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Entrepreneurial bricolage, ambidexterity structure, and new venture growth: Evidence from the hospitality and tourism sector

Hui Fu^a, Wenhong Chen^a, Xiang Huang^{b,*}, Meng Li^a, Mehmet Ali Köseoglu^c

^a Business School, Sun Yat-sen University, Guangzhou, China

^b School of Tourism Management, South China Normal University, Guangzhou, China

^c School of Hotel and Tourism Management, The Hong Kong Polytechnic University, Kowloon, Hong Kong

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ABSTRACT

This study aims to investigate the links between entrepreneurial bricolage, ambidexterity structure, and new venture growth in the Chinese hospitality and tourism industry. Survey data were collected from 345 entrepreneurs involved with new hospitality and tourism ventures in China. Hierarchical regression analysis was used to test the hypotheses of this study. The results indicate that both the combined and balanced dimensions of ambidexterity play mediating roles between entrepreneurial bricolage and new venture growth performance. By exploring the underlying mechanism of the relationship between entrepreneurial bricolage and new venture growth in the hospitality and tourism sector using a comprehensive theoretical model viewed through the lens of ambidexterity, the theoretical and practical implications for management are addressed, and possible directions for future research are discussed.

1. Introduction

This study examines how entrepreneurial bricolage and ambidexterity structure influence new venture growth in the Chinese hospitality and tourism industry. Mainstream entrepreneurship research has long sought to explore how a start-up venture can address resource constraint and develop competitive advantages (An et al., 2018a; Baker and Nelson, 2005; Janssen et al., 2018). To overcome the resource dilemma that entrepreneurs face during the competition process, Garud and Karnøe (2003) and Baker et al. (2003) introduced bricolage theory into the entrepreneurship field, so that this issue could be reconsidered from a new perspective (Senyard et al., 2010). Bricolage was first used to depict the situation of making do with “whatever is at hand” (Levi-Strauss and Wolfram, 1968). Later, this definition was developed into the concept of entrepreneurial bricolage (EB), which refers to the process through which firms create heterogeneous value from ostensibly identical resources (Baker and Nelson, 2005). By creatively utilizing existing resources, EB becomes a feasible means for breaking through resource scarcity and achieving successful entrepreneurship (Senyard et al., 2014). Consequently, EB boosts innovation (Katila and Shane, 2005) and facilitates the growth performance (GP) of new ventures (Salunke et al., 2013).

Bricolage theory provides a comprehensive theoretical perspective

to explain the logic underlying entrepreneurship (Davidsson et al., 2017), noting the vital role played by the environments of new ventures (Fisher, 2012). In the resource-constrained environment, EB can exist in various dimensions: The business environment (e.g., the lack of partners), the customers (e.g., unaffordable products or services), and the internal resources (e.g., the shortage of employees) (Janssen et al., 2018; Witell et al., 2017). This implies that resource scarcity in entrepreneurship can exist in different forms, resulting in various types of EB functions. Thus, the entrepreneurial process may differ in industry (Fu et al., 2019) and country contexts (Guo et al., 2016; Makino et al., 2004; Mueller and Thomas, 2001). However, rarely has the existing literature highlighted the context and conditions under which the EB perspective is applied (An et al., 2018b; Bojica et al., 2018; Kwong et al., 2019; Ladstaetter et al., 2018; Mzembe et al., 2019). Therefore, how the bricolage perspective works in different contexts and conditions by simultaneously implementing the exploration and exploitation processes of organization routines, which are shaped by firms' dynamic capabilities (Teece et al., 1997), should be clarified for scholars and practitioners. Three questions should be addressed on how entrepreneurs formulate and implement competition strategies to generate sustainable competitive advantage: i) How does bricolage perspective work in the context of different industries? ii) How does bricolage perspective work in the context of different countries, regions,

* Corresponding author.

E-mail addresses: mnsfuh@mail.sysu.edu.cn (H. Fu), chenwh48@mail2.sysu.edu.cn (W. Chen), 1899460@qq.com (X. Huang), 1299345098@qq.com (M. Li), mehmetali.koseoglu@polyu.edu.hk (M.A. Köseoglu).

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or cultures? iii) How does ambidexterity (exploration and exploitation) as organizational capability affect EB and a new venture's GP in different contexts?

This study focuses on the hospitality and tourism (H&T) industry, as an industry context, engaged in active entrepreneurship which has witnessed resource constraint in new ventures arising from the liabilities of newness and smallness (Birendra et al., 2018; Lordkipanidze et al., 2005). Many new H&T ventures are family firms (Getz and Carlsen, 2000), resulting in an additional liability of smallness and, subsequently, in more obstacles. The tradition of micro-entrepreneurship in the H&T industry exacerbates the challenge of upgrading and expanding the industry since micro-entrepreneurship faces "poverty" in many domains relative to other types of entrepreneurship (Morrison, 2006). Therefore, how to address the resource issue through effective allocation is a fundamental issue for the management echelon in new H&T ventures (Fu et al., 2019).

