respond adequately to these organisational changes are able to navigate the organisation through hostile business environment. Previous studies argued the need for both small and large organisation to be ambidextrous in an effort to maintain short-term returns and long-term gains (O’Reilly and Tushman, 2013). Being ambidextrous, therefore, serves as a potential solution for organisation to integrate conflicting demands while navigating the company through competitive environment. Ambidextrous behaviours (ABs) can be separated to exploitative and explorative behaviours. Explorative behaviours traces back to behaviours such as “searching, variation, risk taking, experimentation, play, flexibility, discovery and innovation” [March, (1991), p.71] while exploitative behaviours were originally referred to behaviours such as “refinement, choice, production, efficiency, selection, implementation, and execution” [March, (1991), p.71]. The inability for

organisation to reconcile these differences risk falling into a downward spiral of mediocrity (March, 1991). A close examination of relevant literature delineates that ABs as a critical component for which allows organisation to integrate such contradicting demands (Junni et al., 2013) to achieve a better performance and innovative capability (Poon et al., 2018a). Balancing between sufficient exploitation and exploration proves to be a huge challenge. Firms would more likely choose to exploit most of the time rather than explore, believing that short-term success is more important to the company (Kaupilla and Tempelaar, 2016).

While larger organisations are usually able to clearly define specific roles for each functional department, owner-managers in small and medium enterprises (SMEs) are often resource challenged which hinders them to devote significant resources to undertake a certain task. O'Reilly and Tushman (2013) acknowledge this difficulty, especially in achieving this balance, where there are biases that exist in favour of exploitation due to the greater certainty of the short-term result as compared to exploration that inherently bears more risk. Ideally, striking an equilibrium by being ambidextrous is ultimately desirable. For such reasons, the importance of research in emotional intelligence (EI), which makes human relationships more flexible and improves job performance, is increasing. Researchers such as Hahn et al. (2013) have argued that complex 'relationships' are very important in achieving social success. Goleman (2006) argued that EI and innovative performance will greatly assist firm in the 21st century. Due to the contradictory nature of ABs, 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 ABs among SMEs in developed and developing countries (Hahn et al., 2013; Koryak et al., 2018).

It is commonly believed that SMEs faces a bigger challenge in coping with contradictory demand as compared to larger firms. This is due to challenges in resource such as managerial expertise, financial flexibility, hostile business environment, technological usage and governmental policies (Mohamad Radzi et al., 2017). This scenario has promoted a new subject among researchers, in which directs researchers to expand the idea by looking from the perspective of ABs among SMEs in developing countries (Koryak et al., 2018) such as Malaysia. Often times, SMEs are heavily dependent on the owner or manager, the generalisability of existing model from the developed countries differed significantly (Ahmad et al., 2011). Drawing from the view of dynamic capabilities, in this paper built on previous literature exploring antecedents of exploitation, exploration and ABs. In doing so, this paper attempt to understand the effect of EI influencing exploration, exploitation and ABs. It looks at whether ABs in turn leads to better performance for the organisation due to the better performance of its owner-managers. The study also contributes to the literature by testing whether the western perspective of ABs are useful to understand similar behaviours in Malaysia. This study is one of the first studies in Malaysia investigating how individuals' EI results in better firm performance through AB. Hence, the outcome of this study may be generalised in developing countries. On top of that, this study serves as an important implication for SMEs companies, especially 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.

## **2 Theoretical background and hypotheses**

### *2.1 ABs – performance*

SMEs are plagued by intensive competitions and rapidly changing business environment which directly affects firm's performance. Firms need to be proactive in anticipating changes in the market and innovatively design new products and services to address these external threats. Firm that can shift and adapt allows them to reposition the business. While the innovation process is possible with large support of financial and human resources (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), hence having an ambidextrous view provides the optimal blend of exploitation and exploration ensuring short and long-term success (March, 1991).

