# Top Management Team Expansion Study: A New Approach Based on the Team Life Cycle

Bin Xiong<sup>1,\*</sup>, Jinxiang Cai<sup>2</sup>

School of Public Administration, Guangxi University, 530004, Nanning, China;
School of Public Administration, Guangxi University, 530004, Nanning, China.
\*Corresponding Author: Bin Xiong, School of Public Administration, Guangxi University,

Email:xb9873@gxu.edu.cn

#### **Abstract**

The top management team occupies the position at the top of the organizational management hierarchy, is charged with making strategic decisions, and is crucial to the success of the entire business. The study of top management teams has increased dramatically since the publication of the upper echelons theory. The research findings on the relationship between demographic characteristics and their differences and corporate performance, however, lack stability. This is true whether discussing the relationship between the characteristics of the top management team and organizational performance from the perspective of the team's demographic characteristics and their differences or concentrating on the top management team's interaction process to study the mediating role of team process variables between the team's demographic characteristics and strategic decisions and corporate performance. This paper explores a unique research path for the study of top management teams by reviewing the research lineage of these teams, analyzing the shortcomings of previous studies, and proposing a new line of inquiry based on the team life cycle viewpoint.

# **Keywords**

Top management teams, Demographic characteristics, Recessive characteristics, Team life cycle Businesses operate in an increasingly complicated and dynamic external environment in the setting of economic globalization. Businesses are finding it increasingly challenging to manage complicated and unpredictable settings with the knowledge and expertise of a single leader due to the growing competition in the global market. The development of enterprises is led by the Top Management Team (TMT), which is made up of management elites from various departments and fields of enterprises. This has gradually drawn the attention of enterprises and also sparked a boom in academic research on top management teams. This study presents a novel viewpoint on the team life cycle to create an initial debate on the analytical framework of future TMT research, based on a survey of the existing domestic and international TMT research.

# 1. Research lineage of top management team theory

The "Upper Echelons Theory," put forth by Hambrick and Mason in 1984, asserts that the traits and behaviors of the top management team are "reflective" of how well a corporation

Vol 1, No. 5, 2023

performs. The upper echelons theory offers the theoretical groundwork for future TMT research by methodically connecting the demographic traits of TMT to corporate strategic decisions and performance. Since many researchers believe that the recessive characteristics of TMT, such as cognition and values, determine the strategic decision process and organizational performance outcomes, the initial research idea for TMT is focused on these difficult-to-measure recessive characteristics variables. The researchers replace TMT recessive characteristics with TMT demographic characteristics because they are challenging to directly measure, and they conclude that these traits will have an impact on the effectiveness of strategic decisions and, consequently, on the corporation's performance.

This orientation has influenced subsequent researchers, who typically change their research focus to examine the differences in senior executives' functional backgrounds, industries, and tenure within their companies, and how these differences affect strategic decisions and corporate performance. The results of research on the relationship between TMT demographic characteristics and their variability and corporate performance have not been stable (Yuangiong He et al., 2009; West, 2007), but it has been established that there is indeed a potential link between TMT demographic characteristics and enterprise performance (Bantel, 1989). Some academics contend that scenario factors play a role in the shaky association between TMT demographic features and their differences and corporate performance (Hambrick, 2007; Bai Yuntao et al., 2008; Cannella et al., 2008). In their analytical framework, some scholars have taken into account gender, shareholding, external environment, and other moderating factors. The findings of their research have demonstrated that female managers are more likely than male managers to make low-risk strategic decisions (Croson & Gneezy, 2009); executives who hold a particular percentage of shares appropriately can lower agency costs and boost corporate performance (Drakos & Bekiris, 2010); and environmental dynamics can affect corporate performance(Hui Zhang & Qunhui Huang, 2023). Overall, although the inclusion of situational moderating variables has somewhat mitigated some of the drawbacks of the TMT demographic characteristics approach, the research still does not address the TMT psychological characteristics underlying team behavior, and demographic characteristics and their variability are not effective substitutes for the TMT psychological processes (Guanping Cheng, 2008), failing to draw generalizable and more general conclusions.

