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Part 1: Qualitative research on brain drain of small and medium-sized e-commerce enterprises in JiuJiang city, China

Part2: Reflective essay based on quantitative and qualitative analysis

Module Title: **LCDB7003 Qualitative Research**

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Abstract

With the rapid development of mobile Internet, e-commerce has become a new growth point for China's economic development. However, China's latest e-commerce talent survey report shows that small and medium-sized e-commerce companies generally face the problem of high brain drain rate, which has become a key factor restricting the sustainable development of enterprises. Therefore, this study focuses on the research question of “How do small and medium-sized e-commerce enterprises get rid of the dilemma of brain drain?” to understand the influencing factors and talent needs.

On the basis of collecting and searching related literatures, this research focuses on the brain drain problem of small and medium-sized e-commerce enterprises in JiuJiang city and uses the two-factor theory as the analytical lens to find the research gap and establish a conceptual framework.

The research philosophy of this study is interpretivism, and the research method is induction. Research design uses single case study to understand talent needs and brain drain behavior. I used semi-structured interviews, participant observation and document analysis methods for data collection, and thematic analysis method for data analysis to make each data meaningful and understand research questions.

The contribution of this study enriches the connotation and extension of the brain drain theory. Meanwhile, it provides advice for the same types of small and medium-sized e-commerce companies, enriches talent management practices, and improves human resource management.

Keywords: small and medium-sized e-commerce companies, brain drain, case study

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1 Introduction

This chapter mainly introduces the research background, research questions, research objective and contributions.

1.1 Research background

The continuous upgrading of information technologies such as mobile Internet, IoT and big data has accelerated the speed of information exchange in China (Xin and Bifen, 2018). Many traditional Small and medium-sized enterprises have seized this development opportunity to transform into an e-commerce companies(Jian, 2018). Small and medium-sized e-commerce companies have grown rapidly and have become a new growth point for China's economic development(Shengnan, 2017).

According to the 2018‘China E-Commerce Talent Status Survey Report’, the most important factor in the development pressure of Chinese e-commerce companies is team talent problem(Net jing she-E-commerce Research Center and Hangzhou Winning Education Consulting Co., 2019). Brain drain has become a serious problem in the e-commerce industry. Therefore, it’s necessary to research this issue.

The two-factor theory is treated as an analytical lens which can understand the data and put the contributions in context. The gaps between this research and two-factor theory are further explored. First of all, the research background must be small and medium-sized e-commerce companies, so the collected data is of significance to the research problem. Secondly, this research puts forward the views and attitudes on the brain drain problem from the perspective of senior managers and talents. Therefore, the

collected data is highly internally standardized evidence that prevents analysis from surfacing and contributes to the richness and expansion of brain drain theory.

The study follows the philosophical foundations of interpretivism and relies on case study strategy using a variety of data collection methods. First of all, conduct semi-structured interviews with the senior managers and talents of the selected case company. Secondly, use observation method to work in the selected case company. Thirdly, check the company's relevant documents and web pages to learn about the company's annual report and relevant information (Wei, 2014).

In order to carry out research in depth, this study selected a representative enterprise as a typical case to understand the problem of brain drain in JiuJiang city.

1.2 Research questions

In order to better explain the problem of brain drain in small and medium-sized e-commerce companies, this study revolves around a main research question and three sub-questions, the questions are as follows:

Main question: How do small and medium-sized e-commerce companies get rid of the dilemma of brain drain?

Sub-questions:

Q1: What are the influencing factors that lead to the dilemma of brain drain in small and medium-sized e-commerce companies?

Q2: What are the shortcomings and barriers of the company management that lead to brain drain from the perspective of senior managers?

Q3: What policies and measures should be used to meet the needs of talents to curb brain drain from the perspective of talents?

1.3 Research objective

The purpose of this qualitative study is to explore how small and medium-sized e-commerce companies can get rid of the dilemma of brain drain, and understand the behavior of brain drain. To find the answers, the goal of this study is to identify the influencing factors that lead to brain drain, the barriers and shortcomings of company management, and the policies and measures required from the perspective of talent needs. In order to achieve these specific goals, the two-factor theory was used as an analytical framework for brain drain which will help small and medium-sized e-commerce companies to get rid of the brain drain as soon as possible.

1.4 Contributions

This study is mainly to explore how small and medium-sized e-commerce enterprises can get rid of the dilemma of brain drain and understand and explain the behavior of brain drain. It can be said that it has rich theoretical and practical research value. The specific contributions are as follows:

Theoretical contribution: This study makes up for the research gaps of brain drain in specific industry and areas, especially small and medium-sized e-commerce enterprises in small city, and also enriches and develops the theory of brain drain and human resource management of enterprises.

Practical contribution: Through the case study of small and medium-sized e-

commerce companies, find out the influencing factors of brain drain, so as to explain and understand the behaviors of brain drain. This research will help to enrich talent management practices, effectively improve the level and ability of human resources management, and provide practical references for similar enterprises in the same dilemma.

2 Literature review

This chapter is mainly to define the key concepts of brain drain and two-factor theory. By sorting out and commenting on relevant literatures, research gaps were identified and conceptual framework was established.

2.1 Brain drain

The term “brain drain” is similar to the meaning of human capital flows, which means that talents are moving violently in a certain direction(Salt and Stein, 1997). The "brain" refers to a person's potential or attributes. The “drain” means that the loss rate is higher than expected. Putting them together means talented person leaves at a considerable speed(Commander, Kangasniemi and Winters, 2004). The Economics Dictionary defines brain drain as international migration and human capital (Commander, Kangasniemi and Winters, 2004) Or a technician leaves his country (Carr, Inkson and Thorn, 2005).

The above understanding of brain drain is the flow of talents between countries in a broad sense. However, the problem of brain drain in China is mostly the narrow

meaning of brain drain, which refers to the flow of talent within China (Jianzhong, 2002).

Therefore, brain drain mentioned in this study refers to the flow of talents between companies in China, rather than the migration of talents between countries.

2.1.1 Research on the causes of brain drain

American psychologist Lewin believed that the biggest influencing factor was the working environment within the enterprise (Kui and Dongmei, 2006). Price believed that the reasons for employee turnover were related to personal job satisfaction and the external environment (Price, 1978). Lin Jianqing believed that the loss of employees was mainly due to the light management incentives and the failure to establish a performance-based distribution system (Jianqing, 2012). Wang Wei pointed out, the reason was the lack of talent reserve mechanism and imperfect incentive mechanism (Di, 2013).

Some scholars have analyzed the causes of brain drain from psychological perspective. American scholar March & Simon put forward the March and Simon models based on the combination of labor market and individual performance, and believed that the brain drain was related to their psychological and personality (Jiao, 2016). Porter believed that should pay attention to the psychological research of employees, that is, job satisfaction (Porter and Steers, 1973). Yang Ye and Yan Jinbao believed that psychological contract was an important reason for brain drain (Ye and Jinbao, 2005). Williams and Hazer research, predicting the turnover intention was most

relevant to organizational commitment(Williams and Hazer, 1986). Lou Yingjun believed that e-commerce brain drain was closely related to the attitude and values of talents (Jianjun, 2017).