Considering that as both exploitative and explorative behaviours demands for similar resources for SMEs pursuing revolutionary innovation, owner-managers are entrusted to not overly rely on either exploitative or explorative behaviours. Miron-Spektor et al. (2011) argued that focusing only on either explorative or exploitative goal is maladaptive and would not allow individuals to identify complementarities between opposing behaviours. Recognising the limitation of each distinct behaviours, researcher has thus suggested that ABs will build existing firm's capability while not neglecting sufficient exploration of new innovative products and services (Lubatkin et al., 2006). Accordingly, dynamic capabilities support the development of ABs among owner-managers of SMEs (Teece et al., 1997). While the link between ABs and firm performance among SMEs is not uncommon (Cao et al., 2009; Patel et al., 2013), Malaysian perspective of this link remains vague. SMEs that deftly pursue both exploitative and explorative behaviours would drive the firm to better performance. Thus, drawing from the evidence, this paper hypothesised that AB will positively affect firm's performance.

H1 AB has a positive impact on firm performance.

### *2.2 EI – AB relationship*

The concept of EI was first mention by Leuner (1966) that describe EI as the ability to control emotion. The term 'EI', as introduced by Salovey and Mayer in 1990, revolves around the capacity to reason about emotions and that emotions enhance thinking. Goleman (1995) attempts define EI as a form of intelligence relating to the emotional side of life, such as the ability to recognise and manage one's own and others' emotions, to motivate oneself and restrain impulses, and to handle interpersonal relationships effectively. EI is a cognitive ability which is the ability to understand, recognise and evaluate the meaning of emotions in order to reason and solve problems (Mayer et al., 1999). The concept of EI postulates that the two different mental processes, which are thinking and feeling, actually work together (Kerr et al., 2006). Salovey and Mayer's (1990) model is considered as the ability model. It is well-accepted by the academic community. It includes four different abilities, namely, the ability to perceive emotions, use emotions to facilitate thoughts, understand emotions and manage emotions. In an

organisational setting, owner-managers must regulate their emotion by being selective about the people they interact with, modifying the work environment, focusing on specific aspects of their work environment, or changing their evaluation of the work environment.

Individual that can regulate their emotion through response-focused emotion regulation by intensifying, diminishing, prolonging, or curtailing certain emotions. It was found that, individuals with a high EI score perform better in life comparing with those who has lower EI (Bar-On, 1997). Such individuals are able to better understand themselves and other people, socialise and communicate more as well as able to cope with any fluid situation (Bar-On and Parker, 2000). On top of that, when EI is high, it improves the physical and psychological health of people, resulting in an improvement of academic and work performance (Bar-On and Parker, 2000) shares values, culture and norms throughout the organisation (Khan et al., 2014). Observing the significance of EI, it has emerged as a significant predictor to work performance outcomes (e.g., creative performance and voluntary tasks) (Wong and Law, 2002), organisational citizenship behaviour (OCB), job satisfaction, safety behaviour, profitability, innovation, creativity and deviant workplace behaviour (Darvishmotevali et al., 2018). Therefore, Rosing et al. (2011) postulate that EI could be an antecedent of AB. EI may be helpful for owner-managers to recognise and engage in suitable behaviours for a particular situation. Therefore this paper hypothesised the relationship between EI and AB.

H2 EI has a positive impact on AB.

H3 EI has a positive impact on exploitative behaviours.

H4 EI has a positive impact on explorative behaviours.

### **3 Methodology**

#### *3.1 Participants and procedure*

A pretest of the instrument was conducted with two academicians and two owners of SMEs, in which the participants were requested to complete the instrument and offer their comments on the appropriateness of the words used, the clarity of the questions, and the arrangement of the questionnaire. Minor formatting and expert review were conducted before the instruments were deemed ready for distribution.

In this research, the selection of the population was primarily done through simple random sampling. Specifically, the target respondents were owner-managers from SMEs in Selangor and Kuala Lumpur. A list of SMEs was obtained from SME Corporation Malaysia. Selected SMEs were approached from a list of 1000 randomised SPSS cases. 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 questionnaires were collected with 183 useable responses. Table 1, summarises the demographic profiles of the respondents and SMEs.

In respect to non-response bias, the early and late participants were verified to ensure that they were not significantly different (Armstrong and Overton, 1977). Since the survey was self-administered and some respondent delay in completing the survey, a

statistical remedial method was needed to test if no significant difference exists between early and late respondents, non-response bias is not expected to affect the result of the study (Knight and Cavusgil, 2004). Hence, the responses were divided into two different groups (i.e., early respondent and late respondent) to examine if any significant differences that exist between them. The results reveal that there was no significant difference base on the comparison t-test (t-value is 0.626). Thus, the non-response bias is not an issue in this research.

