Performance Implications of The Absorptive Capacity of Small Businesses in A Developing Economy

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Abstract
The role of small businesses in the socioeconomic development of nations has been well established. Despite this, the failure rate of small businesses in developing economies remains high. Much of this stems from poor performance levels on the part of small businesses which is often exacerbated by the continued flux and disruptions in the business environment. Recognising the importance of astute responsiveness to the dynamic business environment, this study investigates whether absorptive capacity can energise small business performance. The study employed the partial least squares structural equation modelling technique and multiple regression analysis to analyse data collected from an effective pool of 685 small business owners/managers. The results affirm that absorptive capacity has a positive though a weak relationship with small business performance. Interestingly, when the absorptive capacity construct was disaggregated, it was insightful to note that not all its components bear statistically significant relationships with small business performance. Specifically, the relationships between small business performance and the component factors of assimilation and exploitation were statistically supported. In contrast, the factors of acquisition and transformation have no statistically significant relationship with small business performance. The finding has important implications for practitioners and researchers as it illuminates specific components of absorptive capacity that deserve higher investments in the quest for improved small business performance.

Keywords: Absorptive capacity; Entrepreneurship; Small business; Performance

INTRODUCTION
Policymakers and researchers agree that increased small business performance (SBP) impacts the development and well-being of societies (Ayandibu & Houghton, 2017; Mthimkhulu & Aziakpomo, 2015). As such, while acknowledging their contributory role in economic development, Wang (2016), also contends that small businesses serve to ameliorate distasteful conditions in developed and developing economies. In the context of a developing economy like South Africa, Smit and Watkins (2012) acknowledge that small businesses lend themselves to poverty reduction, economic growth and reduced unemployment. Unfortunately, despite the affirmed significance of small businesses, they continue to be plagued by multiple challenges in the resource-scarce business environments in which they operate (Bah & Fang, 2015).

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Absorptive capacity (AC) is recognised as a dynamic capability that enables businesses to recognise and exploit emergent information for commercial use as well as to coordinate resources for the navigation of uncertain contexts (Apriliyanti & Alon, 2017; Duchek, 2013; Engelen, Kube, Schmidt & Flatten, 2014). Some scholars argue that the AC capabilities of organisations have an impact on the ability of organisations to learn, on the innovation performance of businesses as well as the transfer and sharing of knowledge (Mamun, Muhammad & Ismail, 2017; Wales, Parida & Patel, 2013; Xie, Zou & Qi, 2018). As a higher-order dynamic capability, AC typically encompasses firms’ organisational processes to acquire, assimilate, transform, and exploit knowledge (Zahra & George, 2002). These components of AC are presented in the extant literature as the inward-looking and outward-looking components (Escribano, Fosfuri & Tribó, 2009; Roberts, 2015). The components of acquisition and assimilation are considered outward-looking, given that they are used to process information from various sources quickly. The inward-looking components consist of transformation and exploitation, which facilitate the interpretation and analysis of information for quicker response to changes in the environment (Lewin, Massini & Peeters, 2011).

Khan, Lew and Marinovac (2019) maintain that AC is crucial in enhancing exploitative and exploratory innovation in the context of developing economies. Aboelmageda and Hashemb (2019) argue that AC influences sustainable capabilities and green innovation adoption for small businesses in developing economies. Similarly, Kale, Aknar and Başar, (2019) reveal that in the developing economic context of Turkey, AC directly impacts small business performance. This is exceptionally instructive because partly, what encumbers small business performance is their inability to cope with the peculiar characteristics in developing economies that create harsh operational circumstances. The lack of capacity to navigate the uncertainties bodes dire consequences for the small business sector in developing economies, which is a problem with profound socioeconomic ramifications. Impelled by the conviction that AC prowess might be critical for small businesses operating in uncertain environments, the current study seeks to deepen the understanding of AC at an organisational level by interrogating the performance effects of small business AC in developing economies.

