

# The Relationship between Learning Orientation and Dynamic Capability based on Environmental Education

Xin He <sup>1</sup>, Shi-Zheng Huang <sup>2\*</sup>, Kou Zhao <sup>1</sup>, Xia Wu <sup>1</sup>

<sup>1</sup> School of Management, Lanzhou University, Lanzhou, Gansu, CHINA

<sup>2</sup> School of Economics and Management, Guangdong University of Petrochemical Technology, Maoming, CHINA

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## ABSTRACT

In the knowledge-based economy era, new firms need dynamic capability to adapt to the rapidly changing environment with increasing uncertainties in the competitive environment. A lot of researchers concern about the significant effects of knowledge accumulation on capability enhancement, systematic research on the effect of organizational learning on dynamic capability is still short. With questionnaire survey, 223 enterprises established within the past 8 years are selected as the research subjects for exploring the relationship among learning orientation, ambidextrous learning, and dynamic capability as well as testing the moderation effect of environmental uncertainty. The results reveal positive effects of learning orientation on dynamic capability, partial mediation of exploratory learning (exploitative learning) on learning orientation to dynamic capability, and moderated-mediation of environmental uncertainty on the exploratory learning (exploitative learning) to learning orientation-dynamic capability. The research proves the function of learning orientation to dynamic capability and provides beneficial inspiration for new firms promoting dynamic capability.

**Keywords:** new firm, learning orientation, ambidextrous learning, dynamic capability, environmental uncertainty

## INTRODUCTION

In the knowledge-based economy era, the increasing uncertainties in the competitive environment have new firms with short resources and insufficient competence encounter greater challenge (Goodman, 2011). For the survival, new firms stress on learning and innovation and the dynamic capability and development speed are higher than general enterprises. The organizational competence promoted through creative learning would affect the overall competitive advantage through product, process, and service innovation. Researchers proposed that an enterprise could absorb new knowledge through internal/external learning to enhance other capabilities (Christensen, 1995; Clammer, 2009; Drucker, 1985). It is a practice difficulty in new firms' survival and continuous development to accumulate knowledge, update knowledge, and construct the core competence. It is also the research focus in academia.

Teece and Pisano (1994) proposed dynamic capability as a key source of an enterprise forming competitive advantages (Teece, Pisano, & Shuen, 1997). Teece (1997) defined dynamic capability as the ability of an enterprise integrating, establishing, and reconstructing internal/external resources. Current research on dynamic capability focuses on two dimensions, including the effect of dynamic capability on corporate performance or competitive advantage (Fainshmidt, Pezeshkan, Lance Frazier, Nair, & Markowski, 2016; Teece, 2007; Zott, 2003) and the effects of entrepreneurial orientation, strategic orientation, and knowledge or relationship network on dynamic capability (Blyler & Coff, 2003; Helfat & Peteraf, 2015; Hodgkinson & Healey, 2011; Monteiro, Soares & Rua, 2017). Nevertheless, learning orientation is normally informal and non-linear in new firms and does not construct a system or is incomplete among other variables. Current research does not completely explain the dynamic capability

#### Contribution of this paper to the literature

- A new firm should devote to constructing the organizational culture with common vision, open mind, and commitment to learning and broadly spread such learning culture into individuals, teams, and the organization to enhance the dynamic capability.
- Exploratory learning and exploitative learning behaviors are affected by internal learning atmosphere of a new firm, i.e. learning orientation.
- A learning-oriented organizational culture is mediated by ambidextrous learning to enhance a new firm's dynamic capability.

construction process, and the effect of learning orientation on corporate dynamic capability has not obtained a systematic theory and empirical study.

It is expected to complete the theoretical influence mechanism on new firms' dynamic capability, enrich the practice of organizational learning theory under different cultural background, and provide practical reference for new firms, under the situation in China, promoting dynamic capability through learning.