**Table 1** Demographic profile of respondent and SMEs

|                        |  | <i>Profile</i> |
|------------------------|--|----------------|
| Gender                 | Male   | 118 (64.50%)   |
|                        | Female   | 65 (35.50%)    |
| Ethnicity              | Malay  | 20 (10.90%)    |
|                        | Chinese  | 144 (78.70%)   |
|                        | Indian   | 12 (6.60%)     |
|                        | Indigenous   | 7 (3.80%)      |
| Types of industry      | Service  | 148 (80.90%)   |
|                        | Manufacturing  | 13 (7.10%)     |
|                        | Others (agriculture, construction, mining and quarrying) | 22 (12.00%)    |
| Position               | Owner  | 73 (39.90%)    |
|                        | Manager  | 110 (60.10%)   |
| Years of establishment | Less than 5 years  | 103 (56.30%)   |
|                        | 5–10 years   | 29 (15.80%)    |
|                        | 11–15 years  | 19 (10.40%)    |
|                        | More than 15 years                                       | 32 (17.50%)    |

### 3.2 Measures

The present study adopts the self-reported WLEIS scale to measure EI (Wong and Law, 2002). This scale is consistent with Mayer and Salovey's (1997) definition of EI. In line with its original conceptualisation, the WLEIS scale in this study was operationalised as a higher order construct that consisted of four second order factors, namely self-emotional appraisal, others' emotional appraisal, regulation of emotions, and utilisation of emotions. Internal consistency reliability for the four factors (each with four items) ranged from 0.83 to 0.90 (Wong and Law, 2002). On the other hand, to capture the essence of ABs, this study employs method and scale developed by Lubatkin et al. (2006) which consists of twelve items. Lubatkin et al. (2006) reported that exploitation achieved a Cronbach's alpha is 0.83 while exploration achieved a Cronbach alpha is 0.84. A second-order formative construct with repeated indicator is developed to estimate ABs. The dependent variables were measured using four items adapted 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. Firms performance has an internal reliability of 0.80. As many as 32 items measuring EI, ABs and firm performance were used in the survey, anchoring on a 7-point Likert scale of 1 = strongly disagree to 7 = strongly agree.

## 4 Results and findings

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 assessing common method bias, Harmon single factor test was done as suggested by Podsakoff et al. (2003). The unrotated factor analysis using the eigenvalue greater than one criterion revealed that 10 distinct factors accounted for 75.56 percent of the variance. No single factor was dominant, nor one general factor account for most of the variance, demonstrating that common method bias is not a great concern. Subsequently, structural equation modelling (SEM) technique was used for the analysis of the proposed framework. The data were tested using partial least squares (PLS) approach with Smart PLS 3.2.7.

### 4.1 *Assessment of measurement (outer) model*

Anderson and Gerbing (1991) suggested two-stage analytical procedures. The evaluation of validity and goodness of the measurement model were first examined. The evaluation of convergent validity was determined based on the item loadings, composite reliability (CR) and average variance extracted (AVE). All items outer loading are above 0.5 excepts for items EX10 and EX12 were removed due to loading values lower than 0.5 (Hair et al., 2017). As for CR, the present study adopted a minimum cut-off value of 0.7. As for AVE, if the value is 0.5 and higher, this represents a sufficient degree of convergent validity, while if the value is below 0.5, it represents otherwise Hair et al. (2017). Table 2 depicts the summary of items, loadings, AVE, CR for the first-order construct. In short, convergent validity was established.

While indicator loadings, CR and AVE are used to assess convergent validity for reflective constructs, they are not meaningful for higher-order formative constructs (Diamantopoulos et al., 2008). In an effort for assessing higher-order with formative constructs, the present study adopts the guideline establish by Hair et al. (2017) for the assessment of multicollinearity, weights and significance. A repeated indicator approach was adopted to model the second-order construct. Variance inflation factor (VIF) of 0.2 and lower or 5 and higher indicates the presence of multicollinearity (Hair et al., 2017). Since SmartPLS does not assume normal distribution of data, bootstrapping procedure conducted to ascertain the significance of each indicator. To assess the indicator validity of this construct, a bootstrapping procedure (5000 samples) was performed to calculate the t-values that determine the significance of the construct weights. T-value is clearly above 1.96 ( $p < 0.05$ ). Table 3 shows the VIF, construct weights and t-values of the higher-order formative constructs.

