



**EFFECTS OF PSYCHOLOGICAL CONTRACT BREACH ON
EMPLOYEES' KNOWLEDGE HIDING IN THE CHINA
CONSTRUCTION ENGINEERING CORPORATION LIMITED**

LAI WEI

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF MANAGEMENT IN MANAGEMENT SCIENCE
INSTITUTE OF SCIENCE INNOVATION AND CULTURE
RAJAMANGALA UNIVERSITY OF TECHNOLOGY KRUNGTHEP
ACADEMIC YEAR 2024
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of the Requirements for the Master's Degree

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ABSTRACT

This study explores the core competitiveness of knowledge sharing in Chinese construction engineering enterprises, focusing on the behaviors and underlying mechanisms of employee knowledge hiding. Through a survey of 557 employees at the China Construction Engineering Group, this paper delves into the complex relationships between psychological contract breaches, responsibility displacement, and knowledge hiding, as well as examining the moderating role of Zhong Yong thinking within these dynamics. The findings reveal that psychological contract breaches significantly increase employees' knowledge-hiding behaviors, with responsibility displacement mediating between psychological contract breaches and knowledge-hiding. Significantly, Zhong Yong thinking mitigates the negative impact of psychological contract breaches on employee behaviors. Additionally, demographic factors such as gender, age, educational background, and length of service also influence knowledge-hiding behaviors. This research provides new insights into the mechanisms of knowledge hiding in the workplace. It highlights the value of Zhong Yong thinking in alleviating the effects of psychological contract breaches, underscoring its importance for promoting internal knowledge sharing within enterprises.

Keywords: Chinese construction engineering enterprises, knowledge sharing, employee knowledge hiding, psychological contract breach, responsibility displacement

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CHAPTER I

INTRODUCTION

1.1 Background and Rationale

In recent years, large-scale construction engineering enterprises in China, including China State Construction Engineering Corporation Limited (CSCEC), have faced numerous challenges. Firstly, with the slowing growth of the Chinese economy, the entire sector is under significant economic downturn pressure, leading to reduced investments and financing constraints. This economic shift has resulted in uncertain project pipelines and tightening profit margins. Furthermore, intense market competition has led companies to frequently adopt low-bidding strategies, further compressing profits and threatening the sustainability of these enterprises (Li & Ling, 2012).

Technological advancements also place higher demands on the construction industry. Clients increasingly emphasize quality and innovation, compelling companies to continually upgrade technologies to maintain competitive advantages (Lu & Yuan, 2010). However, technological innovation requires continuous financial investment and necessitates ongoing employee training and effective integration of new technologies into existing workflows. This increases operational complexity and costs (Chen et al., 2010).

Talent acquisition and retention pose another significant challenge, especially for large state-owned enterprises like CSCEC. The construction engineering sector highly demands skilled and specialized technical talent. Fierce industry competition makes attracting and retaining top talent increasingly difficult. This talent shortage highlights the necessity for effective human resources management (HRM) strategies, including recruitment, training, performance evaluation, and compensation management (Zhao et al., 2009).

As a large state-owned enterprise, CSCEC faces unique challenges related to its size and complexity. Managing a vast workforce across multiple business units and regional branches requires HRM strategies that efficiently promote coordination

and communication. Additionally, operating within the framework of government policies and regulations adds another layer of complexity to HRM practices, necessitating alignment with government directives while meeting the evolving needs of the industry (Zhu et al., 2005).

To address these challenges, CSCEC and similar enterprises must adopt tailored HRM strategies to optimize organizational performance, foster a motivated and satisfied workforce, and enhance their competitiveness in the global market. This includes continuous investment in employee development, promoting a culture of innovation, and implementing robust succession planning to ensure organizational continuity and talent depth (Zheng et al., 2006). By adopting these strategies, these enterprises can navigate complex economic and industry-specific challenges and thrive in the highly competitive and dynamic construction engineering environment.