This study considers the Chinese context for discussing EB issues, since China has been experiencing fast economic growth, becoming one of the largest economic entities in the world. China's dynamic market situation has witnessed evolving entrepreneurship (Qin et al., 2017). China has accumulated a large number of nascent ventures across industries (Ahlstrom and Ding, 2014). Besides, this study highlights the role played by organizational capability based on ambidexterity during the EB process in the Chinese H&T industry context.

2. Literature review and hypotheses development

2.1. Entrepreneurship bricolage and growth performance

Entrepreneurship Bricolage (EB) is identified as a creative approach to resource application that helps new ventures to survive and succeed (Baker and Nelson, 2005). Bricolage, as an effective way to address a newborn vulnerability situation (Baker and Nelson, 2005; Ilonen et al., 2018), reallocates low-cost and disregarded resources on hand to generate new value (Senyard et al., 2009) and thereby gain competitive advantages.

The nature of EB is that new ventures innovatively create heterogeneous values from ostensibly identical resources to solve new problems and respond to potential opportunities (Baker and Nelson, 2005). Similar concepts include resource integration (Sirmon et al., 2007) and improvisation (Baker, 2007), both of which refer to the combination of resources for new purposes. Instead of seeking new resources, proper tools, and new skills, start-up enterprises devoted to EB take the initiative in seeking methods of solving problems and responding to new opportunities with the resources at hand, which include internal and external resources within the existing social network (Senyard et al., 2014). Bricolage under these conditions is also called network bricolage (Baker et al., 2003). Such firms also creatively utilize the worthless and wasted resources of other enterprises to support self-innovation (e Cunha et al., 2008). By doing so, new enterprises can achieve success under a resource constraint scenario (Hargadon, 2003).

The existing research has investigated the antecedents and the outcomes of EB. Scholars in EB found that EB could be affected by entrepreneurs (Fuglsang, 2010), venture characteristics (Salunke et al., 2013) and by the networks the new ventures engaged in (Baker et al., 2003). On the other hand, EB positively influences new ventures by facilitating innovation (Li and Zhu, 2014), and increasing performance (Salunke et al., 2013). The approach provided by EB to the allocation and integration of existing resources is thought to affect new ventures' GP via different routes (Zhu, 2015). As outcomes of EB, innovative development (Li and Zhu, 2014) and advanced employee creativity (Senyard and Steffens, 2011) constitute the limited and inimitable resources, namely heterogeneity, that result in competitiveness and, in turn, profits (Peteraf, 1993). Additionally, Kalogerakis et al. (2010) found that EB helps entrepreneurs accumulate knowledge, which serves as an isolating mechanism that creates resource barriers for

competitors. These resource barriers prevent competitors from imitating or substituting, and preserve the competitive advantages of new ventures, allowing for sustained success (Rumelt, 2005). In this case, EB not only facilitates but also enhances new venture performance. Researchers have found direct evidence of the positive impact of EB on new enterprises' GP (Carlsson-Wall and Kraus, 2015; Salunke et al., 2013). Hence, in H1, we propose that EB is positively associated with the GP of new H&T enterprises.

H1. *EB is positively associated with the GP of new H&T enterprises.*

2.2. Organizational ambidexterity and entrepreneurship bricolage

Organizational ambidexterity, an organization's ability to simultaneously pursue two disparate processes (i.e., exploration and exploitation), provides an integral concept that comprehensively represents the linked nature of exploration and exploitation (Gibson and Birkinshaw, 2004; He and Wong, 2004; Lubatkin et al., 2006; O'Reilly and Tushman, 2008). Since Penrose (1959) introduced the twin concepts of exploration and exploitation, it has been thought that a trade-off between exploration and exploitation is unavoidable (Wernerfelt, 1984). Exploration is the development of new resources (i.e., competitive advantages, see Penrose, 1959; Wernerfelt, 1984), and focuses more on searching, discovery, autonomy, innovation, and embracing variation (March, 1991). Exploitation is the development of existing resources (Penrose, 1959) to increase efficiency, productivity, control, and certainty, and reduce variance (O'Reilly and Tushman, 2008). Whereas exploitation allows enterprises to develop competencies by scale, exploration enables evolving heterogeneity to constitute future competitiveness, resulting in long-term success. However, investment in one may preclude investment in the other, or even come at the cost of the other. Ambidexterity thus represents a firm's overall ability to explore and exploit, which enables firms to gain competitive advantages for short-term performance and develop flexibility for long-term success in a fiercely competitive and dynamic environment.