Subsequently, the discriminant validity was assessed. It was observed that all constructs fulfil Fornell-Larcker criterion, where discriminant validity is established if a latent variable account for more variance in its associated indicator variables than it shares with other constructs in the same model (Fornell and Larcker, 1981) (see Table 5). Henseler and Fassott (2010) suggested assessing discriminant validity through heterotrait-monotrait (HTMT) ratio, which is the average of the heterotrait-heteromethod correlations (i.e., the correlations of indicators across constructs measuring different phenomena), relative to the average of the monotrait-heteromethod correlations (i.e., the correlations of indicators within the same construct). HTMT could be 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 and Fassott, 2010; Voorhees et al., 2016), if the value is greater, then it signifies a problem with discriminant validity. Table 6 depicts the summary of HTMT ratio analysis.

**Table 2** Items, loadings, AVE and CR for first-order construct

| <i>First-order construct</i> | <i>Items</i> | <i>Loadings</i> | <i>AVE</i> | <i>CR</i> |
|------------------------------|--------------|-----------------|------------|-----------|
| Self-emotional appraisal     | EI1          | 0.726           | 0.655      | 0.883     |
|                              | EI2          | 0.887           |            |           |
|                              | EI3          | 0.856           |            |           |
|                              | EI4          | 0.756           |            |           |
| Others' emotional appraisal  | EI5          | 0.842           | 0.796      | 0.940     |
|                              | EI6          | 0.915           |            |           |
|                              | EI7          | 0.877           |            |           |
|                              | EI8          | 0.932           |            |           |
| Utilisation of emotions      | EI9          | 0.861           | 0.746      | 0.921     |
|                              | EI10         | 0.825           |            |           |
|                              | EI11         | 0.893           |            |           |
|                              | EI12         | 0.872           |            |           |
| Regulation of emotion        | EI13         | 0.907           | 0.805      | 0.943     |
|                              | EI14         | 0.924           |            |           |
|                              | EI15         | 0.807           |            |           |
|                              | EI16         | 0.945           |            |           |
| Explorative behaviours       | EX1          | 0.837           | 0.600      | 0.899     |
|                              | EX2          | 0.806           |            |           |
|                              | EX3          | 0.731           |            |           |
|                              | EX4          | 0.839           |            |           |
|                              | EX5          | 0.807           |            |           |
|                              | EX6          | 0.600           |            |           |
| Exploitative behaviours      | EX7          | 0.772           | 0.516      | 0.807     |
|                              | EX8          | 0.582           |            |           |
|                              | EX9          | 0.819           |            |           |
|                              | EX11         | 0.675           |            |           |
| Business performance         | PERFO1       | 0.567           | 0.559      | 0.832     |
|                              | PERFO2       | 0.776           |            |           |
|                              | PERFO3       | 0.723           |            |           |
|                              | PERFO3       | 0.890           |            |           |

Notes: Variance inflation factor (VIF), average variance extracted (AVE) and composite reliability (CR).

**Table 3** VIF and outer weights for second-order constructs

| <i>Second-order constructs</i> | <i>First-order constructs</i> | <i>Weights</i> | <i>t-value</i> | <i>VIF</i> |
|--------------------------------|-------------------------------|----------------|----------------|------------|
| Ambidextrous behaviour         | Explorative behaviours        | 0.581          | 20.939         | 1.835      |
|                                | Exploitative behaviour        | 0.566          | 10.103         | 1.788      |
| Emotional intelligence         | Self-emotional appraisal      | 0.308          | 15.869         | 1.943      |
|                                | Others' emotional appraisal   | 0.312          | 11.927         | 1.579      |
|                                | Utilisation of emotions       | 0.327          | 18.076         | 1.799      |
|                                | Regulation of emotions        | 0.322          | 12.432         | 1.567      |

Note: Variance inflation factor (VIF).