In the era of the knowledge economy, the effective creation and application of knowledge have become pivotal to the core competitiveness of construction engineering enterprises (Nonaka & Takeuchi, 1995). However, China's large-scale construction engineering companies face unprecedented challenges, such as economic downturn pressures, intensified industry competition, the demand for technological innovation and upgrades, talent scarcity, and difficulties in talent retention. Against this backdrop, the issue of employee knowledge hiding has gradually emerged, and its negative impacts cannot be underestimated (Connelly et al., 2012). This behavior undermines work efficiency and productivity and hinders organizational learning and innovation, leading to increased employee turnover rates, affected job satisfaction and morale, weakened organizational competitiveness, and even elevated organizational risks (Serenko & Bontis, 2016).

Existing studies have explored various factors influencing knowledge hiding. However, a noticeable lack of research delves into the underlying reasons for employee knowledge hiding from the standpoint of employee-organization relationships. Notably, the context of interaction between employees and the organization remains underexplored. Additionally, previous investigations have predominantly focused on knowledge-intensive organizations, such as intellectual enterprises and academic institutions, with a concentration of knowledge workers, abundant knowledge resources, and high reliance on organizational support for

knowledge conversion. In contrast, the construction engineering industry exhibits distinct features, including fewer knowledge workers, dispersed knowledge resources, and lower dependency on the organization. Consequently, there is a pressing need to examine employee knowledge-hiding behavior within Chinese construction engineering companies.

This study aims to shed light on the relationship between psychological contract breaches and employee knowledge-hiding behavior, providing deeper insights into the reasons and motivations behind such behavior. By unpacking how psychological contract breaches lead to employees withholding and hiding their knowledge, the study aspires to identify potential issues and challenges, offering tailored improvement solutions for organizational management within the construction engineering industry. Ultimately, this research endeavors to contribute to the understanding and enhancement of knowledge management practices in this vital sector.

1.2 Research Questions

The present study explores the interplay between psychological contract breaches and employees' knowledge-hiding behavior, focusing on understanding the underlying reasons and motivations for such conduct. By examining how psychological contract violations prompt employees to withhold and conceal knowledge, the study intends to uncover potential issues, challenges, and tailored solutions for improving organizational management practices, specifically within the construction engineering sector.

The research questions for this study are as follows:

What is the relationship between psychological contract breaches and knowledge-hiding behavior among employees in large-scale construction engineering enterprises in China?

How do factors such as responsibility displacement and Zhong Yong Thinking influence employees' tendency to engage in knowledge-hiding behavior in the context of psychological contract breach?

1.3 Research Hypotheses

H1: Psychological contract breach positively influences employee knowledge hiding.

H2a: Psychological contract breach positively influences responsibility displacement.

H2b: Responsibility displacement positively influences employee knowledge hiding.

H2c: Responsibility displacement mediates the impact of psychological contract breach on employees' knowledge hiding.

H3a: Zhong Yong thinking negatively moderates the relationship between psychological contract breach and employees' knowledge hiding.

H3b: Zhong Yong thinking negatively moderates the relationship between psychological contract breach and responsibility displacement.

H4: Differences in demographic factors (including gender, age, marital status, educational background, and duration of service) affect employee knowledge hiding.

1.4 Research Objectives

(1) To reveal the influence mechanism of psychological contract breaches on employees' immoral behaviors, such as knowledge hiding, through survey research on employees in China State Construction Engineering.

(2) To reveal the mediating role of responsibility displacement and the moderating roles of Zhong Yong thinking in this process, thereby providing effective management strategies for enterprises.

1.5 Research Scope and Limitation of the Study

The scope of this study includes front-line employees of a CSCEC branch office located in Chongqing, China. The branch office employs over 2,000 staff members, constituting the study's population.

Data will be collected through online and on-site surveys at the CSCEC Chongqing branch office, enabling comprehensive data collection.

This research relies on employee self-reported data, which may introduce subjectivity and standard method bias. Additionally, the limited sample size may affect the representativeness of the findings.

1.6 Research Framework

Based on the research hypothesis, the researcher developed the framework illustrated in Figure 1.1 below.

