

CAN COGNITIVE CRAFTING ENHANCE BUSINESS PERFORMANCE? THE MEDIATING ROLE OF EMPLOYEE AMBIDEXTERITY IN THE CONTEXT OF SMALL AND MEDIUM ENTERPRISES

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ARTICLE INFO	ABSTRACT
<p><i>Article History:</i> Received: 03 Aug 2019 Revised: 09 Dec 2019 Accepted: 02 Mar 2020 Available Online: 05 Jun 2020</p> <p><i>Keywords:</i> Cognitive Crafting; Employee Ambidexterity; Exploration; Execution; Exploitation; Business Performance</p> <p><i>JEL Classification:</i> D83, L32, L33</p>	<p>Cognitive proactive ability to redesign tasks can influence the behaviour of employees to explore, execute and exploit opportunities that tend to enhance business performance. The present study aims to validate the proposed three-dimension structure of employee ambidexterity in the context of small and medium enterprises. Moreover, the study examines the effect of cognitive abilities on the business performance of those employees who are involved in multitasking activities in small and medium enterprises. A total of 600 structured questionnaires were administered randomly to employees of service sector small and medium enterprises with a response rate of 98.3%. The results show validation of a three-dimensional construct of employee ambidexterity. Moreover, the findings reveal a partial mediation of the three dimensions of employee ambidexterious behaviour between the relationship of cognitive crafting and business performance. The findings implicate to realise the importance of the cognitive abilities of employees who redesign their tasks in a situation where they confront with multiple tasks that require collective accomplishment in small and medium businesses.</p>

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1. INTRODUCTION

Jobs at the workplaces are undergoing a revolution. Instead of organisations designing the requirements of the jobs, it is the job holders who actively redesign their job tasks. Such activities are more prevalent in those organisations such as Small and Medium-sized Enterprises (SMEs) that have less formalised organisational structures. Moreover, due to the overlapping activities, the employees face challenges to explore and exploit opportunities. Out of these opportunities, exploration-type involves pursuing those business opportunities that are new to the firm, while exploitation type involves those opportunities that require further refinement and sustainability to gain competitive advantage (March, 1991). Moreover, in order to balance the short and long-term requirements of the business, it is essential to pursue ambidextrous behaviour that can address both exploration and exploitation simultaneously. However, due to scarce resources, it is difficult for smaller organisations to achieve such an ambidextrous orientation.

Moreover, specifically in the context of SMEs, the employees are exposed to an environment that promotes decentralised decision making, and lesser formal rules and procedures. So in such environments employees are directly involved in exploring and exploiting opportunities (Moses, Kayode, & Susan, 2017). However, another perspective further suggests that exploitative activities is linked to other factors such as enhancing efficiency, implementing and executing changes. While on the one hand, the exploitive approach focuses upon improving the existing system, customers and markets and on the other hand explorative approach focus on innovative aspects such as seeking new opportunities and divergent thinking (Smith, 2017). Although, Tushman and O'Reilly (1996) define the ambidextrous organisations as those that can implement both explorative and exploitative changes. However, the current study posits to highlight the significance of execution/implementation as an essential factor apart from exploration and exploitation. Such a proposition means that no matter how effectively the current systems are dealt with and how creatively new opportunities or ideas are explored they tend to be meaningless if not correctly implemented.

Furthermore, for useful exploration, exploitation and execution require intrinsically motivated employees (Caniëls, Neghina, & Schaetsaert, 2017). For this reason, several researchers (Caniëls et al., 2017; Holmqvist & Spicer, 2012; Moses et al., 2017) have coined the involvement of employees in explorative and exploitative activities as “employee ambidexterity”. However, particularly, in SMEs, employees are burdened with overlapping activities that may be beyond their specific job description, so it is essential to assess the psychological state that may induce them to accept multiple tasks while simultaneously implementing or executing the decisions. So the present study aims to examine the dimensionality of ambidexterity by introducing execution as a separate factor in the existing two-factor (exploration and exploitation) construct developed by Mom, Van Den Bosch, and Volberda (2007).