Many Chinese scholars' research on the factors of talent flow mainly from micro and macro perspectives, including personal factors, corporate factors and social factors(Tuzhen, 2011). Zhao Yuming believed that the flow of talents was an inevitable requirement for optimizing resource allocation and developing human resources(Shuming, 2005). Sun Jianmin believed that social factors, organizational factors and personal factors were three main factors affecting the flow of talents(Linjiang *et al.*, 2010). Wei Xinhe and Li Wei believed that based on ERG theory, corporate brain drain was due to the failure of major features such as currency, security, interpersonal relationships and self-realization(Xin and Wei, 2007).

The above literatures on the causes of brain drain encourages me to further explore the truth about brain drain in small and medium-sized e-commerce enterprises in specific contexts and industries.

2.1.2 Research on the impact of brain drain

Kuck believed that moderate mobility was conducive to stimulating people's creativity (Qianru and Mingrong, 2016). Zheng Jiyang and Li Jiangtian pointed out that job vacancies caused by brain drain increased the operating costs of enterprises (Jiyang and Jiangtian, 2000). Zhao Hong believed that the loss of core talents directly led to an increase in labor costs and leakage of trade secrets, which had a great impact on the

stable development of enterprises (Hong, 2010). Yang Rabbit said that once talents were lost to competitors in the same industry, it had a very negative impact on the company(Hongjie, 2006). Gerhart conducted a comparative test of unemployment rate and brain drain rate. The test results showed that the unemployment rate was negatively correlated with the turnover rate(Gerhart, 1990).

Previous literatures on the impact of brain drain has motivated me to explore brain drain from different perspectives of senior managers and talents.

2.1.3 Research on the countermeasures of brain drain

Mobley used the chart method to combine employees with the company, the environment and other factors, and proposes the theoretical model set out by the employees (Mobley, 1977). Ren Lina, Chen Liming, and Deng Xulin believed that employee loyalty should be strengthened to build a psychological contract for employees to retain talent(Lina, Liming and Xulin, 2007). Bai Xiujun believed that the establishment of a talent competition mechanism could make outstanding talents stand out (Xin and Bifen, 2018). Ma Sansheng and Wang Li believed that as a tool of human resource management, performance management had its core position(Sansheng and Li, 2006). Zhang Manjing believed that the establishment of an early warning system for the brain drain crisis of SMEs can effectively prevent the brain drain of SMEs (Manjing, 2009). Cao Dongli said that enterprises should always pay attention to the relationship between management activities and employee responses in human resource management, and strengthen communication with employees(Dongli, 2013). Sushil K.

Sharma believed curbing brain drain could use the corresponding subsidies and telecommuting models(Sharma and Gupta, 2003).

The above literatures have deepened my understanding of the brain drain problem, how to retain talents through policies and measures, and better meet the needs of talents to understand the brain drain behavior.

2.1.4 Research on brain drain from different enterprise natures

Chinese scholars also pay attention to the nature of corporate ownership when studying corporate brain drain. Differences in the nature of the company lead to different problems in management, so brain drain has different characteristics. Therefore, they divided the nature of the enterprise into large state-owned enterprises, private enterprises and foreign-funded enterprises to study the problem of brain drain.

The flow of talents from SMEs to state-owned enterprises and foreign-funded enterprises was obvious, resulting in a high rate of brain drain for SMEs(Liang, 2013). There were many problems in the management of private enterprises, such as unclear job responsibilities, unfair competition, excessive work intensity, unregulated wage system, which has accelerated brain drain(Honhda and Shuting, 2013). The brain drain rate of foreign-funded enterprises has shown a stable low level because its internal perfect enterprise management system and strong capital operation have strong demand for talents(Qin, 2015).

The above literatures prompted me to pay more attention to the brain drain problem of small and medium-sized e-commerce companies in specific industry contexts.

2.2 Talent

Talent is often defined as someone with strong professional skills who can create wealth and contribute to society(Shamsi, Imtinan and Imtinan, 2010). Talent is the code or adjective of talented business managers who can achieve strategic goals for companies(Michaels, Handfield-Jones and Axelrod, 2005). Thunnissen, Boselie and Fruytier regarded talent as valuable, scarce, and difficult to replace(Thunnissen, Boselie and Fruytier, 2013). Talents have the characteristics of potential, ability, wisdom, etc.(Nijs *et al.*, 2014) Or treat high-performing employees as talent(Shuai and Bright, 2012). Melumad said that talent was someone with talent, potential, and high performance(Melumad, 1995).

The talents involved in this research refer to the professional and technical personnel of the small and medium e-commerce companies (Qin, 2015).

2.3 Small and medium-sized e-commerce enterprises

SMEs are relatively vague concepts, generally referring to the small market share in its fields(Shumin, 2000). Chinese companies are divided into four categories: large, medium, small, and micro(National Bureau of Statistics, 2018).

Small and medium-sized e-commerce enterprises are relative concepts. The criteria for judging are: fewer employees, lower operating income, and lower total assets(Jian, 2018).

The small and medium-sized e-commerce companies mentioned in this study only involve online physical transactions, not including virtual products and services.

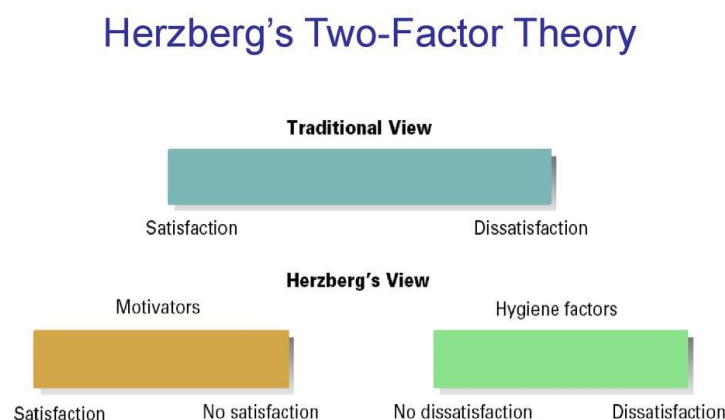
2.4 Two factor theory

The two-factor theory was first proposed by American psychologist Frederick Irving Herzberg in 1959(King, 1970). As shown in Figure 1.

By analyzing the data, he found that an interesting fact is that employees are satisfied with work-related, and those who feel bad are outside the work(King, 1970).

This theory divides the factors that influence people's work into two categories: one is called motivational factors. The second category is called hygiene factors, which is the unsatisfactory factors that are easy to produce negative emotions and negative behaviors (Jian, 2018).

The research question is how can small and medium-sized e-commerce enterprises get rid of the dilemma of brain drain. The two-factor theory provides an analytical lens for the brain drain problem and provides a research perspective.