Blackburn, Hart, and Wainwright (2013) and Hansen and Hamilton (2011) tried to frame the performance of businesses as a consequence of aspects of human capital. On a different trajectory, Corner and Wu (2012) canvass the idea that it is more appealing to explain businesses’ performance under uncertain conditions by recognising businesses as artefacts of alternative, complex, nonlinear, seemingly disordered and iterative processes. Duly cognizant of these positions that are not mutually exclusive, the current study investigates the possible relationship between a business’ absorptive capacity (AC) and its performance, given that the environment is rife with adversities, constraints, uncertainties and ambiguities. The construct of AC, despite the lack of a definitive understanding by scholars, is conceptualised in some studies (see Mamun et al., 2017; Sjödin, Frishammar & Thorgren, 2019) as the ability to recognise new information, integrate it into the business and utilise it to create value. On this score, it would seem that the import of AC for small business performance may be profound in a country like South Africa, with its unique social architecture shaped by the turbulence experienced before the dawn of its democratic dispensation. Broadly, the current study investigates the relationship between AC and performance in small businesses. Additionally, the study also aims to examine the individual relationships between the component factors of AC and the performance of small businesses.
LITERATURE REVIEW

Scholars (see Conboy, Mikalef, Dennehy & Krogstie, 2020; Schilke, Hu & Helfat, 2018; Wohlgemuth & Wenzel, 2016) concur that, dynamic capabilities differentiated from ordinary capabilities, enable a business to reconfigure its existing resources and capability base. This argument draws from research in the resource-based view (RBV) domain, that is fundamental to the understanding of the significance of internal capabilities and resources (Zahra, 2021), which are crucial in AC and small business performance relationship. However, research has acknowledged that there are shortcomings in the use of the RBV for explaining certain behaviours of organisations operating in uncertain environments (Shan, Cai, Hatfield & Tang, 2014), which is the context of small businesses in South Africa. According to Dopfer, von Humboldt, Chalmers and Gassmann (2017), the RBV lens does not allow for a complete explanation of the processes that small businesses go through as they respond to uncertainties in their contexts. Limitations like this, give impetus to the dynamic capabilities perspective, introduced by Teece, Pisano and Shuen (1997), as an extension of the RBV which allows it then, to address the challenges of uncertain and dynamic environments relating to how resource bases are recombined in such situations (Chen, Michel & Lin, 2021). This understanding of dynamic capabilities highlights why small businesses have to continuously adapt to changes and establishes its relevance to the present study.

More so, in uncertain environments, characterised by constant changes and resource scarcity, the capability to quickly sense and respond to contingencies can determine the survival or demise of small businesses (Weaven, Quach, Thaichon, Frazer, Billot & Grace, 2021). Dynamic capabilities, according to Fainshmidt, Pezeshkan, Lance Frazier, Nair and Markowski (2016), are differentiated in terms of higher-order capabilities consisting of routines, and lower-order capabilities comprising ordinary activities and administration. The concept of dynamic capabilities is understood as the ability of an organisation to rapidly respond to an environment characterised by flux through a decisive creation, extension and modification of the firm’s capability (Dyduch, Chudziński, Cyfert & Zastempowski, 2021). Dynamic capabilities involve sensing, learning and reconfiguring (Wilhelm et al., 2015) of information relevant for decision-making. The current study subscribes to the idea that the ability to sense and assimilate insights will enhance continued access to nuanced ideas (Engelen et al., 2014), which increase the propensity of small businesses to exploit emergent opportunities. This perhaps emphasises the potential value of absorptive capacity, which is a dynamic capability, in small businesses.

Xie et al. (2018) assert that AC helps businesses to become innovative and responsive to environmental nuances by leveraging new knowledge. AC was initially conceptualised by Cohen and Levinthal (1990) as the capability to recognise new information, assimilate it and apply it for business benefits. Building on the initial conceptualisation of AC, Zahra and George (2002) proposed that AC comprises the components of acquisition, assimilation, transformation and exploitation.

Cohen and Levinthal (1990) describe the acquisition component of AC as the ability to recognise the value of new and external information. In the opinion of Zahra and George (2002)
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this engenders the accumulation of knowledge that is relevant to the operations of the business. For Müller, Buliga and Voigt (2021), acquisition is concerned with how the firm identifies and obtains knowledge from external sources. Chauvet, Cohendet and Mazouz (2014), from a knowledge-sharing perspective, describe acquisition as consisting of both external and internal dimensions of prior knowledge, prior investments or commitment to acquiring and sharing of knowledge. The AC component of assimilation refers to the internal routines and processes of a business that enable the analysis, processing, interpretation and understanding of the new information acquired from external sources. In essence, the assimilation of knowledge entails the ability of the business to develop relevant processes to learn and make sense of the knowledge that has been acquired (Chauvet et al., 2014; Engelen et al., 2014).