Of course, some academics have recognized that the relationship between TMT characteristics and corporate performance is more likely to be influenced by team process variables like team conflict, team trust, team communication, team cohesion, etc. than by demographic characteristics variables. These team process variables may have a more direct influence on strategic decisions and corporation performance than demographic characteristics variables. They started to concentrate on TMT interaction processes instead of demographic variables and their variability as a result. Several topics have been covered in studies, including the effect of TMT behavioral integration on corporate performance (Carmeli, 2008), the mechanisms of conflict and trust in strategic decisions (Parayitam & Dooley, 2009), team processes like TMT cohesion and conflict and their impact on performance (Chongqing Wang, & Xuefang Liu, 2007), the internal processes and dynamics characteristics of the TMT (Haifa Sun, et al. 2008); In addition, information exchange mediates between TMT heterogeneity and corporate performance (Roh et al., 2019) and TMT behavioral integration mediates between CEO openness and corporate performance (Yazmina et al., 2017). In general, the research on

TMT traits based on team processes has created a framework of thinking, as illustrated in Figure 1, but further investigation is required.

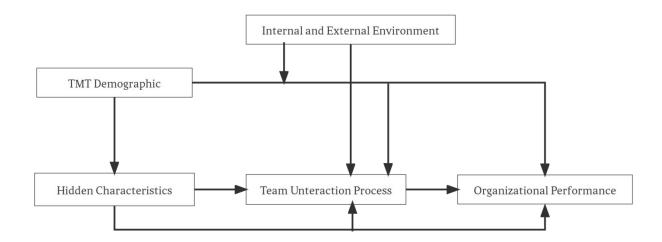


Figure 1: Research framework for TMT characterization based on team process

### 2. The current state of research on team life cycle theory

Life cycle theory has been increasingly incorporated into many traditional management domains since the 1950s, leading to theoretical advancements including business life cycle theory and product life cycle theory[22]. The study of the team life cycle has gradually come to the attention of academics as teams have become an effective organizational paradigm that is widely used in business.

Models such as the "small team development stage" (Tuckman & Jensen, 1977) are the origin of research on the team life cycle. Within this framework, Tuckman and associates separated a group's life cycle into five distinct phases: the organization, shock, regulation, implementation, and disintegration phases. Since then, some academics from both home and abroad have conducted additional, focused research on the team life cycles from team kinds like virtual teams, research teams, and project teams, respectively. The team life cycle stages are typically divided into four phases: the formation period, the shock period, the regulation period, and the implementation period. This is because subsequent researchers essentially came to the same conclusion that we study teams primarily during the survival period and do not need to take into account the status of the team dissolution stage.

Due to the relative lag in the team life cycle theory study, the theory has not been widely used in team management and practice, and TMT research based on the team life cycle perspective has been dispersed in a small number of literature. Some researchers have examined the development of corporate TMT from the perspective of the team life cycle and have proposed a conceptual model of each stage of the corporate TMT evolution process that is directed to the life cycle(Bing Liu, and Louise Li, 2008); The top management team's psychological process of trust is manifested as a motivational process, cognitive process, and emotional process, according to this study of the evolution of TMT team trust from the perspective of the team life cycle (Jingsong Deng and Xiaoping Liu, 2008). It is also argued that the organizational life cycle plays a moderating role in the relationship between TMT

Vol 1, No. 5, 2023

heterogeneity and corporate performance (Velinovinov & Mal 2016). Although these studies lack a thorough understanding of the evolution mechanism and influence mechanism of enterprise TMT, there is still a need for further discussion on how to use the evolution process of enterprise TMT to direct team management practice (Bing Liu and Louise Li, 2008). Nevertheless, they offer a full set of analytical methods and new research horizons for the reconsideration of TMT.

### 3. Deficiencies in the research of top management teams

The aforementioned literature evaluation makes it abundantly evident that top management teams are now the subject of study that has at least the following limitations:

#### 3.1. Deficiencies of research on TMT recessive characteristics

Features can be separated into dominant and recessive qualities based on how easily information can be accessed. The existing research on TMT characteristics primarily focuses on the impact of demographic characteristics on enterprise performance, while ignoring the discussion on the role of TMT recessive characteristics because it is difficult to obtain and accumulate objective and accurate indicators of TMT recessive characteristic variables, and because it has always existed in academia. Such studies have an inherent flaw in that they assume that executives' demographic characteristics determine corporate performance, ignoring the influence of recessive characteristic variables like executives' cognition and values. This leads to an unstable relationship between corporate performance and differences in executive demographics. There are fewer studies on TMT recessive characteristics overall, particularly when it comes to the mechanism of recessive characteristics' direct role in the strategic decision process and their mediating influence in the relationship between demographic variables and corporate performance, which have not been addressed. Some research literature on TMT also expresses the limitations of research due to the neglect of TMT recessive characteristics.