(Figure 1 – Two factors theory)

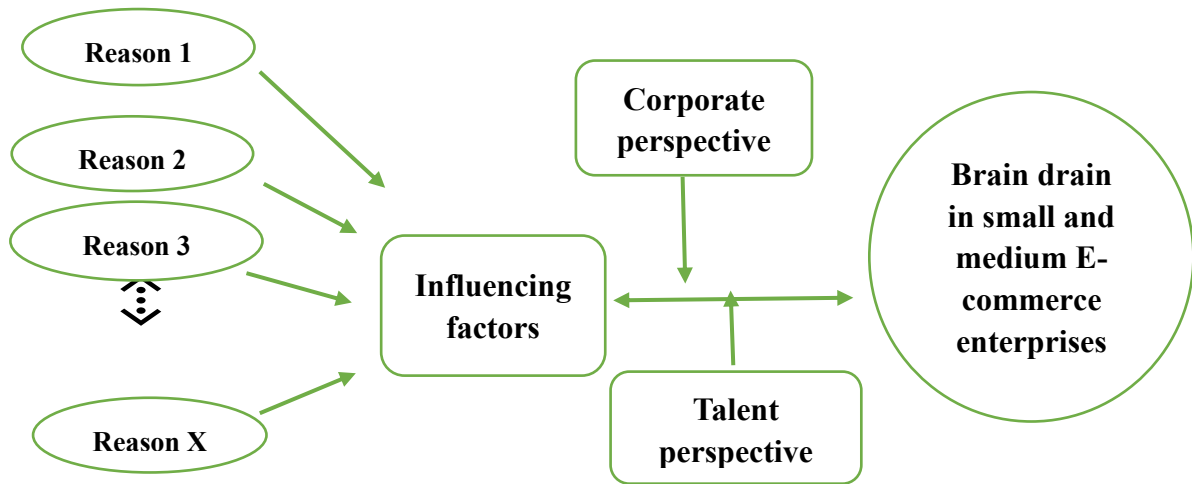
2.5 Research gap

Judging from the current research situation, there is very little literature on the brain drain of China's specific industries. For Chinese domestic scholars, the study of corporate brain drain is mainly focused on macro analysis and lack of research on specific industries and areas, especially the lack of specialized research on brain drain of small and medium-sized e-commerce companies in small cities.

Therefore, this study fills the gap in the brain drain problem of small and medium-sized e-commerce companies, making research more in-depth and targeted. Meanwhile, previous studies on brain drain in different enterprises have focused on large state-owned enterprises, private enterprises and foreign-funded enterprises in large cities, while small and medium-sized enterprises in small cities have fewer studies. Therefore, this study makes up for another research gap, namely the study of brain drain in small and medium-sized e-commerce enterprises in small cities.

2.6 Conceptual framework

This study mainly discusses the brain drain problem of small and medium-sized e-commerce enterprises, and draws on the analytical framework provided by the two-factor theory to construct the preliminary conceptual framework of this research in Figure 2.



(Figure 2 - Preliminary Conceptual Framework)

3 Methodology

This chapter is a methodology chapter that elaborates on the research philosophy behind research questions because it determines how to understand research questions, using research methods, research strategy, data collection techniques, and data analysis methods to explain the entire research (Crotty, 1998).

3.1 Research Philosophy – Interpretivism

Ontology and epistemology are two different philosophical assumptions. Ontology refers to the study of the nature of reality (Al-saadi, 2014) or ontology is about the nature of existence and the structure of reality itself (Crotty, 1998). Epistemology is the assumption of knowledge and how people spread knowledge to others (Burrell and Morgan, 1979).

Interpretivism focuses on the interaction of individuals and groups with the social environment and studies social processes in specific contexts (Bondy, 2008). Interpretivism believes that reality can only be an explanation, the essence of reality is

complex and rich. Through the construction of culture and language, the reality with multiple meanings and interpretations is a combination of periodic processes, experience and practice.

The ontology in this study is that the brain drain problem of small and medium-sized e-commerce companies is not objective, and it is influenced and interacted by various social factors, such as company background, business management, corporate culture, policies and measures, etc. Therefore, its connotation is complex and rich. The interaction and interaction of talents and enterprises and the social environment constitutes a social problem of brain drain. It is this subjective reality that supports this study.

The epistemology of this study is to explore the influencing factors of brain drain in small and medium-sized e-commerce companies, so as to understand and explain the needs of talents and the behavior of brain drain. Therefore, the focus is on interacting with senior managers and talents in the enterprise to help me understand the influencing factors of brain drain in small and medium-sized e-commerce companies and the process leading to brain drain behavior. Through the perspective of senior managers and talents, understand the opinions and insights of organizations and individuals on the brain drain behaviors and talent needs, so as to explain the problem of brain drain more comprehensively. Therefore, the research philosophy of this study is Interpretivism.

3.2 Research objective

This study revolves around a simple research question. How do small and medium-sized e-commerce companies get rid of the dilemma of brain drain? In order to explain this problem, it is necessary to conduct a comprehensive understanding and research on small and medium-sized e-commerce companies to understand the influencing factors of brain drain. Therefore, this study explains the barriers and shortcomings in management at the company level from the perspective of senior management. Meanwhile, from the perspective of talents, talk about the policies and measures should be used to meet the talent's requirements to curb brain drain.

In the analysis of brain drain problem, this study uses two-factor theory as an analysis lens to comprehensively study the loss of small and medium-sized e-commerce talents, providing a unique perspective for analysis. This leads to more valuable conclusions about the brain drain problem of small and medium-sized e-commerce companies in a specific context.

3.2.1 Exploratory Research

Exploratory research uses open questions to discover what is happening and a valuable means of obtaining an issue of interest(Sauners, Lewis and Thornhill, 2016).

Based on the lack of research on brain drain for small and medium-sized e-commerce companies in the existing literatures, in order to understand and explain the truth about brain drain in a specific context. Therefore, an exploratory research approach are used to collect data.

According to research questions, it is necessary to interact with the company's senior managers and talents to understand their attitudes and perceptions about brain drain. Due to the flexibility and adaptability of exploratory research, I will make appropriate adjustments based on new data and insights to continuously enrich and adjust the research results.

3.2.2 Inductive Research

Inductive research requires a variety of data sources and data directions. Therefore, it does not establish a connection between test theories or assumptions, and ultimately derives the theory from the data(Mintzberg, 1979).

The focus of this study is to explain why small and medium-sized e-commerce companies have brain drain problems. The results of the study require data to be collected in interaction with senior managers and corporate talents. Therefore, the research results rely on rich data sources and accurate data analysis to explain research problems. In other words, this study is an inductive, unstructured approach with no theoretical assumptions that makes the results more open and answers the research questions through data analysis steps.

Therefore, it can be said that induction is very suitable for this study, which provides a more comprehensive and in-depth research explanation for the influencing factors of brain drain in small and medium-sized e-commerce enterprises.

3.3 Research design

The purpose of this study is to explore the brain drain problem of small and medium-sized e-commerce companies, understand the behaviors and needs of talents, and help companies that suffer from brain drain problems get out of trouble.

In order to clearly answer this research questions, it is necessary to select representative small and medium-sized e-commerce company for in-depth analysis. Therefore, an exploratory case will be used to study the answer to the question. Case study are based on single or multiple cases and provide insight into research topics and phenomena in a specific context(Yin, 2014). Thus, this study selects a specific case to conduct in-depth discussion and research on the brain drain problem of small and medium-sized e-commerce enterprises in JiuJiang city, China.

3.3.1 Research strategy- Case study

Case study method is appropriate for exploratory, complex or contextual research (Yin, 2014); Secondly, the case study method is appropriate when researchers use the “how” and “why” questions to try to understand the problem(Yin, 2014); Thirdly, understanding the background is the basis of case studies. Case analysis is to explain the behavior of individuals or organizations in a particular situation(Sauners, Lewis and Thornhill, 2016).