Most recently, Caniëls et al. (2017) suggest that motivation is a driving factor that determines how actively the employees are engaged in ambidextrous behaviours. The Self-Determination Theory suggests, intrinsic and extrinsic motivational factors influence situational responses of people with the consideration of psychological needs that leads to self-determination and growth (Deci & Ryan, 2000). Therefore, we can infer that individual motivation uses their cognitive abilities to reshape their jobs that can play a central role in assessing the functioning of ambidextrous behaviour among the employees which may result in improved business performance. Furthermore, intrinsically motivated employees are better able to identify the meaning of work (Deci & Ryan, 2000) and redefine their jobs cognitively that can resultantly improve firm performance. However, still, there is limited evidence that can support the argument that the cognitive abilities can create synergy among the employees to become ambidexterious that leads to enhancing business performance (Prieto & Santana, 2012).

Moreover, most of the studies focus mostly on organisational ambidexterity rather than employee ambidexterity. So various studies call for exploring the ambidexterious behaviour at an employee level (Birkinshaw & Gupta, 2013; Caniëls & Veld, 2016; Prieto & Santana, 2012). The reason to study employee ambidexterity can be attributed to the nature of organisations. In the context of SMEs, employees are directly linked to enhancing business performance and tend to perform multiple roles that require proactive abilities to deal with every task efficiently (Marija, Slavica, & Grozdana, 2014). Therefore, in light of the above discussion, the present study aims to achieve two-fold objectives. Firstly, it tries to reassess the dimensionality of the employee ambidexterity construct proposed by Mom et al. (2007). Secondly, the present study explores the mediating role of employee ambidexterity between the relationship of cognitive crafting and business performance in the context of Small and Medium Enterprises.

2. LITERATURE REVIEW

2.1 Cognitive Crafting

Most recently cognitive crafting is gaining attention by different researchers who advocate this concept as an enabler to redefine changes proactively in their jobs (Niessen, Weseler, & Kostova, 2016; Weseler & Niessen, 2016). Although in the past cognitive crafting is perceived as a type of coping strategy for avoidance where employees try to shape their jobs just to fit their respective preferences and need (Tims & Bakker, 2010). However, it is believed that cognitive crafting can be an effective proactive strategy that can create a fit with the organisational environment by altering the meaning of the work (Niessen et al., 2016). The Self-Determination Theory, (SDT) presented by Deci and Ryan (2000) suggests that the intrinsic and extrinsic motivational factors with innate psychological needs (i.e. autonomy relatedness and competence) determine the situational responses. Intrinsic motivation is concerned with the active engagement of individuals in a task that seems exciting and meaningful (Deci & Ryan, 2000). Motivation is said to be one of the significant predictors of proactive behaviours (Devloo, Anseel, De Beuckelaer, & Salanova, 2015) that elicit job crafting behaviour (Wrzesniewski & Dutton, 2001). Job crafting refers to the proactive behaviour of employees to redefine or restructure their jobs so that they are better able to satisfy their needs (Wrzesniewski & Dutton, 2001). Job crafting can take three forms, i.e. task crafting, relational crafting and cognitive crafting (Wrzesniewski & Dutton, 2001). The current study focuses on cognitive crafting. It refers to a mental state where employees holistically view their jobs and redefine or reframe them in a way to make them more meaningful (Berg, Dutton, & Wrzesniewski, 2013). Therefore, employees who consider their jobs meaningful are more involved in their jobs and perform better (Weseler & Niessen, 2016).

Moreover, the proponents of SDT argue that intrinsically motivated employees are more involved in their tasks/jobs and are motivated to perform at a high level (Deci & Ryan, 2000). Therefore, we can expect intrinsically motivated employees to redefine their jobs cognitively to make them purposeful. Hence, there is a natural link from intrinsic motivation to cognitively crafted jobs specifically in SMEs. Since the managerial aspects of SMEs are attributed to a proactive attitude towards the events in the environment that involves flexibility and willingness to accept the risk (Marija et al., 2014). So it can be argued that cognitive crafting can prove to be a positive attitude amongst the employees to enhance business performance specifically in the context of SMEs. The burden of numerous overlapping activities relating to planning or exploring opportunities, exploiting the routine tasks and implementing

the plans become a challenging task for SMEs. It is argued that in SMEs, working in an efficient manner by the managers calls for 60% of the time for planning and development, 25% to exploit current tasks and 15% to implement routine tasks (Avlijaš, 2008). These facts reveal that in small businesses employees tend to assume multiple roles and are engaged in multitasking activities (such as exploration, exploitation and execution) simultaneously. Therefore, the current study aims to explore the attribute of cognitive crafting among the employees that creates ambidextrous behaviour in a dynamic environment such as SMEs