Xie et al. (2018) contend that the component of transformation involves knowledge renovation that engenders ease of absorption and integration for organisational use. This component therefore relates to the ability of the business to modify the processes for the integration of newly acquired and assimilated knowledge so that it is compatible with the business’ existing knowledge. Transformation as a component of AC is likened to the process of bisociation that feeds an entrepreneurial mindset which in turn, drives entrepreneurial action. This process entails the capability to recognise two sets of information that are seemingly incompatible but are nonetheless integrated to form a new set of information which invariably amounts to the generation of new insights (Ahmed, Guozhu, Mubarik, Khan & Khan, 2020), among others. Miroshnychenko, Strobl, Matzler, and De Massis (2021). describe the AC component of exploitation as the ability to apply the new external knowledge for commercial benefits. In harmony with this view, Engelen et al. (2014) assert that exploitation refers to how the combined knowledge is used for commercial benefits, which inevitably translates to business performance. According to Khan et al. (2019), this is feasible when the act of exploitation enables the business to consolidate the acquired and integrated new knowledge within its operations in a way that is expected to improve business performance. The concept of business performance is sometimes used interchangeably with the multi-dimensional concept of growth that is framed in terms of financial, structural, strategic, and organisational growth (Chimucheka, 2013). Though the significance of measuring the performance of businesses has been noted in literature (Selvam, Gayathri, Vasanth, Lingaraja & Marxiaoli, 2016), Vij and Bedi (2016) highlight the absence of a consensus among scholars as to what constitutes business performance. Zulkifli (2014) notes that the challenge of defining SBP has resulted in a dearth of literature pivoting around the measurement of SBP. Indeed, extant literature on business performance is predominated by indicators for measuring the performance of large businesses to the detriment of small businesses (Anggadwita & Mustafid, 2014). In a bid to provide an explanation for the situation, Blackburn et al. (2013) contend that the difficulties in measuring SBP stem from the diverse contexts that small businesses operate in as well as the contrasting capabilities and aspirations of their owners. To accommodate this, Exposito and Sanchis-Llopis (2018) assert that some studies on SBP employ subjective measures to gauge performance as they are known to have strong inter-rater reliability. Furthermore, the fact that subjective performance measures and objective performance measures are usually correlated, lends support to the validity of subjective performance measures (Ling & Kellermanns, 2010) for the measurement of SBP.
Instructively, studies (see Jiménez-Barrionuevo, 2019; Wales et al., 2013; Xie et al., 2018) have reported varying outcomes regarding the relationship between AC and various indicators of business performance. With respect to this, Limaj and Bernroider (2019), in a study appraising the effects of AC and cultural balance on innovation performance in small businesses, reveal that AC has no effect on exploitative innovation. Conversely, the studies by Rodríguez-Serrano and Martín-Armario (2019) as well as Mamun et al. (2017) reveal that AC has a positive impact on the performance of small businesses in uncertain environments. Similarly, in a study probing the underlying relationship between AC and the innovation performance of high-tech companies, Xie et al. (2018) revealed that AC is positively related to innovation performance.

Mennens, Van Gils, Odekerken-Schröder and Letterie (2018), in an empirical study exploring the precursor of service innovation performance in small businesses, report that small businesses that display higher levels of realised AC are more likely to innovate. While examining the role of absorptive capacity in managing external knowledge, Escribano et al. (2009) provide evidence that AC equips businesses with the ability to sense and exploit external knowledge for innovative outcomes. On their part, Wales et al. (2013), found that AC has a significant inverted-U relationship with increases in sales, operating profit and return-on-assets. The findings of the study by Flatten, Greve and Brettel (2011) revealed that AC has a positive significant relationship with growth in sales, return on investment, operating profit margin, return on equity, and customer retention. These findings are associated with performance measurements different from those that the current study intends to utilise. Additionally, findings in prior studies highlight a lack of congruence in results which may be consequent upon the role of peculiar contextual nuances in the association between AC and business performance, however it may be denominated. The implication therefore is that results from prior studies cannot be relied upon to accurately project what the nature and extent of the relationship between AC and SBP in South Africa could be. However, duly cognisant of some of the positions in extant literature, this study elects to hypothesise that:

\[ H_1: \text{Absorptive capacity has a positive relationship with small business performance.} \]
\[ H_{1.1}: \text{The acquisition component of absorptive capacity has a positive relationship with small business performance.} \]
\[ H_{1.2}: \text{The assimilation component of absorptive capacity has a positive relationship with small business performance.} \]
\[ H_{1.3}: \text{The transformation component of absorptive capacity has a positive relationship with small business performance.} \]
\[ H_{1.4}: \text{The exploitation component of absorptive capacity has a positive relationship with small business performance.} \]

These hypothesised relationships form the basis for the conceptual framework of the study as depicted in Figure 1.
RESEARCH METHOD

Philosophical underpinnings and assumptions are important in research studies as they provide direction in the research, ensure a better comprehension of research processes and create an alignment of the various elements of the study (Sefotho, 2015). Philosophically, this study adopted an objectivist ontological and a positivist epistemological disposition. Aliyu, Bello, Kasim and Martin (2014) contend that the epistemological positivism is founded on the ontological principle that reality is independent of the observer.

Data were collected from the small businesses through a survey instrument that was distributed online. The instrument primarily contained two major scales for measuring AC and SBP. Scales for the AC construct have been operationalised and validated by scholars such as Camisón and Forés (2010) as well as Flatten, Engelen, Zahra and Brettel (2011), among others. In the present study, AC is measured using a scale by Fernhaber and Patel (2012), which is adapted from Jansen et al. (2005) and made relevant for small businesses. This scale measures the AC components of acquisition (6 items), assimilation (3 items), transformation (6 items) and exploitation (6 items). The scale’s 21 items consisted of statements that were accompanied by 5-point Likert-type answer options anchored by 1 (strongly disagree) to 5 (strongly agree). For SBP, several studies (see Awotoye & Singh, 2017; Bouguerra, 2017; Gong, Zhou & Chang, 2013; Jin, Madison, Kraiczy, Kellermanns, Crook & Xi, 2017) have employed multi-dimensional scales to measure the construct.
The present study subscribes to this approach and measures small business performance with a multi-dimensional subjective scale developed by Zahra and George (2002). The scale consists of six items that broadly measured the satisfaction of respondents with the different aspects of business performance related to profitability and growth. All the items were accompanied by a 5-point Likert-type answer options anchored on 1 (not satisfied) to 5 (very satisfied).

The target population for the study consisted of owners and managers of small businesses drawn from different economic sectors in South Africa. To access members of the target population, a database compiled from various small business hubs was used for the study. In total, 2180 questionnaires were despatched and 1027 small business owners and managers in South Africa responded to the survey, which represented a 47% response rate. Following a check of the returned questionnaires, only 685 of the returned questionnaires were completed fully by respondents and so were retained for data analysis purposes. The data was analysed with descriptive and inferential statistical tools, and this is in tandem with the view of Sreejesh, Mohapatra and Anusree (2014) that data analysis refers to the interpretation of collated data using a variety of statistical tools. The position is echoed by Sekaran and Bougie (2016) that among other things, data analysis is utilised to determine if the hypotheses of a study are statistically supported or not.

**FINDINGS AND DISCUSSION**

The research instrument of the present study contained profile questions that sought information related to the demographics of the respondents. Statistics South Africa (2020) groups individuals in South Africa within the ages of 15 to 34 years as youths while age groups from 35 years and above are considered adults. The age distribution of respondents in the study shows that only 2.2% fall in the bracket of youths. This might be reflective of Herrington et al.'s (2017) observation of low levels of entrepreneurial activity among the youth in South Africa. The groups comprising respondents aged between 35-44, 45-54, 55-64 and over 64 were represented by 16.2%, 31.4%, 31.5% and 18.7% of the respondent population, respectively. According to the results of the study, the respondent population comprised 66% (450) males and 34% (235) females. This gender representation demonstrates that for every ten male respondents there were five female respondents who took part in the study. While this may suggest that the sample is predominantly male, the result somewhat mirrors the findings of the GEM South Africa report that revealed that for every ten male entrepreneurs, there were seven female entrepreneurs in South Africa (Herrington et al., 2017).