To clarify the relationship between exploration and exploitation, and to identify the nature of ambidexterity, Cao et al. (2009) proposed the concepts of the combined dimension (CD) and the balanced dimension (BD) of ambidexterity, which indicate different causal mechanisms within ambidexterity. The CD focuses on the synergistic impacts of contradicting strategies (i.e., exploration and exploitation), whereas the BD indicates a close relative match between the two facets (Wang et al., 2018; Zheng et al., 2016). By considering the CD of ambidexterity, the extent to which a firm has ambidexterity depends on the add-up value contributed by exploratory and exploitative processes, as these processes can improve one another when they take place in complementary domains. The BD of ambidexterity emphasizes the trade-off between exploration and exploitation, as they may compete, resulting in hazards. Mathematically, the CD of ambidexterity is calculated as the value of exploration multiplied by that of exploitation, and the BD is calculated as the relative derivation of exploration and exploitation (Cao et al., 2009).

The association of EB and firm growth seems to be related to ambidexterity, which refers to heterogeneity and efficiency. EB does not increase the total number of resources, but rather, the competitive advantages gained from EB, which ultimately lead to positive performance and favorable growth, consist of the efficiency of resource utilization and increased heterogeneity (Zhu, 2015). Although Li and Zhu (2014) and Fultz and Baker (2017) found that EB improves dynamic capabilities in new ventures, indicating that ambidexterity, as an indicator of dynamic capability, can also be affected by EB (March, 1991; O'Reilly and Tushman, 2008; Raisch et al., 2009), we identify the mechanism of influence of EB on the CD and BD of ambidexterity with a focus on heterogeneity and inimitability (Peteraf, 1993).

EB generates heterogeneous resource bundles from the creative allocation or reallocation of resources, thus forming limited superior

factors that constitute the core competencies. Although no additional resources are generated, EB develops new and novel resource bundles through creative utilization. Consequently, firms engaged in EB tend to develop newly evolved competencies, the process of which reflects the facet of exploration. EB that designates the effective application of resources by nature as a solution to address resource limitation not only generates heterogeneity through continuous application but also sustains competitiveness by keeping the competencies inimitable through increased efficiency. This exploitative process is associated with bricolage. When the exploratory and exploitative processes happen in complementary domains, EB is likely to facilitate both processes simultaneously and provide add-up value. Therefore, in H2, we propose that EB has a positive relationship with the CD of ambidexterity in new H&T enterprises.

H2. EB is positively related to the CD of ambidexterity.

As EB generates newly evolved competencies through the exploratory process, new ventures engaged in EB are forced to emphasize the route of exploration. Otherwise, they may not have the opportunity to implement the exploitative process to sustain competitiveness until they can survive. In this case, new enterprises engaged in EB are less likely to overexploit and underexplore. However, exploration can be costly. The relative high expense prevents new ventures from overexploration, especially when they have to employ bricolage to address resource issues. Consequently, in H3, we suggest that new H&T ventures engaged in EB are less likely to either overexplore or overexploit.

H3. EB is positively related to the BD of ambidexterity.

2.3. Organizational ambidexterity and growth performance

Although exploration and exploitation positively affect the GP of new enterprises (Govindarajan and Trimble, 2005; Hill and Birkinshaw, 2014; Tushman et al., 2010), scant literature has provided evidence of ambidexterity's effect on new venture growth related to the CD and BD. However, it has been demonstrated that a firm's competitive advantages can be generated or enhanced by continuous application (Peteraf, 1993), which can be facilitated by efficiency, as firms, through continuous application, can develop an increased understanding of resource utilization and efficiently reconfigure the resource bundles from which heterogeneity evolves (Cao et al., 2009). In this process, the exploitation route develops competitive advantages not only by generating heterogeneity and consolidating competitiveness by keeping the competencies inimitable but also by stimulating the exploratory process. Enhanced exploration positively affects the exploitative process in the complementary domain and a larger pool of competencies. In this case, we can conclude that the exploration and exploitation processes can be enhanced simultaneously and reinforce each other in a firm. These processes generate the firm's competitive advantages. As competitive advantages comprise a firm's favorable performance and growth (Barney, 1986, 1991), we propose that the combination of exploration and exploitation in new ventures is positively related to their GP.

H4. The CD of ambidexterity is positively associated with the GP of new H&T enterprises.