2.2 Ambidexterity

The Ambidexterity Theory presented by March (1991) suggests that the organization should be able to balance the explorative and exploitative activities in order to adopt the change successfully. Moreover, ambidexterity refers to the organisational ability of simultaneously engaging in exploitative and explorative activities (March, 1991; Raisch & Birkinshaw, 2008). Exploitation refers to the improvement and refinement of existing competencies, products, resources and organisational procedures. The exploitative activities direct towards attaining efficiency. On the other hand, exploration refers to searching for new alternatives (Zhang, Linderman, & Schroeder, 2012). Explorative orientation links to risk-taking, experimentation and involvement in creative and innovative activities (March, 1991; Zhang et al., 2012). During the past years various studies were conducted to identify the outcomes of ambidexterity such as, customer satisfaction (Gibson & Birkinshaw, 2004), sales growth (He & Wong, 2004), innovation (Katila & Ahuja, 2002), firm performance (Auh & Menguc, 2005; Lubatkin, Simsek, Ling, & Veiga, 2006; Na, Qin Hai, Janine, & Patrick, 2016) and perceived organizational performance (Gibson & Birkinshaw, 2004). However, the preliminary studies focus more on organisational ambidexterity, and less attention is given to ambidexterity at the employee level (Caniëls et al., 2017). Moreover, Caniëls and Veld (2016) state that organisational ambidexterity is dependent upon the integration of explorative and exploitative behaviour by employees. Such integration of activities as an ambidextrous behaviour among the employees is termed as “employee ambidexterity”. Employee ambidexterity refers to the behavioural orientation of employees towards ambidextrous activities, i.e. exploitation and exploration (Mom, van den Bosch, & Volberda, 2009).

Similarly, Minbaeva, Mäkelä, and Rabbiosi (2012) assert that it is the employees who execute the ambidextrous activities in an organisation - specifically in the context of SMEs. The reason for such an argument is because SMEs possess limited resources and retain only those employees who contribute to enhance the performance of the firms (Castrogiovanni, 2011). Most recently, Moses et al. (2017) report that ambidextrous employees in SMEs contribute to the overall ambidexterity of the organisation that resultantly improves the organisational growth. Additionally, employees in SMEs are characterized by being ambitious, possess tendency of accepting the risk and are desirous to achieve success for their enterprise (Marija et al., 2014), so they can implement (execute) the exploitative and explorative changes (Tushman & O'Reilly, 1996). Moreover, it is notable that the employees in smaller organisations not only involve in the explorative and exploitive activities but are indulged in the effective implementation or execution also. However, in the literature, the construct of ambidexterity is limited to exploitation and exploration where implementation/execution is discussed as a factor of exploitative activity. For instance, Smith (2017) argues that exploitative activities are associated with others factors such as enhancing efficiency, implementing and executing changes. In contrast, the present study posits to give due importance to the implementation or execution of various activities separately in the context of SMEs. The reason for such a proposition can be attributed to the complex overlapping activities that the employees perform in small organisations. As proper implementation or execution can enhance business performance (Marija et al., 2014). Therefore, the current study focuses on employee ambidexterity specifically in SMEs and explores the implementation/execution activity as a separate dimension to ambidexterity construct.