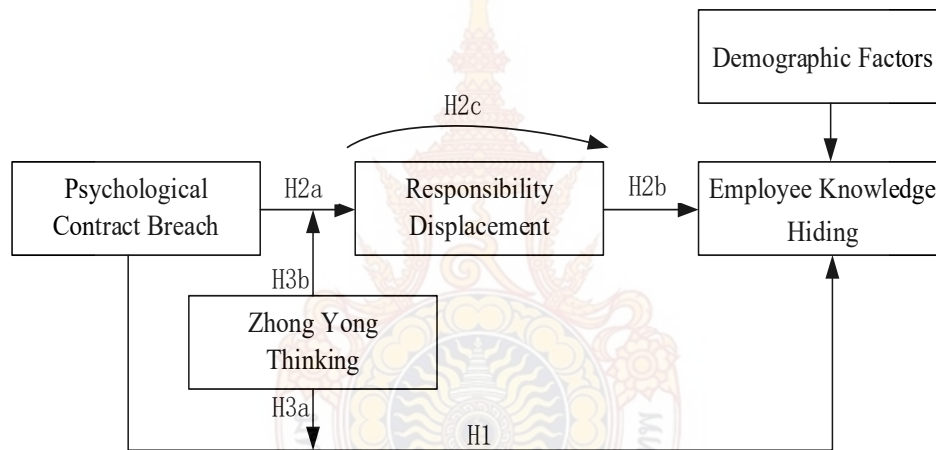


Figure 1.2. Research Framework

1.7 Definition of Key Terms

(1) Knowledge Hiding: Knowledge hiding refers to intentionally withholding or concealing knowledge when others request or seek information. It involves deliberately avoiding or restricting the sharing of valuable knowledge that could benefit others (Connelly, 2012). In this study, knowledge hiding is the dependent variable, meaning it is the outcome that we aim to explain and understand.

(2) Psychological Contract Breach: Psychological contract breach refers to the perception or feeling of employees that the organization has failed to fulfill its

commitments or promises made to them regarding various aspects of the employment relationship, such as rewards, recognition, career development, and work conditions (Robinson, 2000). In this study, psychological contract breach is the independent variable, meaning it is the factor that influences or predicts changes in the dependent variable, which is knowledge hiding.

(3) Responsibility Displacement: Responsibility displacement occurs when individuals believe they have little or no control over specific events, leading them to deny or transfer responsibility for their actions to external factors or authorities. This cognitive mechanism helps individuals distance themselves from the consequences of their behavior (Barsky, 2011). In this study, responsibility displacement is the mediator variable, meaning it explains the mechanism or process through which the independent variable (psychological contract breach) affects the dependent variable (knowledge hiding).

(4) Zhong Yong Thinking: The concept of Zhong Yong Thinking, or middle-way thinking, is deeply rooted in Chinese philosophy, particularly Confucianism. It refers to the philosophical pursuit of moderation, balance, and harmony. This principle encourages avoiding extremes and seeks a balanced approach in all aspects of life (Shen et al., 2019). In this study, Zhong Yong Thinking is the moderator variable, which influences the strength or direction of the relationship between the independent variable (psychological contract breach) and the dependent variable (knowledge-hiding).

These definitions of key terms will serve as a foundation for analyzing and discussing the relationship between psychological contract breaches and knowledge-hiding behavior in the context of large construction engineering enterprises.

1.8 Benefits of the Study

This study aims to uncover the relationship between psychological contract breaches and employee knowledge-hiding behavior, providing in-depth insights into the reasons and motivations behind such behavior. By analyzing how psychological contract breaches lead to employees withholding and hiding their knowledge, this study seeks to identify potential issues and challenges, offering tailored

improvement solutions for organizational management within the construction engineering industry. Ultimately, this research enhances knowledge management practices in construction engineering enterprises and boosts their core competitiveness. The specific benefits of this study include:

(1) Theoretical Contribution: This research will fill existing gaps in the literature, particularly regarding the impact of employee-organization relationships on knowledge-hiding behavior. It introduces a novel perspective and theoretical framework that future research can build upon. This study contributes to a deeper understanding of organizational behavior and knowledge management theories by examining the underlying mechanisms of how psychological contract breaches influence knowledge hiding.