**Table 4** Fornell-Larkcer criterion

|                               | <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
|-------------------------------|----------|----------|----------|----------|----------|----------|----------|
| 1 Business performance        | 0.748    |          |          |          |          |          |          |
| 2 Exploitative behaviours     | 0.233    | 0.718    |          |          |          |          |          |
| 3 Explorative behaviours      | 0.346    | 0.612    | 0.774    |          |          |          |          |
| 4 Others' emotional appraisal | 0.180    | 0.441    | 0.389    | 0.892    |          |          |          |
| 5 Regulation of emotions      | 0.325    | 0.408    | 0.436    | 0.294    | 0.897    |          |          |
| 6 Self-emotional appraisal    | 0.363    | 0.518    | 0.508    | 0.558    | 0.525    | 0.809    |          |
| 7 Utilisation of emotions     | 0.303    | 0.418    | 0.493    | 0.499    | 0.531    | 0.566    | 0.863    |

**Table 5** HTMT ratio analysis

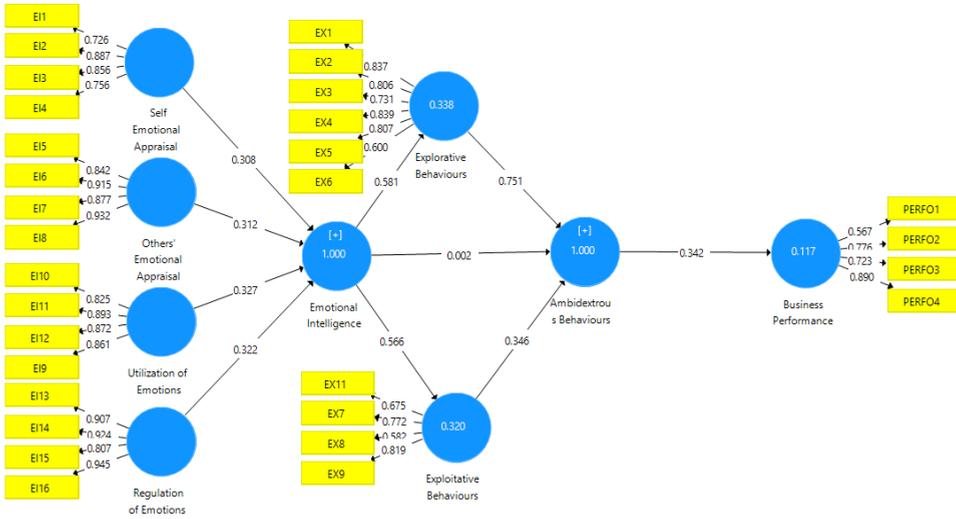
|                               | <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
|-------------------------------|----------|----------|----------|----------|----------|----------|----------|
| 1 Business performance        |          |          |          |          |          |          |          |
| 2 Exploitative behaviours     | 0.276    |          |          |          |          |          |          |
| 3 Explorative behaviours      | 0.360    | 0.753    |          |          |          |          |          |
| 4 Others' emotional appraisal | 0.224    | 0.548    | 0.436    |          |          |          |          |
| 5 Regulation of emotions      | 0.375    | 0.491    | 0.495    | 0.319    |          |          |          |
| 6 Self-emotional appraisal    | 0.439    | 0.663    | 0.597    | 0.646    | 0.599    |          |          |
| 7 Utilisation of emotions     | 0.337    | 0.510    | 0.559    | 0.556    | 0.588    | 0.658    |          |