## LITERATURE REVIEW AND THEORETICAL HYPOTHESIS

### Effects of Learning Orientation on Dynamic Capability

Learning orientation, being an important learning value and culture, is a primary drive of organizational learning behaviors and affects the capability of an organization absorbing, integrating, and creating resources (Baker & Sinkula, 1999; Guàrdia, Freixa, Peró, Turbany, Coscolluela, Barrios, & Rifà, 2006). Some researchers also study the effects of learning orientation on organizational performance or new firms' competitive advantage through the mediation effects of knowledge innovation, team trust, product innovation, and knowledge integration (Baba, 2015; Haryanto, Haryono, & Sawitri, 2017; Huang & Li, 2017; Mahmoud & Yusif, 2012; Sikora, Nybakk, & Panwar, 2016; Wu, Tsai, & Tai, 2016).

Learning organization theory indicated that an enterprise had to enhance the innovation capability through constantly learning for the long-term survival and development under the competitive environment with high uncertainties (Çömlek, Kitapçı, Çelik & Özşahin, 2012; Guàrdia et al., 2006). Zollo and Winter (2002) regarded dynamic capability as the result of learning mechanism. In comparison with other enterprises, new firms encountered more uncertainties and the acquisition of knowledge and resources required organizational loop learning; the learning-oriented cultural atmosphere therefore became extremely important for new firms (Hung, Yang, Lien, Mclean, & Kuo, 2010). To fulfill the development, new firms had to absorb and cultivate new knowledge through commitment to learning, allowing the employees sharing the responsibility with the enterprise through organizational vision, advancing the devotion, and contributing new ideas with creative and open mind to enhance the capability of the organization adapting to external environment (Gomes & Wojahn, 2017).

Managers and employees of new firms, from dynamic aspect, integrate resources to enhance the organizational learning ability and the capabilities of sensing external environment changes and coping with risks. In fact, learning orientation drives an enterprise actively pursuing new knowledge and challenging current situations to enhance the innovation capability. The above analyses reveal the critical function of learning orientation for an enterprise keeping matching with dynamic environment (Sirmon, Hitt, & Ireland, 2007). Consequently, it is considered in this study that learning-oriented cultural atmosphere in an organization might benefit the enterprise acquiring and promoting dynamic capability. Especially, rooted learning orientation might assist new firms, which present insufficient resources and capability, in the continuous survival in the uncertain environment. The following hypothesis is therefore proposed in this study.

**H1:** New firms' learning orientation presents positive effects on dynamic capability.

### Effects of Learning Orientation on Ambidextrous Learning

March (1991) first proposed the balance of exploitative learning and exploratory learning when studying the problems of organizational adaptability and development. Exploratory learning was the learning behavior of new knowledge trial and test; exploitative learning, on the other hand, was the learning behavior to conclude and sublimate existing knowledge in the organization, i.e. deepening the knowledge which presented significant meaning on the survival of the organization. Research revealed that a learning-oriented organization with common vision, open mind, and commitment to learning would show the following characteristics. The members presented common vision to induce the learning intention to further expand the ambidextrous learning (exploitative learning, exploratory learning) of the enterprise; and, open mind would advance the internal communication & exchange

and mutual correction in the organization (Baker & Sinkula, 1999; Mahmoud, Blankson, Owusu-Frimpong, Nwankwo, & Trang, 2015).

The development of ambidextrous learning and the function is affected by learning orientation. An enterprise could make progress through learning and even create innovative changes (Lin, Peng, & Kao, 2008; Maggioni & Roncari, 2009). When learning orientation enhances an enterprise thoroughly utilizing the knowledge and resources for learning, it also promotes the exploratory learning (Swart, Kinnie & Lund, 2007). Exploratory learning stresses on the acquisition of new knowledge and reflects the intention of an enterprise constantly seeking for new knowledge and challenge (Kaya & Patton, 2011). Research discovered that learning orientation had enterprises stress more on exploratory learning and encourage organizational members "thinking outside a box" (Baker & Sinkula, 1999). With limited resources and capability, a new firm might pay more attention to the development of exploratory learning. Accordingly, the following hypotheses are proposed in this study.