This research explores the problem of brain drain in the context of a small and medium-sized e-commerce company, and explains the behavior of talents. Considering the brain drain is a state of disorder and better answer the research questions. It is

suitable to use case study qualitative strategy to explain the behaviors and needs of talents and company's talent management issues in the context of small and medium-sized e-commerce companies (Xin and Bifen, 2018).

3.3.2 Warrantability and trustworthiness issues

Due to the research design is a set of logical representations, the quality of the research can be judged by four logical tests. Throughout the process of the research, four tests in the case study were used as criteria for determining the quality of the entire research, they are construct validity, internal validity, external validity, and reliability(Yin, 2014).

In summary, the above four criteria were designed throughout the research. Based on research questions, I will use triangulation methods to apply a variety of data collection methods to form a series of evidence to verify the authenticity of data collection. Meanwhile, respondents were asked to review the data obtained from interviews and observations and make recommendations to help me confirm the accuracy of the data. This helps to ensure construct validity.

In the data analysis phase, the collated data sets help explain the brain drain problem and help find the answers to the research questions. This helps to ensure internal validity.

In terms of external validity, the answers to research questions are continuously summarized and summarized to form or develop existing brain drain theory and human resource management theory.

In terms of reliability, I will record in detail every step in the research on brain

drain of small and medium-sized enterprises, especially the sampling criteria and data collection methods and data analysis methods, so that subsequent researchers can repeat the research process and get the same answer.

3.3.3 case selection

According to Yin's case design and methodology, single case study design is applicable to representative or typical cases(Yin, 2014). One of the roles recognized in a single case study is to conduct exploratory research on a unique, previously unseen scientific phenomenon(Jiye and Xia, 2008).

Owing to the research on the brain drain problem of small and medium-sized e-commerce companies is almost blank, the choice of representative cases can provide an instructive explanation for the phenomena that have not been studied before(Gaoyong and Jiye, 2015). Therefore, this research is very suitable for single case study design.

In order to find the answers to the research questions, I will choose the case according to the following criteria. Firstly, the company is a representative enterprise of small and medium-sized e-commerce companies in JiuJiang city. Secondly, the company's main business is to conduct physical transactions on the online shopping platform rather than virtual service transactions. Thirdly, the company is now facing the problem of brain drain. Fourthly, the selected case company I am qualified to enter and conduct qualitative scientific research. Therefore, JiuJiang Lian Sheng Yijia E-Commerce Co., Ltd. fully meets the above criteria and will be the case company for my study.

3.4 Data collection techniques

An important advantage of the case study strategy is the opportunity to collect different evidence to show the rich picture of the entire event(Jiye and Xia, 2008).

According to the specific circumstances of this research, I will use a variety of data collection methods including semi-structured interviews(Brooks, Rubin and Rubin, 2018), Observation-participant as observer(Whyte, 2007) and document analysis method(Bowen, Glenn, 2009) to show the rich pictures of the whole research.

3.4.1 Semi-structured interviews

In general, interviews are a purposeful, targeted conversation that collects first-hand information through a verbal conversation with respondents(Wei, 2001).

In this research, the attitudes and opinions of senior managers and corporate talents of the company are one of the main sources of data information to the research questions. In the semi-structured interviews, I can prepare the interview outline in advance, let senior managers and corporate talents to actively participate, and have some control over the structure of the interview. During the interview, I can flexibly adjust the procedures and contents of the interview based on specific interview questions and situations(Wei, 2001). Thus, semi-structured interviews are suitable for my research.

Why don't I choose structured interviews and unstructured interviews (in-depth interviews)? The reasons are as follows: The structured interviews are mainly used for quantitative research methods, which is beyond the scope of this research. However, In-depth interviews usually do not have fixed interview questions. The interviewer is a

supporter and the respondents are the protagonists who are encouraged to express what they consider important. Therefore, the unstructured interview is not easy to master and takes time and efforts, so as to not suitable for my research.

Through semi-structured interviews, I can understand the experiences, opinions, feelings, and knowledge of senior managers and talents on the brain drain of small and medium-sized e-commerce companies, and collect information that cannot be directly observed (Quinn and Patton, 2005). It should be noted that the recording devices can be used to record data after the respondent agrees.

During the interview, I will pay special attention to the interaction with the interviewer and the tone of the question, which will affect the collected data. I will conduct an interview around a main research question and three sub-questions, trying to summarize the answers to the research questions of senior managers and talents. Main question is “How do small and medium-sized e-commerce companies get rid of the dilemma of brain drain?” and sub-questions are: Q1 What are the influencing factors that lead to the dilemma of brain drain in small and medium-sized e-commerce companies? Q2 What are the shortcomings and barriers of the company management that lead to brain drain from the perspective of senior managers? Q3 What policies and measures should be used to meet the needs of talents to curb brain drain from the perspective of talents? Continuous use of open questions can encourage senior managers and corporate talents to express words or ideas to increase the importance and depth of data access. Therefore, by interacting with senior managers and talents, I can get opinions and insights to research questions from their perspectives.

What's more, I will adjust the interview content and procedures at any time based on the specific circumstances of the interview. For example, when interviewing a senior manager, I will listen to the shortcomings and obstacles faced by senior managers at the company level to analyze brain drain. In addition, in order to better understand the behavior of corporate brain drain, I will interview the talents of the company and record their true thoughts and needs to curb the lost behavior.

After each interview, I will report the summarized information to the respondents in time for verification, and interviews on certain issues may need to be repeated and supplemented if necessary(Jiye and Xia, 2008).

3.4.1.1 Purposive sampling

Focusing on research questions, when analyzing the brain drain problem of small and medium-sized e-commerce companies, the number of respondents should be considered before the interview.

Due to the case study strategy, the sampling will take purposive sampling. Considering that the respondents are the company's senior managers and corporate talents. Therefore, through purposive sampling, the selected samples are used to describe and explain the research questions that need to be answered. I will determine some characteristics of the sample selection before sampling.

The choice of sample depends on the changing situation and process, I will tell the interviewed senior managers and talents to conduct repeated or multiple interviews when the information is not saturated. In addition, select more respondents with data

information to join the interview. Subsequently, based on the categories of data collection, coding and data analysis, and progressively clear theory, cumulative selection of purposive samples was made.

3.4.2 Observation-Participant-as-observer

If research questions and goals are related to people's behavior, then an obvious way to find this is to observe their behavior(Saunders, Lewis and Thornhill, 2016). After obtaining the permission of the selected case company, I will use the identity of participant-as- observers entering the selected case company--JiuJiang Lian Sheng Yijia E-Commerce Co., Ltd. for data collection. The process of data collection involves systematic observation, recording, description, analysis and interpretation of people or groups(Saunders, Lewis and Thornhill, 2016).

Participant as observer means that I will be a full-scale enterprise employee. Meanwhile, it is necessary to carry out data collection for research questions as a researcher, and carefully record the behaviors and attitudes of enterprise talents and understand the management mechanism of the enterprise. More importantly, establishing a sincere relationship of colleagues in the work interaction with senior managers and other employees will help me collect real data.