### 3.2. Lack of study of how TMT characteristics have evolved

The four main phases of the TMT's life cycle are formation, oscillation, standardization, and implementation. It is a dynamic system. The TMT life cycle comprises four stages, and each stage's TMT feature pattern will exhibit distinct features. Consequently, the degree to which TMT dominant and recessive traits impact the organization varies depending on the stage of the life cycle. As a result, the researcher's research sample may come from different developmental stages of the team's life cycle, which will unavoidably affect the consistency of the research's findings on TMT characteristics and corporate performance. Current research on TMT characteristics only looks at the static level. Research on TMT characteristics and their impact on corporate performance from the team life cycle perspective has not yet been explored. It is crucial to understand the connection between TMT characteristics, team process, and corporate performance by introducing the time component and examining the effects of TMT dominant and recessive characteristics on corporate performance at various TMT life cycle stages.

#### 3.3. Insufficient research on TMT's team process and its dynamization

Research on the variables of intra-team interaction processes, including conflict, trust, communication, and cohesiveness, is lacking, and the majority of TMT studies currently

conducted concentrate on the influence of demographic traits on organizational performance. The quality of strategic making decisions and organizational performance may be more directly impacted by these interaction process variables than by TMT characteristic characteristics. TMT's decision-making process when it comes to making strategic decisions is more directly reflected by these interactive process variables, such as communication and conflict. According to empirical research, for instance, communication frequency and performance are inversely correlated (Smith et al., 1994). However, few studies solely consider the top management team as a static moment in time, failing to recognize it as a dynamic system that is constantly changing. The dynamic mechanism of TMT feature-internal interaction process-enterprise performance can be further clarified, nonetheless, by discussing the interaction process inside TMT from various dynamic development phases.

# 3.4. Insufficient study of the dynamic growth of the combined influence of multiple characteristics

The "similarity-attraction" idea contends that individuals are drawn to one another because of their shared traits, which is how most people classify groups. The "similarity-attraction" effect of individual TMT features has been the sole focus of past TMT research, oblivious to the potential joint effect of overlapping traits known as the "fault effect." The last conflict and best performance are seen in teams with mild team fault lines (Thatcher et al., 2003); team fault lines are a prospective reflection of team fragmentation, which weakens intra-team cohesion and heightens conflict in teams (Molleman, 2005); Team fault lines are the most effective way to reduce team conflict, and team fault lines are the most effective way to increase corporate performance (Lau & Murnighan, 2005). When there are strong fault lines, team interactions increase negative conflict, which results in poor performance. Murnighan, 2005); top team fault lines impair corporate performance by causing emotional strife and behavioral fragmentation (Li & Hambrick, 2005); Age, tenure, and education are the three demographic factors that form the top team fault lines, and there are a significant inverse relationship between the strength of these fault lines and company innovativeness (Barkema & Shvyrkov 2007); the more fragmented a team is, the less its members share in terms of resources and information, and the less effective its decision-making is (Carmell et al., 2009). TMT fault lines mediate the effect of CEO successor origin on corporate strategic change (Ren et al., 2023); TMT information-related fault lines promote corporate risk-taking, and the power gap negatively moderates the relationship between TMT information-related fault lines and corporate risk-taking (Liangxin Lv, Shiquan Wang, & Xiaoqing Li, 2022). According to the studies mentioned above, team fault lines can be used as a predictor of team processes and outcomes by making use of how closely team members' traits intersect. The research on the influence of fault effects resulting from the association of many characteristics on organizational output has not been addressed, and these studies are only concerned with the fault effects of individual team traits. The contradictory perspectives in the research on the association between TMT features and corporate performance are also largely due to the disregard for the effects of TMT feature faults. At the same time, the "faults" will shift from being primarily based on dominant characteristics to being mainly based on recessive ones, along with the dynamic evolution of the TMT life cycle. Strategic decisions will be significantly impacted by both the overt and covert changes in TMT features. Therefore, it is crucial to incorporate the "fault" effect created by the combined effects of several TMT features within the research domain of TMT.