**H2a:** New firms' learning orientation shows positive effects on exploratory learning.

**H2b:** New firms' learning orientation reveals positive effects on exploitative learning.

### Ambidextrous Learning as Mediator

Research showed that exploratory learning and exploitative learning could remarkably enhance the dynamic capability of an organization (Easterby-Smith & Prieto, 2008). Dröge, Claycomb, and Germain (2003) proved that learning orientation would enhance organizational learning and further advance new firms more effectively allocating resources and constantly enhancing knowledge management capability. Learning orientation was a key factor in organizational learning as well as the capability to affect an organization absorbing, integrating, and creating resources. Teece and Leih (2016) indicated that dynamic capability required the accumulation of organizational learning, but could not directly acquire externally. Learning was the major mechanism to create and develop dynamic capability (Zollo & Winter, 2002), which was developed through repeated practice, records, mistakes, continuous learning, and experience accumulation.

In comparison with mature enterprises, new firms' ambidextrous learning appears more remarkable effects on organizational resources and capability. On one hand, the exploration and exploitation of external knowledge present extremely importance on new firms' promotion of existing resources and recreation of new resources. On the other hand, the characteristic of "new" reflects that existing knowledge of a new firm might not be able to satisfy the current development, but require the information and technology acquired through ambidextrous learning for transforming into organizational resources. It is considered in this study that learning orientation affects dynamic capability with ambidextrous learning as the mediator and the mediation effect of new firms' ambidextrous learning is significant. The following hypotheses are therefore proposed in this study.

**H3a:** Exploratory learning appears mediation effects between new firm learning orientation and dynamic capability.

**H3b:** Exploitative learning presents mediation effects between new firm learning orientation and dynamic capability.

### Moderation of Environmental Uncertainty

Environmental uncertainty refers to the unstable state of the external environment in which an enterprise is. Uncertain environment refers to fiercely external competitive environment and constantly changing customer needs (Teece, 2007). In the research on the root and mechanism of organizational learning, a lot of researchers regarded the changes of external environment as the cause of an enterprise' learning behavior that external environment was a key factor in organizational learning. An organization would reduce the learning intention and behavior when the environment is relatively stable, but enhance with increasing environmental uncertainty. High-level environmental uncertainty has the survival and development of an enterprise become more difficult that the enterprise has to make more efforts to enhance the dynamic capability so as to cope with such test. Under low-level environmental uncertainty, an enterprise with learning-oriented cultural atmosphere might not be aware of threats from the environment to keenly sense external opportunities and pay attention to the promotion of capabilities. For this reason, the following hypotheses are proposed in this study.

**H4a:** Environmental uncertainty shows positive moderation between learning orientation and dynamic capability.

**H4b:** Environmental uncertainty reveals positive moderation between learning orientation and exploratory learning.

**H4c:** Environmental uncertainty appears positive moderation between learning orientation and exploitative learning.

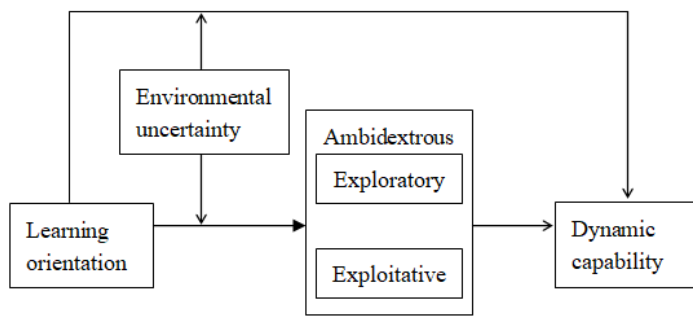


Figure 1. Theoretical model

The previous hypotheses infer the mediation effects of exploratory learning and exploitative learning between learning orientation and dynamic capability; meanwhile, environmental uncertainty positively advances the effect of learning orientation on ambidextrous learning and dynamic capability. In this case, it is necessary to test whether the mediation effect of ambidextrous learning on learning orientation→dynamic capability is moderated by environmental uncertainty. The following hypotheses are further proposed in this study.