Whenever I get answers to research questions from their conversations, I will immediately record them and retain the data for later data collation and analysis.

Why don't I choose the other three different types? For example, complete participants, complete observers and observers as participants? The reasons for not

choosing the other three identities are as follows: Firstly, the reason for not using the complete participant is that the researcher did not disclose the true identity to the research company. By entering the company to work, collecting data privately for research, this identity has ethical issues. Researchers will conduct "espionage" on people who become friends and colleagues. Therefore, this identity may involve crime(Sauners, Lewis and Thornhill, 2016).

Secondly, the reason for not using the complete observer is because the research purpose is not disclosed to the employees of the observed company and the true identity is revealed. This position lacks the interaction of the senior manager and talents, and the information collected is very limited.

Thirdly, the reason for not using observer as participant is that the relevant personnel of the company are aware of the identity of the researcher and the purpose of entering the enterprise. Therefore, the researcher can observe and communicate with the company personnel as an observer in the enterprise and record the opinions. However, whether the corporate talents are willing to express real attitudes and opinions to researchers is unknown. Simultaneously, researchers also lost the feeling of entering the company for experience.

In short, the use of participants as observers helps me understand the company's management systems and corporate environment, as well as understand the behavior of corporate brain drain and collect first-hand information. Therefore, the observation method helps me better explain the behavior of brain drain and the influencing factors of brain drain problem, and find the answers to the research questions.

3.4.3 Document analysis

As a data collection method, document analysis method is particularly useful for qualitative case studies because it provide a rich description of individual phenomena and events(Stake, 1996). The document analysis method needs to explain the content and obtain the meaning when referring to the relevant documents, so as to obtain the rich experience knowledge (Moore, 2009).

In this study, when I obtain the permission of the selected case company, it is necessary for me to understand the management and operation of the case company. Therefore, review documents published in selected company such as annual reports, human resources release reports are very important to my research, so the document analysis method is very suitable for this study.

3.5 Data analysis

The data analysis method chosen for this study is thematic analysis method(Braun and Clarke, 2006). The method generates themes from the data by inductive coding to construct an interpretation. This study will use Braun and Clarke's six-step guide to the thematic analysis method in data analysis, and fully absorbed Susan Spiggle's data analysis operations into the whole analysis process.

Step 1: In the initial stage, I will continue to read the collected data repeatedly, especially after interviewing and observing the senior managers and talents of small and medium-sized e-commerce companies, I will be familiar with each respondent and case data.

Step 2: Start the initial coding. After reading the data repeatedly, I will classify the data and find the relationship between them, this process called categorization (Spiggle, 1994). The categorization are related to research questions because they guide research design and data collection, which consider to be the preferred strategy for case studies (Yin, 2014). The interview data and observation data of the respondents were open coding in this research by reading each sentence and paragraph to find answers to the repetitive questions to determine more general data categories. The extracted code is then further abstracted into a higher-order conceptual structure called theme. This step is done by placing the code into the theme.

Step 3: In the integration phase, code is organized in clusters and hierarchies to generate higher-level code or more meaningful themes. Therefore, it is necessary to constantly compare the similarities and differences between the collected data to determine if the code belongs to the same theme, this process called comparison (Spiggle, 1994). This is done by using axial coding and selective coding. Axial coding is associated with open coding extraction code by induction, then selects one theme as a core theme by selective the code and associates with all other codes to determine a higher order abstraction theme.

Step 4: Optimize and re-evaluate the theme. In the thematic analysis, each code needs to form a consistent data pattern in the theme, but it needs to clearly distinguish the theme (Braun and Clarke, 2006). This process requires a re-evaluation of the entire case study data to consider whether the theme represents a case, involving the process of rewriting the code and further refining the theme.

Step 5: Review and define all themes to try to capture the meaning and interpretation of the data it contains. To further analyze the data, it will also consider a reasonable and competitive interpretation and further review the theme through refutation operations.

Step 6: The final step of the thematic analysis is to generate an analysis report that provides interesting story data descriptions within and between themes. The entire data analysis process will be done by iteration operations through moving back and forth repeatedly at various steps(Spiggle, 1994).

3.6 Research ethics

Research ethics is a key factor in the success of any research. Research ethics includes multiple aspects, such as seeking access to organizations and respondents, as well as data collection, analysis, management, and use of data reports(Sauners, Lewis and Thornhill, 2016).

Stage 1: Before the study begins, I will evaluate the feasibility of this study. Whether I have the opportunity to get the consent of respondents and small and medium-sized e-commerce companies must be considered in advance. As a local person in JiuJiang city, I will find a contact channel for small and medium-sized e-commerce companies in JiuJiang city through my friends. Simultaneously, as a teacher of JiuJiang University, I will use my work advantages to contact related companies to carry out research work. To protect privacy, selected companies and individuals participating in the study should sign a written consent indicating that they have accepted the study.

Stage 2: In the data collection process especially when using interviews and

observations, it is important to protect the privacy of the respondents.

Three prejudices should be avoided in semi-structured interviews. First of all, it is related to me as an interviewer. In the process of interviewing with senior managers and corporate talents, special attention should be paid to the tone, behavior and manners of the dialogue, which will influence and guide the respondent's answer to the question. Secondly, it is related to senior managers and corporate talents. Their perception of me and their sensitivity to research questions may show me the performance of standardization. Thirdly, the time and place of the interview should fully respect the wishes of the respondents and the company. Meanwhile, cultural differences must be respected in interviews.

In observing, I should avoid misunderstandings caused by a lack of understanding of the observations. Meanwhile, the observed data information is recorded in time to avoid forgetting.

Stage 3: In the process of data analysis, respondents and company names are typically treated anonymously in research. However, when geographic location is discovered, it is difficult to achieve anonymity in practice. Secondly, it is necessary to submit the description results to the respondents for review to ensure accuracy because the respondents may have inconsistent descriptions of research questions. When supervising and using data, I must protect data from data leakage, and build the database in a timely manner.

In summary, throughout the entire research, I will always pay attention to the ethical issues of research. Focus on protecting the privacy of respondents and companies, and

avoiding embarrassment and uneasiness among respondents. Meanwhile, informing the respondents that the purpose of this study is not to disclose the true situation of the company, but to conduct pure scientific research to understand the brain drain problem of small e-commerce companies.

4 Conclusion

This research is a qualitative study to understand the brain drain of small and medium-sized e-commerce enterprises in JiuJiang city, aiming to help small and medium-sized e-commerce enterprises get rid of the dilemma of brain drain.

Through the collection and review of relevant literatures, the existing brain drain research literatures is collated and commented to clarify its relevance to research. Therefore, the research gaps are identified, making the study more theoretical and practical, and making its own contributions to the study of brain drain. The two-factor theory provides analytical lenses and a powerful analytical framework to enable research to proceed smoothly.

The research philosophy of this study is interpretivism. It is an inductive study that uses qualitative research method. Single case study was used to conduct the research design. By analyzing the warrantability and trustworthiness, the quality of the research throughout the study is ensured. In the data collection process, semi-structured interviews, observations, and document analysis methods are used to make data information richer and more comprehensive. In the data analysis session, the thematic analysis method is adopted, and the data processing technology is described step by

step. Finally, the research ethics of this study were carefully discussed throughout the entire research process.