Using the PLS-SEM technique that includes PLS algorithm and bootstrapping calculation methods, factor analysis was performed to evaluate the measurement scales and confirm the components of the AC and SBP scales. Notably, for modelling purposes, AC is theorised as a second-order reflective construct, while SBP (the endogenous variable) is a single factor construct. The second-order nature of the AC construct required that its first-order dimensions had to be validated prior to the examination of the feasibility of the second-order constructs. To confirm the reliability of the items of the final measurement scales, this study followed a common rule that stipulates that if item loadings are considered weak, according to Götz, Liehr-Gobbers and Krafft (2010), they can be deleted to improve the model. In this instance, while Hair Jr, Howard and Nitzl (2020) recommend item loadings > 0.7 with t-statistics ± 1.96 for item reliability, Hulland (1999)
acknowledges the unlikelihood of obtaining high factor loadings and argues that even items with loadings of 0.4 or 0.5 can be considered as reliable. The present study went through eight and two iterations for the AC and SBP scales, respectively to ensure that the measurement scales achieved the required item loadings of 0.5 and above, thereby, providing an initial confirmation for item reliability. This resulted in the removal of one item from the SBP scale and eleven items from the AC scale. The final measurement scale confirmed from the factor analysis of the first-order construct of the AC scale consists of AQ (2 items), AS (2 items), TF (4 items) and EXP (2 items). This confirmed AC first-order, four-factor scale has been used in other AC focused studies (see Chauvet et al., 2014; Flatten et al., 2011; Jansen et al., 2005; Xie et al., 2018). The confirmed scale for the SBP scale includes the six items that are consistent with indicators mostly used to measure business performance (see Selvam et al., 2016; Shepherd & Wiklund, 2013).

Figure 2 illustrates the final measurement scale of the AC construct. According to the item loadings displayed in the figure, the items for AS (0.925 and 0.904) have strong item loadings, followed by the item loadings of EXP (0.858 and 0.825) and AQ (0.845 and 0.785). Items for TF (0.805, 0.776, 0.693 and 0.586) showed a mix of moderate and strong item loadings. Based on the item loading values derived from the factor analysis, which are above the 0.5 threshold, the AC measurement scale is confirmed as adequate for the estimation of the structural models.

Figure 2. Final measurement scale of the AC first-order factors

Table 1 presents the items of the confirmed AC and SBP measurement scales with their acceptable loadings, t-statistics and significance levels. Additionally, the values of the average variance extracted (AVE) and composite reliability (CR) of each of the factors of the measurement scales and their significance levels are provided. The outlined item loadings are all significant at the 0.01 level. As part of the effort to confirm the measurement scales for AC and SBP, construct validity (convergent and discriminant validity) and the internal consistency of the items were calculated.
To evaluate convergent and discriminant validity, the AVE, item cross-loadings, the square root of AVE, and Heterotrait-monotrait (HTMT) correlations were calculated for the scales. The AVE and CR values of the AC factors of AQ (AVE=0.665, CR=0.799), AS (AVE=0.837, CR=0.911), TF (AVE=0.519, CR=0.810) and EXP (AVE=0.708, CR=0.829) as shown in Table 1, meet the required thresholds. In addition, the results of the bootstrapping process demonstrate that all the AC factors of AQ (AVE t-value = 26.107, CR t-value = 30.319), AS (AVE t-value = 55.889, CR t-value = 102.339), TF (AVE t-value = 25.510, CR t-value = 59.404) and EXP (AVE t-value = 36.063, CR t-value = 60.110) have t-statistics>1.96 and are significant. These outcomes confirm convergent validity and the internal consistency of the items for the measurement of AC. For the SBP scale, results showed an AVE value of 0.702 and a CR value of 0.933. A review of the bootstrapping outcome indicates that an AVE t-value of 46.192, a CR t-value of 198.391, a t-statistic > 1.96 and p < 0.01 are associated with the SBP scale. These values confirm the convergent validity and the internal consistency of the items for the measurement of SBP.