2.3 Linking Cognitive Crafting, Employee Ambidexterity and Business Performance in the Context of SMEs

In the past several studies investigate various antecedents of ambidexterity (Caniëls et al., 2017), that includes organizational structure (Gibson & Birkinshaw, 2004), knowledge transfer and integration (Gibson & Birkinshaw, 2004), managerial commitment and leadership (Smith & Tushman, 2005), team composition (Beckman, 2006), and motivation (Caniëls et al., 2017; Pierro, Kruglanski, & Higgins, 2006). Motivation is one of the critical factors that determine the performance of employee (Ambrose & Kulik, 1999) which as a result affect the overall organisational performance. Intrinsically motivated employees are more involved in their tasks (Starbuck & Webster, 1991) are interested in discovering a new solution (Gupta, Smith, & Shalley, 2006) and solving problems (Oldham & Cummings, 1996). Hence, as a result, the ambidextrous activities are stimulated and resultantly improves efficiency (Caniëls et al., 2017). Moreover, Jasmand, Blazevic, and de Ruyter (2012) assert that the ambidextrous behaviour of employees is linked to motivation. Recently the study of Caniëls et al. (2017) argues that intrinsic motivation plays a vital role in driving ambidexterity at the individual level, i.e. employee ambidexterity. Additionally, the findings of

Ya-Ling and Ching-Fu (2016) also conclude that intrinsic motivation is an essential predictor of employee ambidexterity.

It is noteworthy to argue that intrinsic motivation increases the time spent on a task or technique, which in turn generates skill (Starbuck & Webster, 1991) to cognitively craft their jobs so that they can exploit, execute and explore the activities which as a result enhances business performance. However, the literature is silent to examine how cognitive crafting improves employee ambidextrous behaviour that resultantly enhances business performance. Therefore the study proposes that cognitive crafting will positively affect business performance when the employees are involved in ambidextrous activities (such as exploration, exploitation and execution). The propositions formulated are as follows:

Proposition 1: Cognitive crafting enhances business performance by improving explorative behaviour among SME employees

Proposition 2: Cognitive crafting enhances business performance by improving executing behaviour among SME employees

Proposition 3: Cognitive crafting enhances business performance by improving exploitative behaviour among SME employees

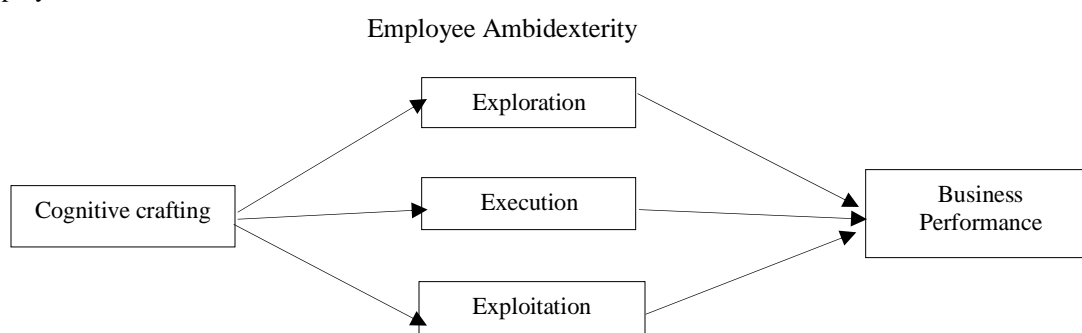


Fig. 1. Conceptual Model

3. METHODOLOGY

3.1 Population

The population consists of the employees of SMEs operating in the service sector. The list of SMEs was obtained from SMEDA (Small and Medium Enterprises Development Authority). The list consists of a population of 4493 firms operating in the service sector. Purposive sampling is used to ensure that companies from 63 subsectors (see Table 1 in the appendix) are included in the sample. For computing the appropriate sample size, a thumb rule suggested by Costello and Osborne (2005) that provides a criterion for determining the sample size is used. The rule suggests a multiple of 20 of the total items in the questionnaire. Therefore, for the current study, a total of 600 questionnaires were personally administered to the employees of the SMEs operating in service sectors. Due to some incomplete responses received, so out of the 600 questionnaires administered, only 590 were suitable for further analysis with a response of 98.3%. The sample consists of 86.4% male and 13.6% female respondents. Most of the respondents were permanent employees (62%) while the remaining were on a contract basis (28.5%).