- H5a:** Environmental uncertainty presents moderated-mediation on exploratory learning between learning orientation and dynamic capability.
- H5b:** Environmental uncertainty shows moderated-mediation on exploitative learning between learning orientation and dynamic capability.

## RESEARCH DESIGN

### Research Sample and Data Collection

The research data are acquired from new firms, which are established within 8 years, in the eastern, western, and central China, and the top and middle managers are surveyed with the questionnaire. Total 400 copies of questionnaire are distributed, and 256 copies are collected. Deducting 33 copies with incomplete information, 223 valid copies are retrieved, with the retrieval rate 55.75%. Among the 223 enterprises, the firm size shows 10.31% with 1-10 employees, 16.14% with 11-50 employees, 12.56% with 51-100 employees, and 60.99% with more than 100 employees. The firm age reveals 3.14% enterprises being established within 1 year, 13.00% in 1-3 years, 15.70% in 3-5 years, and 68.16% in 5-8 years. The industry belonged shows 35.00% of manufacturing, 10.31% of information transmission, software and information technology service, 15.70% of finance, 3.60% of transport, warehouse, and post, 6.73% of wholesale and retail, 7.17% of building, 2.70% of real estate & accommodation and food service, and 16.09% of others.

### Measurement of Variable

The questionnaire in this study is developed by referring to previous theories and relevant literatures. For the conscientiousness, 30 enterprises are selected for the questionnaire pretest to ensure the accuracy, adaptability, and convenience. The formal questionnaire is completed after repeatedly revising unsuitable semantic meanings. The questionnaire is measured with Likert 5-point scale and contains four dimensions of learning orientation, ambidextrous learning, dynamic capability, and environmental uncertainty. The operational definitions and measurement of variables in the research structure as well as the reference for research scales are explained as below.

The measurement of learning orientation combines the scales developed by Sinkula et al. (1997) and Farrell and Mavondo (2004), including three dimensions of commitment to learning, common vision, and open mind. Each dimension contains 3 questions and the Cronbach'  $\alpha$  coefficient of the scale appears 0.858. The measurement of exploratory learning and exploitative learning combines the scales developed by Atuahene-Gima and Murray (2007) and Su, Li, Yang, and Li (2011), and 3 questions are adopted. The Cronbach'  $\alpha$  coefficients of exploratory learning and exploitative learning are 0.760 and 0.841, respectively. Referring to Teece (2007), sensibility, acquisition capability, and reconstruction capability are covered for measuring dynamic capability. Based on the scale developed by Wilden, Gudergan, Bo, and Lings (2013), 12 questions are covered and the Cronbach'  $\alpha$  coefficient presents 0.920. Referring to Miller and Friesen (1983) and Tan and Litschert (1994), two dimensions of dynamic and hostile, total 6 questions, are used for measuring environmental uncertainty. The Cronbach'  $\alpha$  coefficients appear

**Table 1.** Mean, standard deviation, and correlation coefficient matrix of variable

| Variable                    | Mean  | Standard deviation | 1        | 2        | 3        | 4        | 5      | 6       | 7       | 8 |
|-----------------------------|-------|--------------------|----------|----------|----------|----------|--------|---------|---------|---|
| 1 learning orientation      | 3.810 | 0.611              | 1        |          |          |          |        |         |         |   |
| 2 exploratory learning      | 3.550 | 0.762              | 0.594**  | 1        |          |          |        |         |         |   |
| 3 exploitative learning     | 3.528 | 0.751              | 0.489**  | 0.614**  | 1        |          |        |         |         |   |
| 4 dynamic capability        | 3.788 | 0.616              | 0.667**  | 0.707**  | 0.635**  | 1        |        |         |         |   |
| 5 environmental uncertainty | 2.986 | 0.802              | 0.159*   | 0.214**  | 0.243**  | 0.282**  | 1      |         |         |   |
| 6 industry                  | 3.830 | 2.945              | 0.051    | 0.027    | -0.12    | -0.039   | -0.011 | 1       |         |   |
| 7 size                      | 3.240 | 1.063              | -0.215** | -0.238** | -0.198** | -0.204** | 0.001  | -0.102  | 1       |   |
| 8 age                       | 3.490 | 0.838              | -0.071   | -0.068   | -0.109   | -0.076   | -0.085 | -0.140* | 0.635** | 1 |