Table 1. Confirmed measurement model values of the absorptive capacity and small business performance scales

<table>
<thead>
<tr>
<th>Factors</th>
<th>Items</th>
<th>Loadings</th>
<th>t-value</th>
<th>p-value</th>
<th>AVE</th>
<th>t-value</th>
<th>p-value</th>
<th>CR</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBP</td>
<td>S1</td>
<td>0.904</td>
<td>95.586</td>
<td>0.000</td>
<td>0.702</td>
<td>46.192</td>
<td>0.000</td>
<td>0.933</td>
<td>198.391</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>S2</td>
<td>0.913</td>
<td>92.928</td>
<td>0.000</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>S3</td>
<td>0.858</td>
<td>65.669</td>
<td>0.000</td>
<td></td>
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<tr>
<td></td>
<td>S4</td>
<td>0.882</td>
<td>71.435</td>
<td>0.000</td>
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<td></td>
<td>S5</td>
<td>0.753</td>
<td>29.179</td>
<td>0.000</td>
<td></td>
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<tr>
<td></td>
<td>S6</td>
<td>0.694</td>
<td>20.749</td>
<td>0.000</td>
<td></td>
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<tr>
<td>AQ</td>
<td>A1</td>
<td>0.786</td>
<td>8.120</td>
<td>0.000</td>
<td>0.665</td>
<td>26.107</td>
<td>0.000</td>
<td>0.799</td>
<td>30.319</td>
<td>0.000</td>
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<tr>
<td></td>
<td>A5</td>
<td>0.844</td>
<td>10.688</td>
<td>0.000</td>
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<tr>
<td>AS</td>
<td>A8</td>
<td>0.904</td>
<td>68.298</td>
<td>0.000</td>
<td>0.837</td>
<td>55.889</td>
<td>0.000</td>
<td>0.911</td>
<td>102.339</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>A9</td>
<td>0.925</td>
<td>94.056</td>
<td>0.000</td>
<td></td>
<td></td>
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<tr>
<td>TF</td>
<td>A10</td>
<td>0.693</td>
<td>16.635</td>
<td>0.000</td>
<td>0.519</td>
<td>25.510</td>
<td>0.000</td>
<td>0.810</td>
<td>59.404</td>
<td>0.000</td>
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<tr>
<td></td>
<td>A11</td>
<td>0.776</td>
<td>22.576</td>
<td>0.000</td>
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<td></td>
<td>A12</td>
<td>0.805</td>
<td>30.038</td>
<td>0.000</td>
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<tr>
<td></td>
<td>A15</td>
<td>0.586</td>
<td>10.100</td>
<td>0.000</td>
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<tr>
<td>EXP</td>
<td>A19</td>
<td>0.825</td>
<td>20.613</td>
<td>0.000</td>
<td>0.708</td>
<td>36.063</td>
<td>0.000</td>
<td>0.829</td>
<td>60.110</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>A21</td>
<td>0.859</td>
<td>25.499</td>
<td>0.000</td>
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</table>

To establish discriminant validity, a review of the outer loadings using the cross-loading criterion for item level discriminant validity was conducted to ensure that the observed variables are loading on their respective factors. The SBP scale items loaded highly within the variable and the loadings of the items range from 0.694 to 0.904. With loadings that range from 0.586 to 0.924, all the items of the AC scale have relatively higher loadings within their respective factors. This result provides initial confirmation of item level discriminant validity across the AC and SBP measurement scales.

With the satisfactory results, descriptive statistics related to the factors can be reported. As shown in Table 2, the mean scores for the AC factors of AQ (3.39) and AS (3.33) are slightly above
average, which is a pointer that respondents have a moderate inclination towards acquisition and assimilation of emergent insights in their business environment. However, the higher mean scores of TF (3.68) and EXP (3.77) denote that the respondents have a higher proclivity towards the transformation and exploitation of new knowledge in their businesses. The scope of the skewness values for AQ, AS, TF and EXP are between -0.216 and -0.794, while associated kurtosis values lie between -0.001 and 1.494. These values are within the requirement boundaries of ±2 recommended by George and Mallery (2010) for data to be considered as being normally distributed. The mean score and SD for the composite AC construct were 3.55 and ±0.888 respectively and in essence, the statistical means obtained confirm an adequate model fit for the actual data.