3.2 Measures

Employee ambidexterity variable is measured on a 5-point scale ranging from 1 (to a very small extent) to 5 (to a very large extent). To evaluate ambidexterity (exploitation and exploration) eleven item scale (five exploration items and six exploitation items) of Mom et al. (2007) was adopted. Furthermore, the scale regarding the execution was not available in the literature. Therefore, the scale for execution was self-constructed based on the features of the other two dimensions of ambidexterity (i.e. exploration and exploitation). Cognitive crafting variable is measured on a 5-point scale ranging from 1 (never) to 5 (very often). To evaluate cognitive crafting four-item scale of Niessen et al. (2016) was adopted. Business performance variable was measured on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). To evaluate business performance four-item scale of Tan and Liu (2014) was adopted. The overall value of Cronbach's alpha for the instrument was $\alpha = 0.892$ that shows that the reliability is established. Moreover, Hair, Hult, Ringle, and Sarstedt (2013) suggest testing the convergent and discriminant validity of the instrument. The convergent validity is assessed by calculating Outer Loadings, Composite Reliability (CR) and

Average Variance Extracted (AVE) by following the procedure of Fornell and Larcker (1981) with the help of Smart PLS-SEM. Table 2 below shows the value of outer loadings, Composite Reliability (CR) and Average Variance Extracted (AVE) to test for convergent validity.

Table 2. Reliability and Convergent Validity of the Instrument

Construct	Sources	Outer Loadings	CR	AVE
EX	(Mom et al., 2007)		0.817	0.529
EX1		0.788		
EX2		0.609		
EX3		0.785		
EX4		0.714		
EX5				
EN			0.787	0.430
EN1		0.627		
EN2		0.577		
EN3		0.537		
EN4		0.734		
EN5		0.771		
EP	(Mom et al., 2007)		0.781	0.472
EP1		0.672		
EP2		0.683		
EP3		0.735		
EP4		0.653		
EP5				
EP6				
CC	(Niessen et al., 2016)		0.786	0.479
CC1		0.705		
CC2		0.663		
CC3		0.649		
CC4		0.749		
BP	(Tan & Liu, 2014)		0.823	0.538
BP1		0.725		
BP2		0.754		
BP3		0.721		
BP4		0.733		

Table 2 above shows the values of Outer Loadings, AVE and CR to test for the convergent validity. Hair, Hult, Ringle, and Sarstedt (2014) state that convergent validity is established when the values of AVE, CR, and Outer Loadings are higher than 0.50, 0.70 and 0.60. Apart from AVE, the values of CR and Outer Loadings are within the prescribed range. The values of AVE in case of exploration, execution, and exploitation are less than the prescribed limit (higher than 0.05) but are higher than 0.40. Diamantopoulos and Siguaw (2000) recommend that the value of AVE not less than 0.40 is also acceptable. Therefore the convergent validity is established as the calculated values of AVE, CR and Outer loadings are in the range of acceptable region. After assessing convergent validity, the researchers suggest testing for discriminant validity by using a heterotrait-monotrait ratio of correlations (HTMT). Discriminant validity ensures that each construct in the structural model measures a different concept (Hair, Hult, Ringle, & Sarstedt, 2017; Henseler, Ringle, & Sarstedt, 2015). So Table 3 below depicts discriminant validity.

Table 3. Discriminant Validity

Constructs	HTMT Correlation
CC -> BP	0.762
EN -> BP	0.618
EN -> CC	0.651
EP -> BP	0.713
EP -> CC	0.794
EP -> EN	0.916
EX -> BP	0.701
EX -> CC	0.796
EX -> EN	0.889
EX -> EP	0.883

Table 3 above shows the discriminant validity. According to Henseler et al. (2015) and Hair et al. (2017), the HTMT Ratio should be less than 0.90 to establish discriminant validity. Table 3 above shows that HTMT ratio is less than 0.90 except in EP → EN where the HTMT ratio is higher than 0.90, i.e. 0.916

4. ANALYSIS AND RESULTS

4.1 Structural Model Assessment

After the verification of reliability and validity, the next step is to test for the statistical significance of the structural models. A nonparametric procedure referred to as bootstrapping procedure is carried out using the Smart PLS-SEM to examine the significance of the model. The bootstrapping procedure calculates the value of predictive accuracy (R^2), predictive relevance (Q^2) and path modelling. Moreover, the bootstrapping procedure evaluates the model fitness by calculating the value of Standardized Root Mean Square (SRMR). The value of SRMR (Standardized Root Mean Square) calculated for the structural model used in this study is 0.111 which is within the acceptable range, i.e. within 0 to 1 (Hooper, Coughlan, & Mullen, 2008). Figure 2 below shows the model extracted through bootstrapping procedure.