Note: N=223; \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$  (two-tailed test)

0.764 and 0.799, respectively. Furthermore, the number of employees is generally used for measuring firm size. Enterprises with different sizes would present distinct learning methods. Firm age, firm size, and industry belonged are therefore selected as control variables in this study (Wu, Tsai, & Yeh, 2014).

## EMPIRICAL RESULT AND ANALYSIS

### Descriptive Statistics and Common Method Variance Bias

SPSS23.0 and AMOS24.0 are used in this study for the statistical analyses of data. The mean, standard deviation, and correlation coefficient of variables are shown in **Table 1**, in which the correlation coefficients of learning orientation, exploratory learning, exploitative learning, dynamic capability, and environmental uncertainty appear in 0.16-0.71, achieving the significance. It reveals the moderately positive correlation between various dimensions and dynamic capability.

Harman's single factor method is used for solving the Common Method Variance bias. From the analysis of the entire questionnaire, the first factor, without rotation, explains 35.8% variance, showing that the Common Method Variance bias would not affect the research result.

Confirmatory Factor Analysis is utilized for testing the reliability, convergent validity, discriminant validity, and model fit of the questionnaire to understand the consistency between the hypothesis model and the observed data. The Confirmatory Factor Analysis result reveals the model fit reaching the standard ( $df=1.98$  ( $p < 0.001$ ),  $RMR=0.046$ ,  $CFI=0.910$ ,  $IFI=0.911$ , and  $RMSEA=0.067$ ) that the questionnaire presents better reliability and validity, with good fit.

### Hypothesis Test

#### *Main effect and mediation effect*

Multiple Regression Analysis is used for the test in this study. In **Table 2**, Model 2 reveals the significant effects of learning orientation on dynamic capability ( $r=0.656$ ,  $p < 0.001$ ) that H1 is proved. Model 8 presents the remarkably positive effects of learning orientation on exploratory learning ( $r=0.564$ ,  $p < 0.001$ ) that H2a is supported. Similarly, Model 12 shows the notable effects of learning orientation on exploitative learning ( $r=0.476$ ,  $p < 0.001$ ) that H2b is supported. Model 4 reveals significant coefficients of learning orientation, exploratory learning, and exploitative learning, i.e. partial mediation effects of exploratory learning and exploitative learning on learning orientation and dynamic capability, that H3a and H3b are proved.