(2) Practical Implications for HRM: The findings of this study will provide practical guidance for human resource management (HRM) practices in construction engineering enterprises. Companies can develop more effective HRM strategies by identifying the causes and consequences of knowledge hiding due to psychological contract breaches. These strategies may include better recruitment processes, comprehensive training programs, robust performance evaluations, and fair compensation systems, all aimed at fostering a more transparent and collaborative work environment.

(3) Enhancement of Organizational Performance: Improving knowledge management practices based on the study's insights can significantly enhance organizational performance. By addressing knowledge-hiding behaviors, enterprises can improve work efficiency, boost productivity, and foster innovation. This strengthens the organization's ability to adapt to market changes and ensures sustained competitive advantage. Additionally, by fostering a culture of knowledge sharing, companies can reduce employee turnover, increase job satisfaction, and build a more resilient and capable workforce.

CHAPTER II

LITERATURE REVIEW

2.1 Related Theories

2.1.1 Theory of Psychological Contract

In an organizational context, the psychological contract theory proposed by Denise Rousseau in 1989 refers to the unwritten and intangible expectations and obligations between employees and their employers. Unlike formal contracts, psychological contracts are not documented agreements but implicit understandings formed through interactions, communications, and experiences between the two parties.

The psychological contract involves the reciprocal relationship between employees and organizations. Employees have certain expectations from their employers, such as fair treatment, job security, career development opportunities, and recognition for their contributions. On the other hand, organizations expect employees to fulfill their job responsibilities, adhere to company values, and contribute to the organization's overall success.

The fulfillment or breach of the psychological contract can significantly impact employees' attitudes and behaviors in the workplace. When employees perceive that the organization has fulfilled its promises and met their expectations, they will likely experience higher levels of job satisfaction, commitment, and engagement. This positive psychological contract leads to increased organizational citizenship behavior and a willingness to go above and beyond their job requirements.

Conversely, when there is a breach in the psychological contract, such as unfulfilled promises or a lack of support from the organization, employees may experience feelings of betrayal, dissatisfaction, and decreased organizational commitment. This breach can lead to negative work behaviors, such as reduced effort, decreased motivation, and an inclination towards knowledge hiding or withholding valuable information from the organization (Coyle-Shapiro & Conway, 2005).

2.1.2 Cognitive Adjustment in Social Cognitive Theory

According to the social cognitive theory (Bandura, 2017; Stormbroek and Blomme, 2017), cognitive adjustment refers to how individuals modify and adapt their cognitive beliefs based on accumulated experiences and feedback. In the context of social cognitive theory, cognitive adjustment can be achieved through the following approaches:

1. **Adjusting cognitive structures:** Individuals modify and revise their existing cognitive structures by acquiring new information, experiences, or knowledge. This means that an individual's perception and understanding of a specific object or situation may change as they accumulate new information and experiences. For example, an employee may have a vague understanding of a specific task when starting a job. However, as they gain more work experience, their comprehension and interpretation of that task may become more accurate.

2. **Reevaluating cognition:** When individuals encounter information or situations that contradict their previous beliefs, they may reevaluate their existing cognition. This reevaluation can be either proactive or reactive, triggered by the emergence of new information. Through reevaluating cognition, individuals can better adapt to new circumstances or environments.

3. **Comparing feedback:** Individuals adjust their cognition by comparing themselves with others and receiving their feedback and opinions. This feedback can come from colleagues, supervisors, family members, and friends. Based on others' evaluations and feedback, individuals may revise their cognition and behavior to enhance adaptability and performance.

4. **Self-monitoring:** Individuals adjust their cognition by monitoring and evaluating their behavior and performance. Self-monitoring involves observing and assessing actions to promptly identify and rectify potential issues or errors, thus enhancing cognitive proficiency and behavioral effectiveness.