# 4. Studying the top management team's growth based on the team life cycle

### 4.1. Study of the evolutionary process of TMT characteristics

According to the degree of information accessibility, TMT characteristics are divided into dominant characteristics and recessive characteristics. Age, education, tenure, and occupational background are examples of what we typically refer to as TMT demographic features. On the other hand, cognition, values, and social capital are examples of recessive qualities. The impact of TMT features on organizational strategy and performance is a result of several factors working together (Kor, 2003; Simsek et al., 2005). So, to avoid discrepancies in data and inconsistencies in conclusions that could result from investigating solely dominant traits, future research on TMT features should examine both dominant and recessive TMT characteristics together. The probability of conflicting conclusions.

Additionally, because TMT is a system, its properties are not static but rather exhibit various evolutionary stage characteristics at various points in time. The dynamic evolution of TMT characteristics must therefore be taken into account in the research process for TMT characteristics, and the team life cycle offers a better perspective to examine the evolution of TMT characteristics. In the future, we can try to employ the team life cycle as a breakthrough point for the study of TMT characteristics. We can subsequently collect qualitative data from the top management team at each stage of the team life cycle and summarize the characteristic forms of TMT characteristics in each stage, especially the recessive characteristic forms of TMT, using the triple coding process of open coding, axial coding, and selective coding. Testing also makes use of the structural equation model. An analytical model of the evolutionary process of TMT features is constructed at the same time and is based on the increase or decrease of the components of TMT dominant and recessive characteristics in the process of team evolution. This model then analyzes the corporation's performance in the four stages of the TMT life cycle. With the addition of the time dimension, research on TMT characteristics will undoubtedly shift its attention to examining how dominant and recessive TMT characteristics affect corporate performance at various points of the TMT life cycle.

# 4.2. Research using a team approach to examine how TMT attributes affect corporate performance

The study of TMT features as well as the team processes of TMT and their effect on corporate performance both exhibit a disregard for time in TMT research. The relationship between TMT's team process and corporate performance is dependent upon time, with distinct effects on the team process and organizational performance occurring at different phases of the team life cycle. Additionally, studies have demonstrated that TMT traits' effects on corporate performance vary over time (Carpenter, 2002). In addition, the addition of team process as a mediating variable can compensate for the absence of intermediary variables in the analysis of the relationship between TMT characteristics and corporate performance, thereby offering a fresh look into the "black box" of this relationship. To conduct dynamic research on the relationship between TMT characteristics, team process, and corporate performance, time variables should be added to the current analytical framework of TMT characteristics research. This is because different stages of the team life cycle include different mechanisms of interaction between TMT characteristics, team process, and corporate

Vol 1, No. 5, 2023

performance. Of these, "information exchange" and "team atmosphere" are the two perspectives through which the TMT team process is examined. As the hub for gathering and analyzing information for decisions, the "information exchange" variable will influence the enterprise's strategic decisions, which will then impact the enterprise's performance. The "team atmosphere" variable in these decisions has an impact on how effective decisions are made, and adjustments to this variable will have an impact on corporate performance and teamwork behavior. Future research should also examine the dynamic mechanism of TMT characteristics of team process-corporate performance from various team life cycle phases.

# 4.3. Studying TMT Characterization Fault and How it Affects Corporate Performance

The union of a team's multiple characteristic differences is referred to as a "fault" in social psychology theory and geology, and this concept forms the phenomenon of subteams. The differences among team members in multiple characteristics are like a set of fault lines; faults are produced along the direction of the fault lines; the more consistent the direction of these lines, the stronger the faults; when the faults reach a certain strength, the team will split into several subteams (Lau, 1998; Yueming Chen et al., 2012). It is crucial to investigate the flaws in top management team characteristics and the mechanisms that influence corporate performance because these flaws can be both dominant and recessive. Additionally, at different phases of the team's life cycle, different fault characteristics will manifest, which will result in combined effects and differing impacts on corporate performance. The exploration of TMT characteristic faults and how they affect corporate performance should begin with two types of faults: dominant and recessive. These faults should be analyzed in conjunction with the team life cycle model and team process to uncover the fault that results from the interaction of multiple TMT characteristics and how that influence affects enterprise performance. This will open up an exciting new field of study.