**Table 2.** Hierarchical Regression Analysis result

| Variable                | Dynamic capability |           |           |           |           | Exploratory learning |           |           |           |           | Exploitative learning |           |           |           |
|-------------------------|--------------------|-----------|-----------|-----------|-----------|----------------------|-----------|-----------|-----------|-----------|-----------------------|-----------|-----------|-----------|
|                         | Model1             | Model2    | Model3    | Model4    | Model5    | Model6               | Model7    | Model8    | Model9    | Model10   | Model11               | Model12   | Model13   | Model14   |
| control variable        |                    |           |           |           |           |                      |           |           |           |           |                       |           |           |           |
| industry                | -0.054             | -0.079    | -0.016    | -0.037    | -0.073    | -0.072               | 0.014     | -0.008    | -0.004    | 0.000     | -0.141*               | -0.159**  | -0.155**  | -0.152**  |
| size                    | -0.262**           | -0.076    | -0.027    | 0.004     | -0.102    | -0.106               | -0.326*** | -0.166*   | -0.185*   | -0.191*   | -0.220*               | -0.085    | -0.108    | -0.114    |
| age                     | 0.083              | 0.008     | 0.008     | -0.009    | 0.038     | 0.037                | 0.141     | 0.076     | 0.099     | 0.096     | 0.011                 | -0.043    | -0.016    | -0.018    |
| parameter               |                    |           |           |           |           |                      |           |           |           |           |                       |           |           |           |
| learning orientation    |                    | 0.656***  |           | 0.337***  | 0.623***  | 0.602***             |           | 0.564***  | 0.540***  | 0.505***  |                       | 0.476***  | 0.446***  | 0.416***  |
| mediator                |                    |           |           |           |           |                      |           |           |           |           |                       |           |           |           |
| exploratory learning    |                    |           | 0.507***  | 0.357***  |           |                      |           |           |           |           |                       |           |           |           |
| exploitative learning   |                    |           | 0.317***  | 0.246***  |           |                      |           |           |           |           |                       |           |           |           |
| moderator               |                    |           |           |           |           |                      |           |           |           |           |                       |           |           |           |
| environmental certainty |                    |           |           |           | 0.186***  | 0.164**              |           |           | 0.136*    | 0.098     |                       |           | 0.169**   | 0.137**   |
| interaction             |                    |           |           |           |           | 0.111*               |           |           |           | 0.193***  |                       |           |           | 0.163**   |
| R <sup>2</sup>          | 0.049              | 0.456     | 0.565     | 0.635     | 0.489     | 0.500                | 0.068     | 0.369     | 0.387     | 0.421     | 0.059                 | 0.274     | 0.301     | 0.326     |
| ΔR <sup>2</sup>         | 0.036              | 0.446     | 0.555     | 0.625     | 0.477     | 0.486                | 0.055     | 0.358     | 0.373     | 0.405     | 0.046                 | 0.260     | 0.285     | 0.307     |
| F                       | 3.777*             | 45.615*** | 56.396*** | 62.559*** | 41.474*** | 36.009***            | 5.343***  | 31.928*** | 27.413*** | 26.208*** | 4.608**               | 20.547*** | 18.712*** | 17.392*** |

Note: N=223; \*p<.05; \*\*p<.01; \*\*\*p<.001 (two-tailed test)

Bootstrap is utilized for testing the significance of mediation effects. Setting the macro test of 5000 times of mediation effects with Bootstrap, the learning orientation-exploratory learning-dynamic capability Sobel test shows the remarkably indirect effect 0.203 (Z=4.765, p<0.001). It reveals that 95% confidence interval (CI) of above indirect effect is [0.128, 0.296], where 0 is not included. The indirect effect is therefore significant. The learning orientation-exploitative learning-dynamic capability Sobel test appears the indirect effect 0.118 (Z=3.568, p<0.001), achieving the significance. The Bootstrap test shows that 95% confidence interval (CI) of above indirect effect is [0.063, 0.197], in which 0 is not included, that the indirect effect is significant.

### Test of moderation effect

The test result of moderation effect is shown in Table 2. Model 6 presents the remarkable coefficient of the product of learning orientation and environmental uncertainty (r=0.111, p<0.05), showing the notable moderation effect of environmental uncertainty on learning orientation and dynamic capability that H4a is supported. Model 10 reveals the notable coefficient of the product (r=0.193, p<0.001), explaining the significant moderation effect of environmental uncertainty on learning orientation and exploratory learning that H4b is supported. Model 14 presents the remarkable coefficient of the product (r=0.163, p<0.01), revealing the significant moderation effect of environmental uncertainty on learning orientation and exploitative learning that H4c is supported.