Table 2. Measures of central tendency

<table>
<thead>
<tr>
<th>Latent Variables</th>
<th>Item Statement</th>
<th>Item Mean</th>
<th>Latent Variable Mean</th>
<th>Std. Dev. (SD)</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQ</td>
<td>A1 <em>We have frequent interactions with others in the industry to acquire new knowledge related to product development.</em></td>
<td>3.700</td>
<td>± 0.997</td>
<td>-0.759</td>
<td>0.137</td>
<td></td>
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<tr>
<td></td>
<td>A5 <em>We organise special meetings with customers, suppliers, or third parties to acquire new knowledge on the process, product, logistics and distribution related innovation.</em></td>
<td>3.39</td>
<td>± 1.160</td>
<td>-0.216</td>
<td>-0.887</td>
<td></td>
</tr>
<tr>
<td>AS</td>
<td>A8 <em>We are able to quickly identify new opportunities to meet our customer needs.</em></td>
<td>3.860</td>
<td>± 0.817</td>
<td>-0.709</td>
<td>0.584</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A9 <em>We quickly analyse and interpret changing market demands.</em></td>
<td>3.690</td>
<td>± 0.850</td>
<td>-0.522</td>
<td>-0.001</td>
<td></td>
</tr>
<tr>
<td>TF</td>
<td>A10 <em>We regularly consider the consequences of changing market demands in terms of new products.</em></td>
<td>3.760</td>
<td>± 0.834</td>
<td>-0.577</td>
<td>0.277</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A11 <em>Employees record and store newly acquired knowledge for future reference.</em></td>
<td>3.630</td>
<td>± 0.875</td>
<td>-0.688</td>
<td>0.383</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A12 <em>We quickly recognise the usefulness of new external knowledge to existing knowledge.</em></td>
<td>3.68</td>
<td>± 0.687</td>
<td>-0.794</td>
<td>1.494</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A15 <em>Different units in the venture sometimes meet to discuss consequences of new product development and</em></td>
<td>3.410</td>
<td>± 0.939</td>
<td>-0.443</td>
<td>0.134</td>
<td></td>
</tr>
</tbody>
</table>

ISSN 2580-0981 (online)
SBP was measured using a 5-point Likert-type scale operationalised by Zahra and George (2002) consisting of two factors, growth and profit satisfaction, with seven items. Following the validation of the construct in the present study, it is confirmed as a single factor construct with six items that range from S1 to S6 as presented in Table 3. The mean of the observed variables ranges between 2.882 and 3.334, suggesting a slightly moderate agreement with the performance indicators. The skewness values of the items range between -0.106 and -0.501, while the scope of the kurtosis ratios ranges from -0.572 to -0.893. These skewness and kurtosis results are satisfactory, which means that the derived data for SBP is normally distributed and can be used for structural modelling. The composite mean score (3.144) and the SD (± 1.175) of the SBP observed variables suggest that responses were dispersed, and respondents are moderately satisfied with the performance of their businesses. More so, the statistical means confirm an acceptable model fit for the observed data.

To investigate the relationships hypothesised in the study, multiple regression analysis was conducted, and two multiple regression models as shown in Table 3. When the component factors of AQ, AS, TF and EXP as well as the dependent variable of SBP were examined, only the hypothesised relationships between AS and SBP (H1.2) as well as between EXP and SBP (H1.4) were statistically supported. Both relationships were positive and of statistical significance at a 99% confidence level. Conversely, the regression analysis results show that AQ and TF do not have a statistically significant relationship with SBP, and this implies that H1.1 and H1.3 are not statistically supported. The regression model with the components of AC and SBP is statistically significant. The R² value associated with this regression model indicates that 15% of the variability in the dependent variable of SBP can be explained by the independent variables in the model.

Table 3. Regression analysis results
When the hypothesised relationship \( (H_1) \) between AC as a composite construct and SBP was examined, results obtained showed that it was statistically supported. The relationship expressed in \( H_1 \) was proven to be positive and statistically significant at a 99% confidence level. The model with AC as a composite construct along with SBP is statistically significant. The \( R^2 \) value associated with this regression model indicates that 4.3% of the variability in the dependent variable of SBP can be explained by the composite AC construct. The findings demonstrate that AC is a critical capability utilised by small businesses in developing economies as they navigate the challenges consistent with their context. Evidently, AC is employed by small businesses as they recognise emergent opportunities, use acquired insights to reconfigure existing resources, and exploit these opportunities to achieve business performance. This finding related to the AC composite construct is consistent with the findings of other studies within the developing and emerging economy context (see Liu, Zhao & Zhao, 2018; dos Santos, Roldan & Loo, 2021; Tzokas, Kim, Akbar & Al-Dajani, 2015). Specifically, though, small businesses in developing economies are more inclined to use their assimilation and exploitation capabilities to achieve business performance.