#### 5. Conclusion

The team life cycle is a pivotal point in this perspective as it expands the existing research framework of the demographic characteristics of TMT to a more substantive meaning of TMT recessive characteristics level research to explore the evolution of TMT characteristics and to clarify the role of the three mechanisms of TMT characteristics, team process, and corporate performance. This is necessary to unlock the inner "black box" of the relationship between TMT and corporate performance. All of these factors must be combined with China's unique practices to carry out a focused and specific analysis. This perspective's breakthrough involves using the team life cycle as a starting point, extending the current research framework of TMT demographic characteristics to the more insightful research on TMT recessive characteristics, examining the evolution of TMT characteristics, and elucidating the mechanisms of the three aspects of TMT characteristics, team process, and corporate performance. It offers theoretical and methodological guidance for resolving the reality of unstable research on the relationship between TMT characteristics and organizational performance and for creating effective corporate top management teams, which is also a field that businesses and academia need to actively explore.

# Acknowledgments

This work was supported by the National Science Foundation China (Project no. 72061001) and the Research Fund Project of Guangxi University (Project no. XBS1642).

### References

- [1] Hambrick DC, Msaon P A. Upper echelons: The organization as a reflection of its top managers[J]. Academy of Management Review, 1984 (9): 193-206.
- [2] Bantel K A. Top management and innovations in banking: Does the composition of the top team make a difference? [J]. Strategic Management Journal, 1989(10): 107-124.
- [3] Yuanqiong He, Wen Yang, Yun Chen: Research on the relationship between top management team characteristics and enterprise performance based on Meta-analysis (Soft Science, China 2009), p.12-17. (In Chinese)
- [4] West G P. Collective Cognition: When Entrepreneurial Teams, Not Individuals, Make Decisions.[J]. Entrepreneurship: Theory & Practice. 2007, 31(1): 77-102.
- [5] Mason A. Carpenter, Marta A. Geletkanycz1, Wm. Gerard Sanders. Upper Echelons Research Revisited: Antecedents, Elements, and Consequences of Top Management Team Composition[J]. Journal of Management, 2004, 30 (6): 749-778.
- [6] Hambrick D C. Upper echelons theory: An update [J] .Academy of Management Review, 2007 (32):334-343.
- [7] Yuntao Bai, Jue Guo, Youmin Xi, et al.: An experimental study of the effect of authority type and decision-making process on the decision-making outcomes of top management teams (Journal of Industrial Engineering and Engineering Management, China 2008), p.72-78. (In Chinese)
- [8] Cannella A A, Park J, Lee H. Top Management Team Functional Background Diversity And Firm Performance: Examing The Roles Of Team Member Colocation And Environmental Uncertainty[J]. Academy of Management Journal. 2008, 51(4): 768-784.
- [9] Croson R, Gneezy U. Gender differences in preferences[J]. Journal of Economic Literature, 2009, 47(2): 448-474.
- [10] Drakos A.A, Bekiris F.V. Corporate performance, managerial ownership, and endogeneity: A simultaneous equations analysis for the Athens stock exchange[J].Research in International Business and Finance, 2010, 24(1):24-38.
- [11] Hui Zhang, Qunhui Huang: A Study on the Influence Mechanism of Top Management Team Characteristics on Corporate Strategic Change-Based on the Perspective of Environmental Dynamics (Enterprise Economy, China 2023), p.76-86. (In Chinese)
- [12] Guanping Cheng, Haishan Liu: Development of Theoretical Models of Top Management Teams (Modern Management Science, China 2009), p.150-155. (In Chinese)
- [13] Carmeli A. Top Management Team Behavioral Integration and the Performance of Service Organizations.[J]. Group & Organization Management. 2008, 33(6): 712-735.
- [14] Parayitam S, Dooley R S. The interplay between cognitive- and affective conflict and cognition- and affect-based trust in influencing decision outcomes[J]. Journal of Business Research. 2009, 62(8): 789-796.