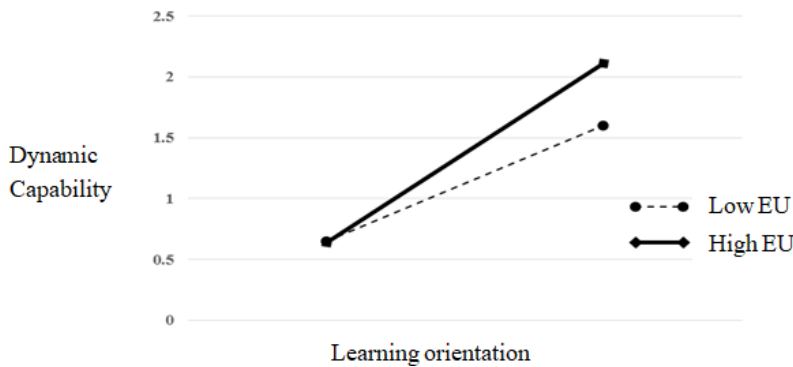
To test moderated-mediation effects, according to the suggestion of Edwards and Lambert (2007), setting the macro test of 5000 times of indirect effects with Bootstrap, the results are shown in Table 3. From Table 3, when environmental uncertainty appears the lower level (mean-1 standard deviation), learning orientation shows notable effects on dynamic capability through exploratory learning (r=0.117, p<0.001). The confidence interval (CI) is [0.040, 0.198], in which 0 is not included. When environmental uncertainty presents higher level (mean+1 standard deviation), learning orientation shows effects on dynamic capability through exploratory learning (r=0.237, p<0.001). The confidence interval (CI) is [0.131, 0.372], where 0 is not included. As a result, in comparison with low-level environmental uncertainty, exploratory learning presents stronger mediation effects between learning orientation and dynamic capability when higher-level environmental uncertainty appears. H5a is therefore supported. Similarly, learning orientation shows remarkable effects on dynamic capability through exploitative learning (r=0.060, p<0.001) when there is lower-level environmental uncertainty (mean-1 standard deviation). The confidence interval (CI) is [0.016, 0.132], where 0 is not included. When the level of environmental uncertainty is high (mean+1 standard deviation), learning orientation presents notable effects on dynamic capability through exploitative learning (r=0.131, p<0.001). The confidence interval (CI) appears [0.060, 0.241], where 0 is not included. It is therefore considered that exploitative learning shows stronger mediation effects between learning orientation and dynamic capability when higher-level environmental uncertainty appears that H5b is supported. To present the mediation effects of exploratory learning and exploitative learning under different environmental uncertainty levels, the relationship between learning orientation and dynamic capability is shown in Figure 2. When exploratory learning and exploitative learning are mediators, the stronger relationship appears between learning orientation and dynamic capability with the higher environmental uncertainty level.



**Table 3.** Mediation effects and the confidence interval of Bootstrap on different moderator standards

|                       | environmental uncertainty | dynamic capability |       |       |       |
|-----------------------|---------------------------|--------------------|-------|-------|-------|
|                       |                           | indirect effects   | SE    | LLCI  | ULCI  |
| exploratory learning  | 2.184                     | 0.117***           | 0.040 | 0.040 | 0.198 |
| exploratory learning  | 2.986                     | 0.175***           | 0.039 | 0.104 | 0.261 |
| exploratory learning  | 3.788                     | 0.237***           | 0.060 | 0.131 | 0.372 |
| exploitative learning | 2.184                     | 0.060***           | 0.029 | 0.016 | 0.132 |
| exploitative learning | 2.986                     | 0.096***           | 0.030 | 0.047 | 0.166 |
| exploitative learning | 3.788                     | 0.131***           | 0.044 | 0.060 | 0.241 |

Note: N=223; \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$  (two-tailed test)



**Figure 2.** Learning orientation and dynamic capability: moderation of environmental uncertainty

## RESEARCH CONCLUSION AND OUTLOOK

### Result Discussion

The theoretical model of learning orientation and dynamic capability in this study is constructed based on organizational learning theory to propose relevant hypotheses, and new firms in China, the developing country, are regarded as the research objects. The research is concluded as followings.