5. **Self-reflection:** Individuals self-reflect to contemplate and explore cognitive biases, misconceptions, and deficiencies in their experiences and behaviors. Through self-reflection, individuals gain deeper insights into their cognitive processes, allowing for better adjustment and optimization of cognition.

In summary, cognitive adjustment in social cognitive theory refers to how

individuals modify and adapt their cognitive beliefs based on new information, experiences, feedback, and self-evaluation. These cognitive adjustment approaches enable individuals to adapt to the ever-changing social environment and circumstances, enhancing their ability to cope with various challenges and issues. Understanding and applying these cognitive adjustment approaches can help employees better adapt to organizational requirements and changes, improving work performance and satisfaction.

2.2 Related Studies and Hypotheses

2.2.1 Psychological Contract Breach

A psychological contract breach (PCB) occurs when employees perceive that the organization has failed to fulfill its promises or meet its expectations (Morrison & Robinson, 1997). This perception could stem from unfair treatment or discrepancies between expectations and reality. Furthermore, a lack of fairness could lead to psychological contract violations (Tekleab et al., 2005), potentially provoking a range of negative behaviors, such as knowledge hiding and shirking. The psychological contract breach may decrease job satisfaction, reduced commitment, and other negative work behaviors. Zhao et al. (2007) further confirmed in a meta-analysis that psychological contract breaches negatively impact job satisfaction, commitment, trust, and performance. Bal et al. (2010) study indicated that age is a moderating variable between psychological contract breach and job attitudes.

2.2.2 Employee Knowledge Hiding

Knowledge hiding refers to intentionally withholding or concealing knowledge when others make knowledge requests, which can be further divided into evasive hiding, playing dumb, and rationalized hiding (Connelly et al., 2012). Evasive hiding involves answering off-topic or not keeping promises; playing dumb involves pretending ignorance about the knowledge being asked; rationalized hiding involves providing supposedly reasonable excuses for refusing to share. This phenomenon often occurs in business practice because employees may wish to maintain a competitive edge by monopolizing certain knowledge.

The related research on knowledge hiding can be traced back to the 1960s in organizational behavior and anthropology. However, earlier studies were often

fragmented and personalized, often conflating knowledge hiding with concepts such as deception or concealment. Not until 2012 did Connelly et al. first define knowledge hiding as "the intentional concealment or withholding of knowledge sought by knowledge seekers," making knowledge hiding an independent and emerging academic concept.

Taking engineering enterprises as an example, employees' skill advantages form an essential part of their core competitiveness, accumulating over time through work. In such an environment, knowledge-hiding behavior frequently occurs. New employees acquire skill knowledge through daily accumulation, mentorship, organized company education, and learning from each other. However, the most rapid ways of acquiring knowledge often involve knowledge hiding, leading to challenges in job performance, skill deficiency, production decline, high employee turnover, and management difficulties.

Psychologist Erich Fromm posited that humans inherently have a self-protective nature, and to avoid bearing excessive responsibility, people tend to hide their deficiencies. This perspective is particularly pronounced in the workplace, where employees may hide their knowledge and skills for fear of underperforming. It provides a theoretical basis for understanding the impact of psychological contract breaches on employee knowledge hiding.

Numerous scholars have explored the impact of psychological contract breaches on employee knowledge, hiding from various angles. For instance, Zhang (2018) found through empirical research that a breach in the psychological contract decreases employees' job engagement and satisfaction, thus intensifying knowledge hiding. Li (2019) analyzed the impact mechanism of psychological contract breach on employee knowledge hiding from an organizational behavior perspective.

These research results reveal the link between psychological contract breaches and employee knowledge hiding.

H1: Psychological contract breach positively influences the employee's knowledge hiding.

2.2.3 The Mediating Role of Responsibility Displacement

The social cognition theory suggests that an individual's behavior is consistent with cognition, and behavioral decisions will also affect cognitive adjustment.