#### 4.2 Assessment of structural (inner) model

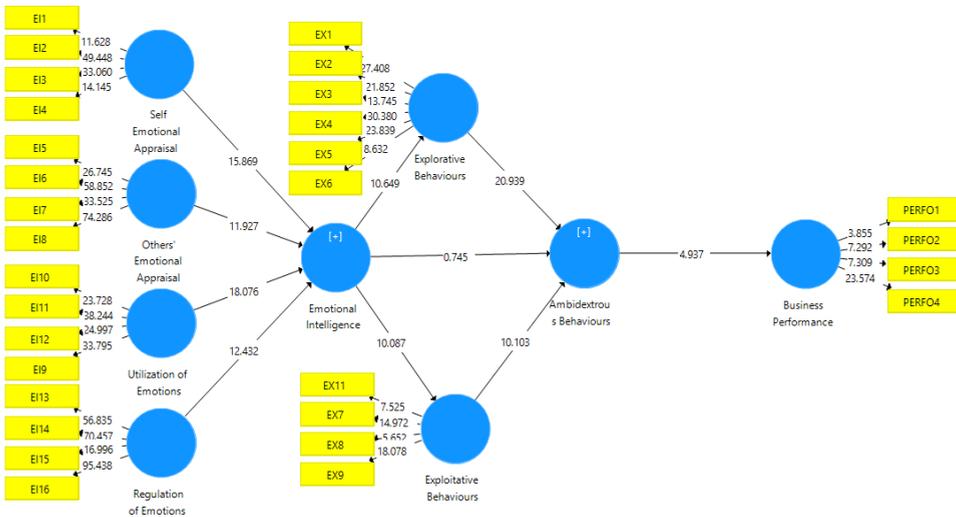
As for the assessment of structural model, bootstrapping method of 5,000 resampling procedure is used to estimate for standard errors, path coefficient and t-statistics (Hair et al., 2017) was adopted. The results depict that EI has a positive relationship with both exploitative behaviours ( $\beta = 0.566$ ,  $t = 10.087$ ,  $p < 0.01$ ) and explorative behaviours ( $\beta = 0.581$ ,  $t = 10.649$ ,  $p < 0.01$ ), on the other hand EI was found to be not significantly

influencing ABs ( $\beta = 0.002$ ,  $t = 0.745$ ,  $p > 0.05$ ). ABs has a positive relationship with business performance ( $\beta = 0.342$ ,  $t = 4.937$ ,  $p < 0.01$ ). 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 (Q2) for business performance value of 0.050, exploitative behaviours Q2 value of 0.148 and explorative behaviours Q2 value of 0.188. Thus, the model has predictive relevance, since Q2 is greater than 0.

**Figure 1** Results of measurement model (see online version for colours)



**Figure 2** Results of structural model (see online version for colours)



**Table 6** Standard beta, standard error, T-value, variance explained and predictive relevance

|                              | $\beta$ | <i>Std. error</i> | <i>T-value</i> | <i>Decisions</i>    | $R^2$ | $Q^2$ |
|------------------------------|---------|-------------------|----------------|---------------------|-------|-------|
| AB → business performance    | 0.342   | 0.069             | 4.937*         | <i>H1 supported</i> | 0.117 | 0.050 |
| EI → AB                      | 0.002   | 0.003             | 0.745          | <i>H2 rejected</i>  |       |       |
| EI → exploitative behaviours | 0.566   | 0.056             | 10.087*        | <i>H3 supported</i> | 0.320 | 0.148 |
| EI → explorative behaviours  | 0.581   | 0.055             | 10.649*        | <i>H4 supported</i> | 0.338 | 0.188 |

Notes: \* $p < 0.01$ ,  $R^2$  = variance explained,  $Q^2$  = Stone-Geisser predictive relevance (bootstrapping = 5,000, omission distance,  $D = 7$ ).

## 5 Discussion

The study considers whether the effects of EI on explorative behaviours, exploitative behaviours and AB focusing on the consequences of business performance among SMEs in Malaysia. The finding revealed that EI plays important role in the development of both exploitative and explorative behaviours. AB play a significant impact on the business performance of SMEs. Interestingly, EI were found to be not significantly influencing AB. Three hypotheses that were confirm can serve as a useful reference for the human resource managers in recruitment and training to improve employee performance.