First, learning orientation could effectively drive new firms forming dynamic capability. A new firm should devote to constructing the organizational culture with common vision, open mind, and commitment to learning and broadly spread such learning culture into individuals, teams, and the organization to enhance the dynamic capability. It explains a new firm’s timely sensing external opportunities and risks, grasping opportunities, and timely adjusting and integrating resources. Second, exploratory learning and exploitative learning behaviors are affected by internal learning atmosphere of a new firm, i.e. learning orientation. The cognition of the importance of learning culture could promote an enterprise’s exploratory learning and exploitative learning. Third, a learning-oriented organizational culture is mediated by ambidextrous learning to enhance a new firm’s dynamic capability. For a new firm, exploratory learning presents more significantly positive effects on dynamic capability than the effect of exploitative learning on dynamic capability. It explains the critical effect of exploratory learning on a new firm forming dynamic capability. Fourth, environmental uncertainty positively moderates the relationship between learning orientation and dynamic capability as well as the relationship between learning orientation and exploratory learning, exploitative learning. Moreover, the moderation of environmental uncertainty on the relationship between organizational learning culture and learning behavior is especially remarkable. When external environmental uncertainty appears high level, the ambidextrous learning behavior of an organization is active; otherwise, the ambidextrous learning behavior is inhibited. Research also finds out the moderation of environmental uncertainty on exploratory learning behavior, which is more significant than the moderation on exploitative learning. It might be determined by a new firm’s characteristics. Fifth, the mediation effect of ambidextrous learning between learning orientation and dynamic capability is moderated by environmental uncertainty. When environmental uncertainty is enhanced, the mediation effect of either exploratory learning or exploitative learning is enhanced. Sixth, the survey data reveal that increasing firm size would reduce an organization’s learning orientation, ambidextrous learning behavior, and dynamic capability. It is an important alert for entrepreneurs that organizational learning culture, learning behavior protection mechanism, and dynamic capability should be emphasized when expanding the firm size.

### Theoretical Contribution

The major theoretical contribution of this study is summarized as below. First, organizational learning theory and dynamic capability theory are integrated, and learning orientation and ambidextrous learning are applied to entrepreneurship to explain the effects from learning orientation to dynamic capability that an enterprise should pay attention to the cultivation of learning orientation atmosphere, and develop organizational learning culture. Second, from the aspect of organizational learning, exploratory learning and exploitative learning, as mediators, are included in the model to study the effect of learning orientation on dynamic capability through ambidextrous learning. Sorting out organizational culture and enriching learning orientation and the result as well as the mutual function through the route of organizational behavior driving dynamic capability instruct a new firm constructing the dynamic capability. Finally, new firms are selected as the research objects because they appear larger differences from mature enterprises, under static and dynamic environment. New firms require the support of new resources that environment uncertainty shows larger function on the learning activity and dynamic capability. By introducing environmental uncertainty as the moderator, the empirical analysis reveals the significant moderation of environmental uncertainty to enrich the theoretical model as well as provide theoretical supports of timely, positive, and active exploratory learning and exploitative learning for new firms, under the turmoil environment.

### Research Restriction and Future Outlook

This study presents the following shortage. (1) Although sample structure is taken into account for the selection of samples, the number of effective samples is limited that the research result might exist in bias. (2) Exploratory learning and exploitative learning are taken as mediators for the research on effects on learning orientation and dynamic capability. The result proves partial mediation effects of exploratory learning and exploitative learning between learning orientation and dynamic capability. It implies that there might be other variables with mediation effects between learning orientation and dynamic capability. In this case, successive research should further dig out various potential mediators to more completely disclose the internal mechanism between the two. (3) Environmental uncertainty is regarded as the moderator in this study. The results prove the moderation of environmental uncertainty between learning orientation, ambidextrous learning and dynamic capability. The future research could take environmental uncertainty as the antecedent to study the effect of environmental uncertainty on an organization's learning orientation and dynamic capability. (4) Ambidextrous learning covers individuals, teams, and the organization. This study merely discusses organizational ambidextrous learning. The future research could thoroughly discuss the relationship among learning orientation, ambidextrous learning, and dynamic capability of an enterprise from different aspects to comprehensively understand the effect of learning orientation on dynamic capability in a new firm.

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