In contrast, the tension of ambidexterity can have negative effects on GP due to the imbalanced exploration–exploitation trade-off (He and Wong, 2004). As star-ups may fail to survive without innovative competencies generated from exploration process (March, 1991), they may not manage to sustain competencies by implementing the exploitative process over the exploration process. Relatively high expenses due to overexploration may also result in poor performance (Cao et al., 2009). In this case, the risk of obsolescence is likely to arise from overexploitation or underexploration. In fact, researchers have empirically found that the CD and BD of ambidexterity are positively related to

firms' internal innovation, new product performance, financial and social performance, and firm performance as a whole (Hahn et al., 2016; Wang et al., 2018). Thus, we argue that the balanced development of exploration–exploitation has a positive impact on the GP of new H&T enterprises.

H5. The BD of ambidexterity is positively associated with the GP of new H&T enterprises.

2.4. The mediating effect of ambidexterity

EB as a creative approach to resource application develops competitive advantages by generating heterogeneous resource bundles and forming innovative superior factors (Peteraf, 1993) from which the exploratory process is equipped (Zhu, 2015). Through continuous application, EB facilitates efficient resource utilization and generates heterogeneity and sustains competencies. The exploratory and exploitative processes stimulated by EB may complement and reinforce each other, as both generate competitive advantages simultaneously, ultimately leading to favorable growth. However, the imbalance between the disparate processes is likely to offset the favorable performance resulting from the add-up value provided by these processes since either underexploration or overexploration can do harm to firm performance. Thus, we argue that the CD and BD of ambidexterity mediate the positive association between EB and new venture growth.

H6. The CD of ambidexterity mediates the relationship between EB and the GP of new H&T enterprises.

H7. The BD of ambidexterity mediates the relationship between EB and the GP of new H&T enterprises.

Fig. 1 shows the conceptual framework for this research based on the hypotheses mentioned above.

3. Methodology

3.1. Development of the research instrument

We measured EB using a five-point Likert scale adapted from the eight-item scale developed by Senyard and Steffens (2011) that ranges from “strongly disagree” = 1 to “strongly agree” = 5. The two sample items are, “We handle new challenges by processing existing resources and gaining a competitive price,” and “When facing new challenges, we process existing resources to obtain a solution.” The CD and the BD of ambidexterity can be calculated using exploration and exploitation as follows:

$$CD = \text{Exploration} \times \text{Exploitation} \quad (1)$$

$$BD = Y - |\text{Exploration} - \text{Exploitation}| / (\text{Exploration} + \text{Exploitation}) \quad (2)$$

As the gap between exploration and exploitation represents the extent of (im)balance between these two facets, we determined the degree of (im)balance by calculating the discrepancy between exploration and exploitation using a value that was sufficiently large to

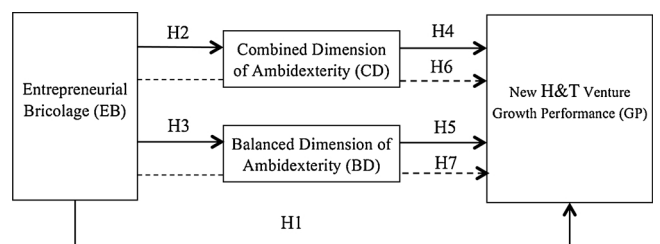


Fig. 1. Proposed Theoretical Model.

Table 1
Confirmatory factor analysis and construct validity.

	Factor Loading	Cronbach's alpha	CR	AVE	P Value
Entrepreneurial Bricolage		0.884	0.893	0.513	
Confident to find solutions with existing resources.	0.622				***
Utilize existing resources to face challenges readily.	0.599				***
Use existing available resources to process new problems effectively.	0.692				***
Handle new challenges from existing and competitive resources.	0.677				***
Explore new solutions positively.	0.731				***
Address new barriers from processing existing resources.	0.741				***
Process existing resources to obtain solution project.	0.799				***
Process and wield existing resources that are planned for other aspects.	0.730				***
Exploration		0.813	0.843	0.574	
Develop new products or services.	0.712				***
Expand our product range.	0.761				***
Develop new market.	0.712				***
Introduce new technology.	0.708				***
Exploitation		0.819	0.872	0.578	
Improve the existing quality of products or services.	0.732				***
Elevate the flexibility of our existing products or services.	0.694				***
Diminish the cost of existing products or services.	0.618				***
Reduce the material consumption in the process.	0.653				***
Improve the output or rendering more services.	0.766				***
Growth Performance		0.886	0.918	0.788	
Pre-tax profit growth rate.	0.821				***
Revenue growth rate.	0.871				***
Market share growth rate.	0.857				***

Note: ***P < 0.001, the Cronbach's alpha coefficients of this questionnaire is 0.914, N = 345.

subtract the quotient of the absolute value of discrepancy divided by the sum of exploration and exploitation. Additionally, we measured exploration and exploitation using He and Wong's (2004) nine-item scale in the questionnaire, with four items measuring exploration (e.g., "We put efforts into developing new products or services") and five items measuring exploitation (e.g., "We keep improving the existing quality of products or services"). Regarding the GP of new H&T ventures, respondents were asked to assess firms' financial situations compared with those of their competitors using scales developed by Chandrasekaran et al. (2012). Sample scale items included, "Our pre-tax profit growth rate is at a higher level than our competitors," and "Our revenue growth rate is at a higher level than our competitors." The items were translated into Chinese, and back-translation was used to check the accuracy of the survey text (Soriano and Foxall, 2002). All the constructs and their respective items are described in Table 1.