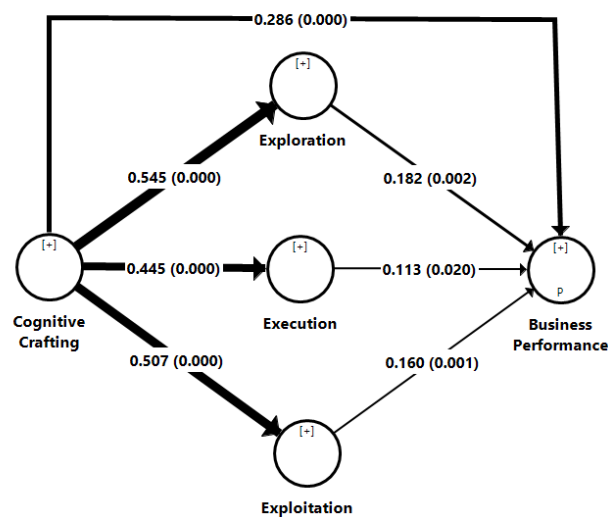


Fig. 2. PLS-SEM Model

Figure 2 above shows the direct and indirect effect of cognitive crafting (CC) on business performance (BP) through the mediation of employee ambidexterity (i.e. exploration, execution, and exploitation). Model extracted through bootstrapping procedure shows that all the CC (independent variable) has a positive and highly significant impact on the BP ($p = 0.000 < 0.05$) and mediating variable i.e. exploration (EX), execution (EN) and exploitation (EP) ($p = 0.000 < 0.05$). Moreover, mediating variable EX, EN and EP show a positive and highly significant impact on dependent variable i.e. BP ($p = 0.002, 0.020, 0.001 < 0.05$). Therefore as the exploration (EX), execution (EN) and exploitation (EP) mediates the relationship between cognitive crafting and business performance all the proposed propositions, i.e. P1, P2, and P3 are accepted.

4.2 Predictive Accuracy

The predictive accuracy is calculated by the coefficient of determination, i.e. R^2 using the PLS-Bootstrapping procedure. The value of R^2 represents the amount of combined variance as explained by exogenous variable into an endogenous variable. In this study, endogenous variables, i.e., BP, EX, EN and EP have the value of R^2 0.365, 0.297, 0.198 and 0.257. Additionally, for cross-validating, the predictive accuracy of each endogenous variables PLS-SEM also calculates the value of Stone-Geisser Q^2 (Geisser, 1974; Stone, 1974). Table 4 below displays the values of R^2 (predictive accuracy) and Q^2 (cross-validated predictive relevance) for the model. The table also discusses the effect size with respect to Q^2 .

Table 4. Results of R^2 and Q^2

Constructs	R^2	Adjusted R^2	Q^2	Effect Size
Business Performance	0.365	0.361	0.185	Medium
Exploration	0.297	0.296	0.146	Small
Execution	0.198	0.196	0.078	Small
Exploitation	0.257	0.256	0.115	Small

Effect Size: Small: $0.0 < Q^2$ effect size < 0.15 ; Medium: $0.15 < Q^2$ effect size < 0.35 ; Large: Q^2 effect size > 0.35

Table 4 above discusses the values of R^2 and Q^2 . The predictive relevance of the structural model is established when the values of Q^2 are $> \text{Zero}$. In the current study, the predictive relevance of the structural model is established as the value of Q^2 for BP, EX, EN and EP are 0.185, 0.146, 0.078 and 0.115 which is greater than zero. Moreover, the effect size of Q^2 varies from small to medium.