After a psychological contract breach occurs, employees often perceive the organization as no longer trustworthy (Stormbroek, 2017). Faced with fragile and unstable relationships with the organization, employees may display behavior that disregards the organization's interests to maintain workplace advantages and protect their interests. Because internal cognition will ultimately adapt to individual behavior (Boardley, 2010), when individuals act against the organization's interests due to a psychological contract breach, their conscience may also be morally condemned. At this point, to escape the supervision of moral standards, individuals often choose to selectively activate moral standards by adjusting moral cognition to escape moral condemnation, enabling them to refuse actions beneficial to the organization without burden. Specifically, when employees of China State Construction Engineering display negative behavior due to a psychological contract breach, they can eliminate the immoral perception of negative behavior through adjustments in moral cognition. This adjustment in moral cognition is responsibility displacement. It can be inferred that employees of China State Construction Engineering are likely to adjust their moral cognition through responsibility displacement, adapting to the changes caused by the psychological contract breach.

Responsibility displacement refers to the refusal to take responsibility for one's actions when an individual judges that they cannot control the occurrence of events, that is, to deny or shift their responsibility (Barsky, 2011). Individuals exhibiting responsibility displacement weaken moral condemnation by inverting or distorting adverse consequences (Zhang and Wang, 2016). For employees although the responsibility between employees and the organization is mutual (Rousseau, 1990), the organization cannot force employees to contribute beyond the formal contract. Similarly, employees cannot ask the organization to fulfill the informal contract. Employees perceiving a psychological contract breach implies that they believe the organization tends to deny or reduce its responsibility, and employees cannot influence this behavior of the organization. Influenced by this, employees are likely to reduce their sense of responsibility towards the organization and deny their responsibility in the informal contract with the organization, that is, deny responsibility or shift blame. A psychological contract breach is inferred to be positively related to responsibility displacement.

In summary, a psychological contract breach may cause changes in employees' moral cognition. On one hand, a psychological contract breach could lead employees to abandon their existing moral standards and redefine them. On the other hand, it could also provide convenience for employees to shift their responsibility, resulting in a decline in their sense of responsibility towards the organization.

Based on the above analysis, this research proposes the following hypotheses:

H2a: Psychological contract breach positively influences responsibility displacement.

H2b: Responsibility displacement positively influences employee knowledge hiding.

When the responsibility displacement mechanism is activated, the individual will not actively take responsibility for their actions and may even shift this responsibility to others. In the workplace, responsibility displacement often means that employees shift their responsibilities to a more authoritative object to escape moral sanctions. From the perspective of employees, the organization has higher authority, and employees can shift responsibility to the organization through the responsibility displacement mechanism, covering up their relationship with the harmful consequences of their actions. For employees of construction engineering companies, even if they recognize that knowledge hiding will lower the level of organizational knowledge management and have a negative impact on other members of the organization or even the organization, under the influence of responsibility displacement, they view knowledge hiding as personal decision-making behavior, with little impact on the organization, and will not prevent colleagues from acquiring knowledge from other channels, and therefore believe that they do not need to be responsible for the negative consequences caused by knowledge hiding, which may ultimately lead to an increase in knowledge hiding. Therefore, it is inferred that responsibility displacement may be positively correlated with knowledge hiding among employees of construction engineering companies.

Based on the above analysis, this study proposes the following hypotheses:

H2c: Responsibility displacement mediates the impact of psychological contract breach on knowledge hiding.

2.2.4 The Moderating Role of Zhong Yong Thinking

Zhong Yong Thinking, derived from Chinese Confucian thought, refers to avoiding extremes and seeking a compromise and reasonable solution when dealing with problems (Shen et al., 2019). In organizational behavior, Zhong Yong's thinking may help alleviate conflicts and promote team cooperation (Yang, 2009). Although the study of Zhong Yong's thinking on organizational behavior is still relatively scarce, its potential value in understanding employee behavior and improving organizational efficiency cannot be ignored.