CONCLUSION

Overall, based on the results obtained through the regression analysis, the study declares that while \( H_{1.1} \) (AC-SBP), \( H_{1.2} \) (AS-SBP) and \( H_{1.4} \) (EXP-SBP) were statistically supported, conversely, no statistical support was found for \( H_{1.3} \) (AQ-SBP) and \( H_{1.5} \) (TF-SBP). These results are insightful as they affirm that efforts towards improved AC would likely engender better SBP. This is understandable against the backdrop of the fact that the AC of a business avails important information to decision-makers so that they can act to improve the performance of the business from positions of knowledge rather than ignorance. The finding is novel as previous studies that considered AC a predictor variable did not investigate its import for subjective measures of small businesses.

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**Dependent variable: SBP**

Regression model with AQ, AS, TF and EXP as the explanatory variable

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Standardised coefficient</th>
<th>Standard Error</th>
<th>t-stat</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQ</td>
<td>-0.044</td>
<td>0.059</td>
<td>-1.044</td>
<td>0.297</td>
</tr>
<tr>
<td>AS</td>
<td>0.307</td>
<td>0.061</td>
<td>6.502</td>
<td>0.000</td>
</tr>
<tr>
<td>TF</td>
<td>-0.003</td>
<td>0.092</td>
<td>-0.060</td>
<td>0.952</td>
</tr>
<tr>
<td>EXP</td>
<td>0.153</td>
<td>0.079</td>
<td>3.306</td>
<td>0.001</td>
</tr>
</tbody>
</table>

- \( R^2 \) = 0.150
- F statistic = 30.034***
- Number of obs. = 684

Regression model with the composite construct of AC as the explanatory variable

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Standardised coefficient</th>
<th>Standard Error</th>
<th>t-stat</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absorptive capacity</td>
<td>0.208</td>
<td>0.115</td>
<td>5.554</td>
<td>0.000</td>
</tr>
</tbody>
</table>

- \( R^2 \) = 0.043
- F statistic = 30.851***
- Number of obs. = 684

*** indicates significant at 1%
performance linked to the perceptions of owners/managers. Additionally, the disaggregation of the AC constructs allowed the study to identify the specific components of AC that had statistically significant relationships with SBP. As identified in the study, these were assimilation and exploration. The implication is that owners/managers who recognise that AC plays a role in SBP should invest in enhancing the business’ propensity to assimilate and explore information/knowledge from external sources instead of focusing on the AC components of acquisition and transformation. These revelations have profound practical and theoretical implications as they emphasise that in the uncertain South African small business environment, there is a need for researchers and practitioners alike to accord due attention to the components of AS and EXP whenever the issue of AC is of interest.

LIMITATION & FURTHER RESEARCH
The study relied on a database of small businesses that were personally developed by relying on information collected from selected business hubs that were accessible. This significantly limits the generalisability of the results of the finding to the broader pool of small businesses in South Africa. This limitation could, however, not be overcome as no comprehensive dossier of small businesses in South Africa exists. The ex-post facto design adopted for the study implies that respondents were expected to remember certain aspects of AC related to business operations that may not necessarily have been current. The limitation associated with this is related to the fact that views canvassed could only be informed by events that the respondent could clearly remember.

Additionally, data were collected cross-sectionally even though AC and SBP are more inherently longitudinal. The study also relied exclusively on subjective measures of SBP, which may not necessarily be a correct reflection of the actual performance of the small business. Future research could be undertaken using data collected longitudinally while focusing on AC and SBP in specific industries. This is because of the role of context in such studies. Further, SBP as an outcome variable could be measured objectively in future studies as this may allow for a comparative analysis of AC’s effect in low versus high-performing small businesses according to their sizes.

REFERENCES


[Accessed: 2020-09-05].