The study has its shortcomings and limitations. Firstly, because my own research level is limited; secondly, there are limitations in the scope of the research object and the type of business. The research object of this study is limited to small and medium-sized e-commerce companies in JiuJiang City. However, the applicability of the research results to other regions or other types of enterprises remains to be studied. Therefore, in the future research, it is possible to carry out analysis and research on the brain drain factors and coping strategies of more regions, larger areas, more enterprises and gradually improve the theory of brain drain.

Part 2: Reflective essay based on quantitative and qualitative analysis

Abstract: Quantitative analysis and qualitative analysis have great differences in methodology in terms of theoretical origin, research strategies, research methods, and data analysis. Therefore, they are two distinct research methods. Based on my understanding and experience of the two research methods in the actual application process, I would like to talk about the connection and difference, advantages and disadvantages of the two analysis, and hope that the two can achieve complementary advantages and achieve the best research results.

Keywords: qualitative analysis; quantitative analysis

1 Introduction to qualitative and quantitative analysis

Qualitative research is primarily an activity in which researchers are used as research tools to interact with respondents in the natural environment to gain an explanatory understanding of their behavior and meaning construction(Xiangming, 2000). Qualitative research has different research strategies, including ethnography, action research, case study, grounded theory and narrative research. It can use different data collection techniques, such as interviews, observations, document analysis method and so on to collect data, and then understand the meaning of the data through data analysis. Therefore, qualitative research is a comprehensive exploration of social phenomena. It mainly uses inductive analysis of data to make the data meaningful and to explain

research questions.

Quantitative analysis is a more widely used method of scientific analysis. It is to find logical relationships between different variables and to validate and validate hypotheses(Choy, 2014). It believes that social phenomena exist objectively and are not affected by human subjective concepts. Research strategies for quantitative research include experiments, surveys, etc. The data collection method is usually an experimental method or a questionnaire method. The data analysis phase of quantitative research has a systematic operational process. Quantitative research is considered objective and fair in the process of fully considering reliability and validity.

2 Understanding of the two research methods

In my opinion, the quantitative analysis seems to be easier to use than qualitative analysis. Because my master's thesis was done with quantitative analysis, compared to the difficulties encountered in the first part of the qualitative study, I think quantitative research seems to be easier. Let me talk about the specific understanding and sentiment below.

Firstly, the two are completely different methodological choices. The research philosophy of quantitative research is positivism, which requires objectivity throughout the whole research process. Qualitative research, on the other hand, supports subjectivist ontology. It believes that the object of research is not the simple event itself, but the meaning given to it by human beings, which is very subjective.

Secondly, quantitative research mainly involves the study of the material

phenomena of things, not the study of the spiritual world. There is no need to establish a relationship between the researcher and the respondents before the study. The research steps are to propose the problem hypothesis - design structure questionnaire - verify the hypothesis-analyze the reason-find the countermeasure- conclusion(Sauners, Lewis and Thornhill, 2016).

However, qualitative research needs to establish an association with the respondents, and understand, analyze and think about the problem from the perspective of the respondents. It can be seen that qualitative analysis emphasizes the interaction with the respondents.

Thirdly, Quantitative research has a strict and standardized operating procedure to analyze and calculate the collected data, so the calculation results are fair and objective. However, the data collected by qualitative research is the subject's understanding and answer to the research questions, as well as the researchers' records using observation methods. While qualitative research uses triangulation and participant validation to ensure credibility and effectiveness, researchers' depth of understanding of research questions and the degree of collaboration of respondents on research issues may influence conclusions(Xiaotian, 2017).

Fourthly, quantitative research has a clear and unified system of research methods when it comes to data collection and data analysis. The conclusions it draws have certain promotion and reference functions. However, in the qualitative research process, whether the selected sample can represent the whole, it is difficult to determine whether the conclusion obtained is useful.

3 Choice of qualitative research or quantitative research methods

In the subsequent doctoral thesis, I will consider multi-method qualitative or multi-method quantitative based on my research topic. Because I learned that these two research methods have its advantages and disadvantages. They are two complementary analytical methods. If one can combine the advantages of the two and supplement the disadvantages, it's possible to conduct more in-depth study. I have listed some of the advantages and disadvantages of both analysis methods, as shown below.

In quantitative analysis, one of the advantages of quantitative research is that its theory is relatively mature and has a systematic data operating system. Quantitative research can intuitively use data to express analytical results, but its shortcomings cannot be ignored, that is, some opinions are easily misunderstood due to quantification. It is worth mentioning that the qualitative method can avoid the shortcomings of the above quantitative methods, make the data collection richer, and draw more comprehensive and deeper conclusions. What's more, there is another disadvantage of quantitative research. It strictly requires that the subject and object of the study should be separated and ignores the initiative of the researcher himself. Its research process overemphasizes statistics, sometimes into strange circles of blind quantitative research.

However, the advantages of qualitative research can best compensate for this shortcoming of quantitative analysis. It is based on an empirical description and methodological system centered on inductive analysis, emphasizing the diversity and richness of data and establishing a good relationship between researchers and respondents. Therefore, the combination of the two helps to make the research more

comprehensive and in-depth understanding of the research questions.

The merit of qualitative research is that data analysis is not limited by quantitation and can be adjusted to match the research object and research questions. Therefore, qualitative research can obtain rich data information, which bring a lot of space for researchers to explain. However, because it overemphasizes subjectivity and participation, it also focuses on case studies. Therefore, its popularity and usefulness are affected.

In summary, both qualitative research and quantitative research have advantages and disadvantages. For this reason, in the future writing of a doctoral thesis, efforts should be made to achieve the combination of the two advantages, avoiding shortcomings and helping to achieve better research results.

4 Comparison of quantitative analysis and qualitative analysis

In the light of my understanding and experience of these two research methods, the similarities and differences between the two are as follows:

Firstly, both are scientific methods of research. The scientific spirit requires us to conduct scientific research in an objectively and accurately manner in the process of conducting scientific research (Lei, 2013). No matter which research approach, data collection method, data analysis method is used, or how it is presented as text or numbers, both research methods aim to explore the essence of things and reflect the objective requirements of the scientific spirit. Therefore, there is no good or bad evaluation for qualitative analysis and quantitative analysis.

Secondly, both have fully considered the reliability and validity issues. Both data that are expected to be collected and analyzed are reliable and reproducible and are extended to other similar studies. It is undeniable that the two are completely different research methods.

From the technical or operational level, there are significant differences: Firstly, the research perspective is different. Qualitative research emphasizes the perspective of respondents. It refers to the fact that the research questions raised by qualitative research have implications for both the researcher and the respondents. The researcher himself usually uses an observation method to enter the field of study to experience life, to understand the meaning of the behavior of the respondents and their views on research questions. The researcher himself also participated in the whole process of research and maintained a good relationship with the respondents(Queirós, Faria and Almeida, 2017). While in quantitative research, the researchers themselves are outside the research and maintain a certain distance from the research object to achieve objective and non-human factors.

Secondly, the research methods are different. The methods used in quantitative research mainly include data collection and analysis of phenomena and problems, such as investigation, experiment, observation, and statistics, etc. It is a non-experiential data collection method. While the main methods used in qualitative research are the interview, observation, and document analysis methods, etc. It is an experiential observation and interview.