3.2. Sampling and data collection

Before the survey, we conducted a pilot test with a small snowball sample to examine the reliability and validity of the questionnaire and to refine the scale items (Fu et al., 2016). During this process, 41 questionnaires were distributed, and 40 valid questionnaires were returned. The reliability and validity were tested using factor analysis and composite methods. No items were dropped, and the accuracy and effectiveness were ensured for further surveying.

After the pilot study, we used a paper-and-pencil questionnaire survey and an online questionnaire to test the hypotheses in a sample of new ventures in the H&T sector in China. We sampled enterprises that were less than eight years old (Peng et al., 2013). Online surveys were delivered to the entrepreneurs of enterprises targeted beforehand, using the snowball technique to collect more responses. We also collected offline data at three famous tourism destinations—Xing Ping Town, Yang Shuo County, and Da Yan Town—where H&T entrepreneurship is very active.

140 online and 404 offline questionnaires were collected. In total, 345 valid questionnaires were returned and used for further analysis. Among these questionnaires, 153 were from ventures established for less than three years, 116 from three- to five-year-old ventures, and 76

from five- to eight-year-old ventures. Furthermore, 288 questionnaires were from ventures with no more than 50 staff, 33 from ventures with 51–100 staff, 21 from ventures with 101–500 staff, and 3 from ventures with 500 staff and more.

3.3. Analysis

The reliability of all the constructs was tested using both Cronbach's alpha and composite reliability methods. The Cronbach's alphas of all the constructs surpassed the acceptable level of 0.70, ranging from 0.81 to 0.89. Additionally, the composite reliability surpassed the satisfactory level of 0.50, ranging from 0.84 to 0.92 (Hair et al., 1995). Therefore, all the constructs had good reliability. The detailed items with their respective reliability results are presented in Table 1. Factor analysis was then used to test the convergent validity of the constructs. As shown in Table 1, all the measurement items with factor loading scores greater than 0.5 were loaded on their respective constructs. The average variance extracted (AVE) values surpassed the cut-off value of 0.5. Thus, we can conclude that all the constructs in this study had good convergent validity.

Furthermore, we examined the discriminant validity through the correlation coefficients of the constructs (see Table 2), which were all far below 0.85 (Kline, 2015). The squared correlations of the respective pairs of constructs were lower than the respective AVEs, indicating that the measurement model had good discriminant validity (Preacher and Hayes, 2004). Therefore, the scale reliability and the validity of the

Table 2
Correlation analysis and discriminant validity of constructs.

	Entrepreneurial Bricolage (EB)	Exploration Ability (ER)	Exploitation Ability (EI)	Growth Performance (GP)
EB	(0.716)			
ER	.447**	(0.757)		
EI	.522**	.602**	(0.760)	
GP	.409**	.469**	.380**	(0.888)

Notes: ** P < 0.01, N = 345.

Table 3
Descriptive statistics and correlation analysis of variables.

Variable	Mean	SD	EB	CD	BD	GP	Age	Scale
Entrepreneurial Bricolage (EB)	3.91	0.509	1.000					
Combined Dimension of Ambidexterity (CD)	16.40	22.549	.543**	1.000				
Balanced Dimension of Ambidexterity (BD)	0.43	0.004	.149**	.411**	1.000			
Growth Performance (GP)	3.43	0.571	.409**	.475**	.228**	1.000		
Age	1.78	0.616	-.060	-.112*	-.020	-.029	1.000	
Scale	1.24	0.359	-.037	-.018	.148**	.156**	.184**	1.000

Notes: ** P < 0.01, * P < 0.05, N = 345.

questionnaire content were ensured.

4. Findings

4.1. Descriptive statistical analysis and coefficient matrix

Prior to model construction, we used SPSS to obtain descriptive statistics for, and conduct correlation analysis of, our variables of interest. The correlation between EB and GP was significantly positive ($r = 0.409, P < 0.01$). Furthermore, EB was positively related to the CD of ambidexterity ($r = 0.543, P < 0.01$), and the CD of ambidexterity positively predicted GP ($r = 0.475, P < 0.01$). Also, the correlation between EB and the BD of ambidexterity was significantly positive ($r = 0.149, P < 0.01$), and the BD of ambidexterity was significantly related to GP ($r = 0.228, P < 0.01$). These results offered initial support for H1–H5. Our results are presented in Table 3.