5. DISCUSSION

In this study, we sought to investigate the mediating role of ambidexterity between the relationship of cognitive crafting and business performance specifically in the context of SMEs. However, initially, the study proposed to investigate the dimensionality of ambidexterity by introducing execution as a separate dimension from exploration and exploitation. The reason to examine execution as a separate dimension is to consider implementation as an additional factor that requires particular attention (Marija et al., 2014). This means that while new opportunities are explored effectively, and the current activities are improved, it is also essential to execute or implement the changes efficiently. The current study validates empirically the implementing activity, i.e. execution as a separate dimension of ambidexterity apart from exploration and exploitation in the context of SMEs. This result can be well associated in the context of SMEs as the employees are burdened with overlapping activities (Marija et al., 2014), and sometimes any task can be left well attended. So we can infer that those employees who are proactive and can craft their jobs cognitively have better chances to deal with such overlapping activities swiftly. This means that when employees view their work holistically, they tend to feel responsible for those tasks even though such tasks are not formally assigned to them. Moreover, due to the multitasking behaviour of employees in SMEs, they tend to have a good understanding of their activities and how such activities will lead to influence business performance. Our findings suggest that business performance improves when cognitively motivated employees with ambidextrous behaviour craft their jobs/tasks. This means that cognitive crafting tends to create synergy among the employees to explore, exploit and execute effectively. The conceptual model empirically validates the partial mediation of the employees' ambidextrous behaviour that creates a link between cognitive crafting and business performance. The findings of the study also have some important theoretical and practical implications that are as follows.

5.1 Implications

The results of the study contribute to the ambidexterity theory by recognising execution as a separate dimension from exploration and exploitation in the context of SMEs. The significant mediating role of ambidexterity (i.e. exploration, execution and exploitation) between cognitive crafting and business performance suggests that SMEs should motivate their employees to involve in ambidextrous activities in order to improve business performance. Moreover, those organisations that do not follow a set organisational structure and lacks proper delegation of responsibilities require an understanding of the employee's cognitive abilities. Furthermore, the present study implicates that SMEs should realise that the employees can redesign their work tasks proactively and become able to arrange their multiple tasks utilising their cognitive abilities to explore, exploit and execute. However, while realising the significance of cognitive crafting caution is required. Organisations should monitor that when task boundaries are extended work is intensified. Such an intensification of work tasks may lead to work overload and stress.

5.2 Limitations and Future Directions

Even though the current study contributes to the existing literature of crafting and employee ambidexterity, the study is still subject to some limitations. First, there are three types of crafting, i.e. task, relational and cognitive. However, the current study only focused on cognitive crafting. So, the current study suggests investigating the other two types of crafting that may induce the employees to involve in ambidextrous activities that can improve business performance. Second, the current study is conducted on the services sector of SMEs in Pakistan. Furthermore, the present recommends the future researchers to replicate the study in other sectors to generalise the findings. One of the most significant contributions of this paper is the identification of execution as a separate dimension of ambidexterity

and the development of the scale. The study recommends the future researchers to conduct this research in other industries to identify the importance of execution as a separate dimension.

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Appendix

Table 1. Subsectors in the Service sector

No.	Subsectors
1	Advertising and Marketing
2	Agriculture and Horticulture
3	Automobile
4	Aviation
5	Beverages
6	Building material
7	Bicycles
8	Cables and wires
9	Carpet and tapestry
10	Cement
11	Chemicals
12	Computers and software
13	Construction
14	Consultants
15	Cosmetics
16	Crockery
17	Customs clearing and forwarding
18	Dairy products
19	Departmental stores
20	Edible and cooking oil
21	Educational institution
22	Electric and appliances
23	Engineering
24	Financial institution
25	Firefighting miscellaneous
26	Food and allied
27	Fuel and energy
28	Furniture & wood
29	Gas & gas appliances
30	Glass-ceramics and sanitary
31	Handicrafts
32	Iron and steel
33	Jewellery & gemstones
34	Leather and tanneries
35	Livestock, birds & fisheries
36	Machinery
37	Medical and laboratory equipment
38	Medicine
39	Metal and metals product
40	Mineral
41	Miscellaneous
42	Optical and goods
43	Packaging
44	Paper and board
45	Plastic and PVC

46	Poultry
47	Printing and publishing
48	Real estate brokers & developers
49	Rice
50	Rubber
51	Services
52	Shoes
53	Sports Goods
54	Stationery
55	Sugar and allied
56	Telecommunications
57	Textile
58	Timber
59	Tourism and recreation
60	Toys
61	Transport
62	Watches
63	Water and water plants