Thirdly, the data is expressed in different forms. The data for quantitative research

is usually digital, while the data collected by qualitative research are text, images, video clips, and other similar materials. Therefore, quantification is considered synonymous with data collection technology questionnaires. Qualitative study is considered synonymous with data collection techniques, such as interviews and categorical data.

Fourthly, the research strategy is different. Quantitative research is the process of proposing a hypothesis-validation hypothesis, which is dominated by deductive methods. The qualitative study is centered on explaining research problems and focusing on an inductive analysis (Yu, 2012).

5 Conclusion

In summary, due to the advantages and disadvantages of qualitative research and quantitative research, there are similarities and differences between them. Therefore, when conducting specific practical applications, I will conduct research design based on specific research questions and research purposes. By combining qualitative research and quantitative research, the advantages of the two research methods are fully utilized, thereby enriching the research results and improving the research quality.

References

- Al-saadi, H. (2014) 'Demystifying Ontology and Epistemology in Research Methods', *ResearchGate*, pp. 1–11.
- Bondy, K. (2008) *INSTITUTIONS AND AGENCY IN CSR STRATEGY: AN EMPIRICAL INVESTIGATION OF DEVELOPMENT AND IMPLEMENTATION*.
- Bowen, Glenn, A. (2009) *Document Analysis as a Qualitative Research Method*, *Qualitative Research Journal*.
- Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology', *Qualitative Research in Psychology*, 3(2), pp. 77–101. doi: 10.1017/CBO9781107415324.004.
- Brooks, F. B., Rubin, H. and Rubin, I. s (2018) 'Qualitative Interviewing: The Art of Hearing Data', *The Modern Language Journal*, 80(4), pp. 1807–1826. doi: 10.1515/9783110977479-007.
- Burell, G. and Morgan, G. (1979) 'Sociological paradigms and organisational analysis', *Elements of the sociology of corporate life*, p. 3.
- Carr, S. C., Inkson, K. and Thorn, K. (2005) 'From global careers to talent flow: Reinterpreting "brain drain"', *Journal of World Business*, 40(4), pp. 386–398. doi: 10.1016/j.jwb.2005.08.006.
- Choy, L. T. (2014) 'The Strengths and Weaknesses of Research Methodology: Comparison and Complimentary between Qualitative and Quantitative Approaches', *IOSR Journal of Humanities and Social Science*, 19(4), pp. 99–104. doi: 10.9790/0837-194399104.
- Commander, S., Kangasniemi, M. and Winters, L. A. (2004) 'The Brain Drain : Curse or Boon? A Survey of the Literature', *Challenges to Globalization: Analyzing the Economics.*, (February), pp. 235–278.
- Crotty, M. (1998) 'Printing tips : Viewing tips ':, *The foundations of social research : meaning and perspective in the research process*.
- Di, W. (2013) *Crisis Management about Brain Drain of Small and Medium Enterprises in current Economic Environment*.
- Dongli, C. (2013) 'Causes and Countermeasures of Brain Drain in Private Small and

- Medium-sized Enterprises', *Human Resource Development*, (3), pp. 2–6.
- Gaoyong, L. and Jiye, M. (2015) 'Case Selection and Research Strategy——A Summary of China Enterprise Management Cases and Qualitative Research Forum (2014)', *Management World (monthly)*, (2), pp. 133–136. doi: 10.1017/CBO9781107415324.004.
- Gerhart, B. (1990) 'Voluntary Turnover and Alternative Job Opportunities', *Journal of Applied Psychology*, 75(5), pp. 467–476. doi: 10.1037/0021-9010.75.5.467.
- Hong, Z. (2010) 'How Medium and Small Sized Private Enterprises Retain Core talents', *Journal of Shiyuan Technical Institute*, 23(1), pp. 60–62.
- Hongjie, L. (2006) 'On the Risk Prevention of Brain Drain in High-tech Enterprises', *POPULATION & ECONOMICS*, 33(S1), pp. 95–97. doi: 10.19744/j.cnki.11-1235/f.2006.09.027.
- Honhda, G. and Shuting, H. (2013) 'Research on Brain Drain of Small and Medium-sized Enterprises Based on Two-Factor Theory', *Human Resource Management*, 5, p. 33.
- Jian, W. (2018) *Analysis of problems and Countermeasure on Brain Drain of Small and Medium-sized E-commerce Enterprises--Taking HG Company as an Example*.
- Jianjun, L. (2017) 'The Status Quo and Countermeasures of E-commerce Human Resource Management in China', *China Management Informationization*, 20(4), pp. 136–137.
- Jianqing, L. (2012) 'Ananalysis of health brain-drain', *Modem Hospital*, 12(4), pp. 3–5.
- Jianzhong, L. (2002) 'Brain drain: panic the world', *Chinese talent*, (11), pp. 58–60.
- Jiao, L. (2016) *A Study of Reasons and Countermeasures of Brain Drain in State-owned Steel and Iron Enterprises ——An Example from Handan Steel Company*.
- Jiyang, Z. and Jiangtian, L. (2000) 'SCIENTIFIC MANAGEMENT RESEARCH', *SCIENTIFIC MANAGEMENT RESEARCH*, 18(4), pp. 73–75.
- Jiye, M. and Xia, Z. (2008) 'Specification and status assessment of case study methods', *Management world*, (4), pp. 115–121.

- King, N. (1970) 'Clarification and evaluation of the two-factor theory of job satisfaction', *Psychological Bulletin*, 74(1), pp. 18–31. doi: 10.1037/h0029444.
- Kui, W. and Dongmei, W. (2006) 'Research Report on the Environment of Science and Technology Innovation Talents', *Research on economics and management*, (1), pp. 19–24.
- Lei, X. (2013) 'Thoughts on Quantitative Research and Qualitative Research', *Business*, (12), p. 232.
- Liang, L. (2013) 'Analysis of the current situation of brain drain in state-owned enterprises and coping strategies', *HUMAN RESOURCE MANAGEMENT P.*, (10), pp. 226–227.
- Lina, R., Liming, C. and Xulin, D. (2007) 'THINK MUCH OF MENTAL CONTRACT TO REDUCE TALENT DRAIN FROM HOSPITAL', *Modem Hospital*, 7(1), pp. 128–130.
- Linjiang, K. *et al.* (2010) 'The Impact of Human Capital, Social Capital and Psychological Capital on Job Performance: Total Effect, Effect Difference and Regulating Factors', *Journal of Industrial Engineering /Engineering Management*, 24(4), pp. 29–35.
- Manjing, Z. (2009) 'Research on Early Warning Management of Brain Drainage in Small and Medium Enterprises', *Business China*, (3x), p. 76.
- Melumad, D. M. N. . N. D. (1995) 'Divisional versus company-wide focus: The trade-off between allocation of managerial attention and screening of talent', *Journal of Accounting Research*, 33(1995), pp. 65–94.
- Michaels, E., Handfield-Jones, H. and Axelrod, B. (2005) *The war of talent*.
- Mintzberg, H. (1979) 'An Emerging Strategy of "Direct" Research', *Administrative Science Quarterly*, 24(4), p. 582. doi: 10.2307/2392364.
- Mobley, W. H. (1977) 'Intermediate linkages in the relationship between job satisfaction and employee turnover', *Journal of Applied Psychology*, 62(2), pp. 237–240. doi: 10.1037/0021-9010.62.2.237.
- Moore, A. C. (2009) 'Basics of Qualitative Research: Techniques and Procedures for