4.2. The direct effects of EB on the CD and the BD of ambidexterity

The coefficient analysis addresses H1–H5 by revealing the correlations between EB, combined ambidexterity, balanced ambidexterity, and GP. However, the role each variable plays within a model, and how the variables work as a mechanism are not clear. Specifically, the mediating roles of combined and balanced ambidexterity, as stated in H6 and H7, have not been explored. To further test our hypotheses, we used hierarchical regression analysis (Baron and Kenny, 1986) to provide precise results.

We first tested the effects of EB on the combined and balanced dimensions of ambidexterity. As observed in Table 4, Model 1 indicates that only age, as one of the control variables, had a significant effect ($F = 2.18, P < 0.05$) on CD. After inserting EB into the regression model, we found EB presented a stronger positive effect in Model 2 ($F = 49.07, P < 0.001$). On the other hand, Model 3 indicates that only scale, one of the control variables, had significant effect ($F = 4.21, P < 0.01$). After inserting EB into the regression model, a stronger positive effect was also found in Model 4 ($F = 49.07, P < 0.001$). Thus, it is indicated that EB can well explain the variances in BD and

CD. The values of R^2 and Adjusted R^2 of Model 2 and Model 4 are much larger than those in Model 1 and Model 3, respectively, indicating that the alternative models (Model 2 and Model 4) present a better fit than Model 1 and Model 3. Specifically, in Model 2, the regression coefficient of EB on CD was significantly positive ($\beta = 0.539, P < 0.001$) with controls for age and scale. Thus, H2 was supported. In Model 4, the regression coefficient of EB on BD was significant and positive ($\beta = 0.153, P < 0.01$) with controls for age and scale. Thus, H3 was also supported.

4.3. The main effect of EB on GP

To test the effects of EB on firm GP, we first analyzed the relationship between the control variables (i.e., age and scale) and GP with Model 5. Next, we inserted EB into the regression model and analyzed the influence of EB on GP (Model 6). As we can see in Table 4, Model 5 indicated that the control variables had significant effects ($F = 4.88, P < 0.01$) on GP. After inserting EB into the regression model, we found that Model 6 indicated a more significantly positive coefficient ($\beta = 0.414, F = 28.08, P < 0.001$), and the values of R^2 and Adjusted R^2 are significantly larger than the values in Model 5, meaning that Model 6 had a better fit than Model 5. Thus, H1 was supported.

4.4. Mediating effects analysis

In the third stage of analysis, we tested mediating effects by replacing EB with CD and BD, respectively, resulting in regression Models 7 and 8. Thereafter, we reinserted EB and CD into the regression model to form Model 9 and re-inserted EB and BD into the regression model to form Model 10. As shown in Table 4, the F values from Models 7 to 10 are all significant ($P < 0.001$), and compared with Model 5, the R^2 values and Adjusted R^2 values of the five alternative models (Model 6–Model 10) are significantly larger. The larger values of R^2 and Adjusted R^2 in Model 6–10 indicate that adjusted models have a significantly better fit than Model 5. In Model 7, the regression coefficient between CD and GP was significantly positive ($\beta = 0.477, P < 0.001$) after

Table 4
Hierarchy regression analysis.

	Combined Dimension of Ambidexterity			Balanced Dimension of Ambidexterity			Growth Performance			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Constant	17.587***	3.113*	.421***	.365***	3.270***	1.501***	1.934***	2.245***	1.324***	.873**
Age	-.113*	-.083	-.048	-.040	-.060	-.037	-.006	-.050	-.008	-.031
Scale	-.003	.018	.156**	.161**	.167**	.178***	.165***	.134*	.172***	.155**
Entrepreneurial Bricolage		.539***		.153**		.414***			.221***	.391***
Combined Dimension of Ambidexterity							.477***		.357***	
Balanced Dimension of Ambidexterity								.207***		.146**
R^2	.013	.302	.024	.047	.028	.198	.253	.070	.287	.218
ΔR^2	-	.289	-	.023	-	.170	.225	.042	.259	.190
Adjusted R^2	.007	.295	.018	.039	.022	.191	.246	.061	.279	.209
F	2.18	49.07***	4.21*	5.64***	4.88**	28.08***	38.46***	8.50***	34.26***	23.75***

Notes: *** P < 0.001, ** P < 0.01, * P < 0.05, N = 345.

Table 5
Robustness check of mediating effects.