Vol 1, No. 5, 2023

- [15] Chongming Wang, Xuefang Liu: An empirical study on the effect of Top Management Team cohesion on succession performance of family enterprises (Management World, China 2007), p.84-98. (In Chinese)
- [16] Haifa Sun, Haishan Liu, Zhenhua Yao: Comparison of the Composition and Operation Process of Top Management team Teams of Party, State-owned Enterprises and Private Enterprises (Journal of Sun Yatsen University (Social Science Edition), China 2008), p.169-178. (In Chinese)
- [17] Carmen., et al. The Influence of Top Management Team Conflict on Firm Innovativeness[J].group decision and negotiation,2015,24(6): 957-980.
- [18] Yazmina, et al. Exploring the Influence of CEO Extra Version and Openness to Experience on Firm Performance[J]. Journal of Leadership & Organizational Studies, 2017, 24(2):201-215.
- [19] Roh Hyuntak, Chun Kyungmi, Ryou Yeejeong. Opening the Black Box: A Meta-Analytic Examination of the Effects of Top Management Team Diversity on Emergent Team Processes and Multilevel Contextual Influence[J].GROUP & ORGANIZATION MANAGEMENT, 2019,44(1):112-164.
- [20] Hui Jin, Qian Yan: Team life cycle theory and its research progress (Science & Technology Progress and Policy, China 2006), p.194. (In Chinese)
- [21] Bing Liu, Louise Li, J.N. Wang: A Life Cycle Oriented Study of TMT Evolutionary Processes in Enterprises (Reformation & Strategy, China 2008), p.132-134. (In Chinese)
- [22] Jingsong Deng, Xiaoping Liu: Trust Processes and Trust Management for Top Management Teams in Organizations ( Science of Science and Management of S.&T., China 2008), p.174-176. (In Chinese)
- [23] Velinov, Malý.Top Management Team Diversity and Company Performance: The moderating effect of Organization Life Cycle[J].Journal of Eastern European and Central Asian Research, 2016, 3(2):1-11.
- [24] Smith KG, Smith KA, Olian J D, et al. Top management team demography and process: The role of social integration and communication [J]. Administrative Science Quarterly,1994 (39):412-438.
- [25] THATCHER S, JEHN K A, ZANUTTO E. Cracks in Diversity Research: The Effects of Diversity Fault lines On Conflict and Performance[J]. Group Decision and Negotiation.2003, 12(3): 217-241.
- [26] MOLLEMAN E. Diversity in Demographic Characteristics, Abilities, and Personality Traits: Do Fault Lines Affect Team Functioning?[J]. Group Decision and Negotiation.2005,14(3): 173-193.
- [27] Lau DC, Murnighan J K. Interactions within Groups and Subgroups: The Effects of Demographic Faultlines[J]. Academy of Management Journal. 2005, 48(4): 645-659.
- [28] Li J, Hambrick D C. Factional Groups: A New Vantage On Demographic Faultlines, Conflict, and Disintegration in Work Teams[J]. Academy of Management Journal. 2005, 48(5): 794.
- [29] Barkema H G, Shvyrkov O. Does Top Management Team Diversity Promote Or Hamper Foreign Expansion?[J]. Strategic Management Journal. 2007, 28(7): 663~680.
- [30] Carmeli A, Sheaffer Z, Halevi M Y. Does Participatory Decision-Making in Top Management Teams Enhance Decision Effectiveness and Firm Performance?[J]. Personnel Review. 2009, 38(6): 696~714.
- [31] Liangxin Lv, Shiquan Wang, Xiaoqing Li: Top Management Team Disconnect and Corporate Risk Taking The Moderating Role of the CEO-TMT Power Gap (Soft Science, China 2022), p.83-89. (In Chinese)

Vol 1, No. 5, 2023

- [32] Ren D, Jiang H, Cheng J Y, Peng C, Zou Y.CEO successor origins, top management team fault line, and strategic change—empirical evidence from China[J]. Heliyon, 2023, 9(9):19200.
- [33] Kor Y. Y. Experience-based top management team competence and sustained growth [J]. Organization Science, 2003(14): 707-719.
- [34] Simsek Z, Veiga J.F, Lubatkin M.H, Dino R.N.Modeling the multilevel determinants of top management team behavioral integration[J]. Academy of Management Journal, 2005(48):69-84.
- [35] Carpenter M.A. The implication of strategy and social context for the relationship between top management team heterogeneity and firm performance [J]. Strategic Management Journal, 2002(23): 275-284.
- [36] Lau DC, Murnighan J K. Demographic Diversity and Fault lines: The Compositional Dynamics of Organizational Groups[J]. Academy of Management Review. 1998,23(2): 325-340.
- [37] Yueming Chen, Yuhui Ge, Zhiqiang Song: A study of the relationship between top management team faults and corporate strategic decision-making (Chinese Journal of Management, China 2019), p.1634-1642. (In Chinese)