- Developing Grounded Theory', *Library & Information Science Research*, 31(4), pp. 267–268. doi: 10.1016/j.lisr.2009.06.003.
- National Bureau of Statistics (2018) *Notice on Printing and Distributing the 'Statistical Measures for the Division of Large, Medium, Small and Micro Enterprises (2017)'*, National Bureau of Statistics official website. Available at: http://www.stats.gov.cn/tjgz/tzgb/201801/t20180103_1569254.html (Accessed: 3 January 2018).
- Netjingshe-E-commerce Research Center and Hangzhou Winning Education Consulting Co., L. (2019) *2018 China E-commerce Talent Survey Report*, Wangjingshe-E-commerce Research Center. Available at: <http://www.100ec.cn/zt/18rcbg/> (Accessed: 15 April 2019).
- Nijs, S. *et al.* (2014) 'A multidisciplinary review into the definition, operationalization, and measurement of talent', *Journal of World Business*. Elsevier Inc., 49(2), pp. 180–191. doi: 10.1016/j.jwb.2013.11.002.
- Porter, L. W. and Steers, R. M. (1973) 'Organizational, work, and personal factors in employee turnover and absenteeism', *Psychological Bulletin*, 80(2), pp. 151–176. doi: 10.1037/h0034829.
- Price, J. L. (1978) 'The Study of Turnover', *Science Quarterly*, 23(2), pp. 351–353. doi: 10.1111/gequ.12017.
- Qianru, F. and Mingrong, X. (2016) 'Measures to Deal with the Loss of Knowledge-based Talents in Small and Medium-sized Enterprises Based on Cook Curve', *Enterprises Forum*, (15), pp. 114–116.
- Qin, C. (2015) *The analysis of the influence factors and countermeasures of brain drain of the small and medium-sized enterprises —Taking the HanTai area for example*.
- Queirós, A., Faria, D. and Almeida, F. (2017) 'Strengths and limitations of qualitative and quantitative research methods', *European Journal of Education Studies*, 3(9), pp. 369–387. doi: 10.5281/zenodo.887089.
- Quinn, M. P. and Patton, M. Q. (2005) 'Qualitative Research', *Encyclopedia of*

- Statistics in Behavioral Science*, 3, pp. 1633–1636. doi: 10.1080/10503307.2011.620642.
- Salt, J. and Stein, J. (1997) ‘Migration as a Business: The Case of Trafficking’, *International Migration*, 35(4), pp. 467–494. doi: 10.1111/1468-2435.00023.
- Sansheng, M. and Li, W. (2006) ‘Research on Performance Management of Key Performance Indicators’, *Group economy*, (01s), p. 168.
- Sauners, M., Lewis, P. and Thornhill, A. (2016) *Research methods for business students*.
- Shamsi, U. R., Imtinan, U. and Imtinan, A. (2010) ‘Human resource management and technology advancement in education in Pakistan’, *ICEMT 2010 - 2010 International Conference on Education and Management Technology, Proceedings*, pp. 565–568. doi: 10.1109/ICEMT.2010.5657593.
- Sharma, S. K. and Gupta, J. N. D. (2003) ‘Socio-economic influences of e-commerce adoption’, *Journal of Global Information Technology Management*, 6(3), pp. 3–21. doi: 10.1080/1097198X.2003.10856353.
- Shengnan, D. (2017) ‘Research on the Loss of Employees in Small and Medium Enterprises and Its Countermeasures——Taking a Hotel as an Example’, *Market Modernization*, 846(9), pp. 140–141.
- Shuai, Z. and Bright, D. (2012) ‘Talent definition and talent management recognition in Chinese private-owned enterprises’, *Journal of Chinese Entrepreneurship*, 4(2), pp. 143–163.
- Shumin, L. (2000) ‘Research on the definition of small and medium-sized enterprises’, *Journal of Yunnan Finance and Trade Institute*, 16(6), pp. 14–17.
- Shuming, Z. (2005) ‘Analysis of the Status Quo of Human Resource Management Theory Research’, *Foreign Economies & Management*, 27(1), pp. 15–26.
- Spiggle, S. (1994) ‘Data in Consumer Research’, *Journal of Consumer Research*, 21(December), pp. 491–504. doi: 10.1086/209413.
- Stake, R. E. (1996) ‘The Art of Case Study Research’, *The Modern Language Journal*, 80(4), pp. 556–557.

- Thunnissen, M., Boselie, P. and Fruytier, B. (2013) 'Talent management and the relevance of context: Towards a pluralistic approach', *Human Resource Management Review*. Elsevier Inc., 23(4), pp. 326–336. doi: 10.1016/j.hrmr.2013.05.004.
- Tuzhen, Y. (2011) 'Medium and Small-sized Private Enterprises Brain Drain Current Situation and Countermeasures', *Technoeconomics & Management Research*, (10), pp. 63–66.
- Wei, H. (2014) *Salary & Compensation system Upgrading Research of L E-Commerce company*.
- Wei, Y. (2001) 'Interview Analysis', *Journal of Qiqihar university(Phi & soc Sci)*, (4), pp. 114–117.
- Whyte, W. F. (2007) 'Preface to the human perspective in sociology the methodology of participant observation', *Journal of Applied Social Science*, 1(2), pp. 1–3. doi: 10.1177/193672440700100201.
- Williams, L. J. and Hazer, J. T. (1986) 'Antecedents and Consequences of Satisfaction and Commitment in Turnover Models. A Reanalysis Using Latent Variable Structural Equation Methods', *Journal of Applied Psychology*, 71(2), pp. 219–231. doi: 10.1037/0021-9010.71.2.219.
- Xiangming, C. (2000) *QUATITATIVE RESEARCH IN SOCIAL SCIENCES*.
- Xiaotian, F. (2017) 'Differences and Combinations between Qualitative Research and Quantitative Research', *Journal of Jiangsu Administration Institute*, (2), pp. 68–74.
- Xin, C. and Bifen, Z. (2018) 'Analysis of Factors Affecting Employee Turnover Based on Grounded Theory——Taking S Exhibition Hall as an Example', *Journal of Shanxi Finance & Taxation College*, 20(3), pp. 35–38. doi: 10.15036/arerugi.48.887_2.
- Xin, W. and Wei, L. (2007) 'A comprehensive analysis of brain drain by E R G theory', *Market modernization*, (3), pp. 70–71.
- Ye, Y. and Jinbao, H. (2005) 'Brain - drain Risk Avoidance Based on Psychological Contract', *SCIENTIFIC MANAGEMENT RESEARCH*, 23(5), pp. 91–94.
- Yin, R. (2014) *CASE STUDY RESEARCH DESIGN AND METHODS 5ED*.

Yu, L. (2012) 'Discussion on the difference and combination of qualitative research methods and quantitative research methods', *China Science & Technology Overview*, (23), pp. 213–214.