Model	Product of coefficients		Bootstrapping bias-corrected 95% CI	
	Point Estimate	SE	Lower	Higher
Indirect effects				
Combined Dimension of Ambidexterity	.207	.039	.136	.290
Indirect effects				
Balanced Dimension of Ambidexterity	.027	.014	.007	.066

Notes: 5000 Bootstrap samples, Model = 4, N = 345.

controlling for the effects of age and scale. Thus, H4 was supported. In Model 8, the regression coefficient between BD and GP is significant and positive ($\beta = 0.207$, $P < 0.001$) after controlling for the effects of age and scale. Thus, H5 was supported.

Finally, Models 9 and 10 are obtained after EB and CD, EB and BD, respectively, were re-inserted into the regression model. The regression coefficients of EB in Model 9 ($\beta = 0.221$, $P < 0.001$) and in Model 10 ($\beta = 0.391$, $P < 0.001$) are lower than the coefficient in Model 6 ($\beta = 0.414$, $P < 0.001$), indicating that CD and BD partially mediated the relationship between EB and the GP of new H&T enterprises. Thus, H6 and H7 were supported.

4.5. Robustness check of CD and BD as mediators

Hierarchical regression analysis can continue only if the relationships between the independent variables and the dependent variable are significant (Edwards, 2019). On this condition, the inspected mediating effect can only be a partial mediating effect (Iacobucci, 2008). To ensure the validity of the ambidexterity structure's mediating effects, we used bootstrapping to perform a mediating test (Preacher and Hayes, 2004). The results are shown in Table 5. Both mediating variables, CD (0.136, 0.290) and BD (0.007, 0.066), had a significant mediating effect; the values were 0.207 and 0.027, respectively. Thus, the results of the mediating test in the hierarchy regression analysis were robust. H6 and H7 were supported.

5. Conclusions

New H&T ventures suffer from the liability of newness as start-ups and face challenges related to the liability of smallness due to industrial characteristics. Scholarly interpretation of how new H&T ventures can break through resource constraint is necessary. By introducing EB and ambidexterity into the H&T sector, we bridge the gap between entrepreneurship research and H&T research and provide insights into H&T entrepreneurship. Additionally, this research used Chinese samples, providing a view of how EB and ambidexterity work in the H&T industry in emerging economies. Entrepreneurship has contributed to China's rapid economic growth (He et al., 2019). However, new ventures face challenges related to constraints in finance because of the banking system and from those in the business environment resulting from the institutional regime (Ahlstrom and Ding, 2014). Exploring bricolage and ambidexterity in such a dynamic environment provides insights into how developing economies can grow via new venture creation. Our efforts extend the literature of bricolage and ambidexterity in entrepreneurship within developing economies.

Results indicate that EB has a significantly positive effect on the GP of new H&T ventures, with ambidexterity playing a mediating role. Specifically, the mediating effects of combined and balanced ambidexterity are examined in the relationship between bricolage and entrepreneurial growth, showing that combined and balanced

ambidexterity both positively mediate the effect of EB on the GP of new H&T ventures. Results also demonstrate that ambidextrous capability can partially mediate the relationship between EB and firm performance. Our research fills a gap in the H&T and entrepreneurship literature and offers insights for future EB research.

Our results suggest that the influence of EB on new ventures can be extended to the H&T sector. de Klerk (2015) and Carlsson-Wall and Kraus (2015) found that EB cultivates new ventures' competitive advantages and increases their innovation performance. The links between bricolage and growth performance in the H&T sector are in line with evidences from other research that new ventures employed bricolage strategy experience higher growth (Tasavori et al., 2018; Yu et al., 2019). The findings are also consistent with Zhu's (2015) argument that the higher the level of EB capability embodied by a new venture, the better performance can be achieved. Additionally, our finding that ambidexterity has a positive effect on new venture GP is consistent with existing research findings that ambidexterity positively affects corporate financial performance and innovation performance (Govindarajan and Trimble, 2005; Tushman et al., 2010). This study also addresses a gap, in which the roles of the different dimensions of ambidexterity- the combined and balanced dimensions- remain rather underexplored, by examining combined and balanced ambidexterity and providing a further understanding of ambidexterity in entrepreneurship. This study thus responds to Cao et al.'s (2009) call for an in-depth exploration of ambidexterity's structure.

5.1. Theoretical implications

Our research contributes to the strategic management research, entrepreneurship research and more specifically H&T literature in several ways. First, we establish a comprehensive theoretical model that incorporates EB, ambidexterity, and new venture growth to explain the underlying mechanism of EB's influence on new ventures' GP, which is an important contribution furthering EB theory. By exploring the underlying mechanism of how EB influences new H&T ventures' GP, our research advances Senyard et al.'s (2010) progress, indicating that the innovative application and allocation of limited resources play critical roles in achieving entrepreneurial success. This research extends the existing literature by providing evidence of how EB influences the performance of new H&T ventures (An et al., 2018b; Carlsson-Wall and Kraus, 2015; Senyard et al., 2010).