The findings show that EI is an important predictor for exploitative and explorative behaviours, which in turn forms ABs among owner-managers. The findings imply that owner-managers EI are more likely to develop exploitative and explorative behaviours. 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). The ability to associate emotional ques with cognitive task is essential for an effective positive outcome (Brackett et al., 2011). This line of thought is similar with the argument by Keltner and Haidt (2001) that emotions play a significant role transforming information regarding other individuals' thoughts, intents, manners and behaviours. EI allows owner-managers to be better able to manage and understand own and others' emotion, which enable them to potentially contribute to the facilitation of exploitation and exploration behaviours through cognitive activities such as reasoning, decision-making and problem-solving (Jafri et al., 2016). In line with Rosing et al. (2011) argument that EI may be helpful for owner-managers' sensitivity in recognising what kind of behaviours suitable in a given situation and sensibly adjusting the behaviour to the requirements of the innovation tasks. The result suggest that Malaysian SMEs owner-managers with high EI are likely to be able to switch between explorative and exploitative behaviours. With a high management of EI, they can utilise these skill and competencies sufficiently.

Interestingly, the result indicates that EI is not a predictor for ABs. Ambidextrous individual can execute both explore and exploit adequately enabling the individual to critically balance between opposing behaviours. Once finding the balance between opposing behaviours, individual no longer fine-tune its emotion for explorative or exploitative behaviours. The empirical result suggests that EI ambivalence enable owner-managers to seamlessly alternate between explorative and exploitive behaviours. The results suggest that owner-managers in Malaysian SMEs against the backdrop of costly business venture and dynamic business environment contribute to such alternating behaviours. A high EI individual are more sensitive to it's surrounding, supporting

owner-managers decision to employ either explorative or exploitative behaviours depending on external situations. A cognitive effort is required to grant for ABs. This lead to deduce that being ambidextrous has cognitive underpinning. Owner-managers with high EI, enable firms 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 resulting in improved business performance. The present study extends the finding to SMEs in developing nation, further emphasising the importance of ABs among business. There may be some cognitive factors contributing to the development of ABs among owner-managers in Malaysian SMEs.

## **6 Future research and limitation**

This study has several limitations which provide direction for future research. The present study adopts a self-reported measure for EI and ABs, one should be aware of the potential bias. 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 ABs. The findings of this work show that individual AB can lead to more positive performance outcomes (Kao and Chen, 2016). However, an important extension to the literature of ABs would be to examine the mechanism and approach owner-managers could adopt in maximising ABs among front-line employees. Due to the relatively flat organisational structure in SMEs, maximising the contribution of each member in the organisation is extremely important towards its survival. A potential limitation of this research is the claim to causality. 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 ABs (e.g., explorative and exploitative behaviours) to determine factors influencing exploitative and explorative behaviours. This perspective should enhance the understanding of antecedent of ABs. However, insight on how ambidextrous tension affect individual and ultimately mechanism in resolving such tension should not be neglected.

## **7 Implication and conclusions**

Our study has several academic implications and contributions to current research. First, the present study illustrate that Malaysian SMEs should drive to develop AB as a unique capability. This will positively impact the organisation's performance across the entire organisation focussing on both short- and long-term demands. Owner-managers' emotional sensitivity to its surrounding allows for the careful selection of explorative and exploitative behaviour enabling AB. In short, the present study indicates new ideas with regard to the linkage between EI, AB and firm performance. Moreover, AB was conceptualised in a different way, that is, as a multidimensional second-order construct consisting of two formative dimensions. The present study considers this measure more

appropriate to capture the total variance in its dimensions (explorative and exploitative behaviours). Regarding managerial implications, this study highlights the importance of AB as a low-cost competitive advantage for SMEs. Many owner-managers recognise and complain about the numerous factors limiting organisational growth and highly competitive business environment. This research finding suggest owner-managers' AB leads to a positive improvement in the business performance. While the concept of AB is relatively new, relevant trainings by governmental agency and academic institutions will provide owner-managers with sufficient knowledge to get them started with exploitation and exploration related activities. Owner-managers must be aware and use that EI as a facilitator of AB. In this regards, owner-managers high EI reinforces communication skills, motivating employees to think more creatively about how best to leverage their cognitive abilities. As environmental uncertainty persists, EI support owner-managers irrespective of their skills, to adjust, react and design appropriate short- or long-term strategies increasing firm's overall survivability.

Building on and extending previous research, the result indicates that EI play a significant role generating explorative and exploitative behaviours. Empirically, AB positively impact firm performance of SMEs in Malaysia. Therefore, the management of emotion is extremely crucial in sensing, adjusting to bring about explorative and exploitative behaviours. 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 ABs.

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