Second, we introduce the mediating role of ambidextrous capability in the relationship between EB and performance and further identify the roles of ambidexterity structure in terms of combined and balanced dimensions. Although Cao et al. (2009) proposed that different dimensions of ambidexterity have different characteristics and impacts on firm performance, research has rarely explored the effects of ambidexterity from this perspective. By investigating both the add-up value and the balance of the exploration and exploitation processes, this research demonstrates how combined and balanced ambidexterity influence new H&T venture growth and mediate the effects of bricolage on new H&T venture growth. Consequently, this study responds to Cao et al.'s (2009) call for in-depth exploration of the structure of ambidexterity, filling a gap in the research and enriching the theories of bricolage and ambidextrous capability.

Third, by employing ambidexterity as a mediator, this study demonstrates that bricolage, as an innovative means of resource allocation with limited resources, is a determinant of the ambidextrous capability of new ventures. Our findings are consistent with An et al. (2018b), who found that bricolage encourages opportunity exploration in entrepreneurship. This research advances the research frontier of ambidexterity by providing a key antecedent following Gibson and Birkinshaw's (2004) and Chandrasekaran et al.'s (2012) studies, which investigated the determinants of organizational ambidexterity from an intermediate perspective.

Fourth, our study contributes to entrepreneurship literature by

providing evidence in the context of H&T. New H&T ventures suffer from the liability of newness as start-ups, while also facing challenges related to the liability of smallness due to the tradition of micro-entrepreneurship in the H&T industry (Getz and Carlsen, 2000). However, investigations into the mechanism of how new ventures employ effective resource allocation to achieve success in the H&T industry are very limited. Scholarly interpretation of how new H&T ventures address the dilemma of resource constraint is desperately needed. By introducing EB and ambidexterity into the H&T sector, we bridge the gap between entrepreneurship research and H&T research, providing insights into H&T entrepreneurship. Although this study focuses on H&T entrepreneurship, our findings can be generalizable to other contexts. Specifically, EB as a means to address resource constraint and its impacts through ambidexterity structure can enlighten entrepreneurship research to other contexts.

5.2. Managerial implications

Our study offers important practical implications for new ventures in the H&T industry, and may also be applicable to firms in a wide entrepreneurship context. First, small and medium businesses, especially those in entrepreneurship, are prone to failure because of hardships related to financing and resource accumulation. Our findings suggest that these ventures can engage in bricolage to achieve effective resource allocation to address external changes and develop competitive advantages. Effective resource allocation is strategically important for entrepreneurs in new venture development. Our research offers the insight that new ventures can develop ambidexterity as a competitive advantage through EB, helping them to increase their GP and achieve success.

Second, by proposing the mediating role of ambidexterity, we reveal that mere exploration or exploitation is not enough for a new H&T venture to survive and succeed. Overexploitation can result in core rigidity and stagnation, while overexploration can result in new H&T ventures facing increased risks of uncertainty and turbulence. Combining the application of exploration and exploitation and achieving a balance between them are important for new H&T ventures, as this combination and balance can provide critical competitive advantages related to gaining success and solving the challenge of limited resources leading to reduced competitive advantages. These results may also be applied to the new ventures with resource constraint in other industries.

Third, this research suggests the influential role of ambidexterity structure in terms of combined and balanced ambidexterity. Our findings suggest that balanced ambidexterity is more beneficial than combined ambidexterity for new H&T ventures since balanced ambidexterity has a more significant effect on GP. However, the results also demonstrate that combined ambidexterity may be easier to develop through bricolage since EB has a more significant effect on combined ambidexterity than on balanced ambidexterity. In this case, we suggest that new ventures in H&T pay attention to combined and balanced ambidexterity and consciously improve balanced ambidexterity when engaging in bricolage to achieve growth.

6. Limitations and future research

Although our findings contribute to the literature, the study has certain limitations. First, the sample of the study was restricted to small part of China. Although, the findings of this study are consistent with the previous literature that used non-China samples, the findings of this study may not be generalized to other geographical contexts. Second, the study used cross-sectional data, but the causality of our theoretical model would have been better identified using longitudinal data. Future research could verify our model through longitudinal analysis. Third, GP in our research was measured using the respondents' evaluations rather than public financial reports, as most of the ventures of

interest were non-listed and financial data were not available publicly. For a more convincing conclusion, future research could verify our hypotheses with data from listed enterprises. Finally, other variables might mediate the relationship between EB and GP. Future research could explore these mediating variables further. Moreover, future research could consider additional entrepreneurship scenarios outside the H&T context.

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