Zhong Yong's thinking is unique to the Chinese. It requires individuals to take appropriate actions after integrating external conditions and internal requirements in specific situations, including multidimensional thinking, integration, and harmony (Wu & Lin, 2005). The Social cognitive theory believes that the values formed under the same social culture will continuously impact people's cognition and behavior (Bandura, 2001). As a value concept with Confucian characteristics, Zhong Yong subtly influences modern Chinese life, leading people to consider the overall situation during interactions (Zhao et al., 2014). As a unique value concept among the Chinese, Zhong Yong's thinking can help employees in construction engineering companies adapt to the workplace, control their emotions, and achieve self-discipline. Therefore, when employees of construction engineering companies have strong Zhong Yong thinking, they usually exhibit more assertive principled behavior, emphasize harmony as a guideline for action, maintain a relatively moderate behavioral strategy, and maintain harmony in interpersonal interactions. Even if a psychological contract breach brings negative stimuli, such employees are likely to provide answers when faced with knowledge requests patiently, participate in internal knowledge exchange within the company, and not easily exhibit knowledge hiding. Due to a lack of reverence for principles and a disregard for harmony, employees with a lower degree of Zhong Yong thinking are likely to take extreme actions in organizational interactions, increasing the probability of knowledge hiding. Therefore, it is inferred that employees of China State Construction Engineering with high Zhong Yong thinking are less likely to hide knowledge induced by breaches of the psychological contract; employees of construction engineering companies with low Zhong Yong thinking are more likely to hide knowledge induced by breaches of the psychological contract.

At the same time, employees of construction engineering companies with strong Zhong Yong thinking will emphasize moral self-restraint, avoid impulsive actions, and focus on viewing problems with a dialectical and holistic perspective (He, 2019). Such employees usually have a stronger sense of morality. Even if the breach of the psychological contract makes them perceive the organization's unfair treatment (Lin and Jin, 2013) or the absence of reciprocal responsibility in the organization, they will still adhere to high moral standards in the organization, consider the impact of their actions on the organization out of moral self-control, and maintain a sense of responsibility towards the organization (Wu and Lin, 2005). Therefore, these employees are less likely to develop responsibility displacement cognition. Employees of construction engineering companies with weaker Zhong Yong thinking, on the other hand, usually prioritize their interests and are likely to use self-protection as an excuse to justify harming others' interests and evade responsibility in the organization. Therefore, these employees are likelier to adjust their moral cognition and develop responsibility displacement. Therefore, it is inferred that employees of construction engineering companies with high Zhong Yong thinking are less likely to develop responsibility displacement induced by breaches of the psychological contract; employees of construction engineering companies with low Zhong Yong thinking are more likely to develop responsibility displacement induced by breaches of the psychological contract.

Based on the above analysis, the following hypotheses are proposed:

H3a: Zhong Yong Thinking negatively moderates the relationship between psychological contract breach and employees' knowledge hiding.

H3b: Zhong Yong Thinking negatively moderates the relationship between psychological contract breach and responsibility displacement.

2.2.5 Research on Organizational Identification

Finally, considering the potential effect of demographic factors, such as gender, age, marital status, educational background, and duration of service, the following hypotheses are proposed:

H4 : The difference in demographic factors (including gender, age, marital status, educational background, and duration of service) affects employee knowledge

hiding.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

The research design adopts a quantitative method and a questionnaire research method. Questionnaire research collects data by sending questionnaires to samples to obtain their opinions, perceptions, and experiences.

This study used a questionnaire survey method to assemble the attitudes of employees in China State Construction Engineering towards psychological contract breach and knowledge hiding, as well as the interrelationships between other variables, and collected data for research.

3.2 Research Population and Samples

3.2.1 Population

The subject of this study is the employees of China State Construction Engineering's branch in Chongqing, China, with approximately 1000 employees.

3.2.2 Samples

Typically, in conducting a questionnaire survey, the sample size should be sufficiently large to ensure the reliability and effectiveness of the research results. Generally, the sample size should be greater than 5-10% of the total population to ensure that the sample can represent the characteristics of the entire population. Since the questionnaire contains 35 items, collecting at least 525 (35×15) sample data is a reasonable target. This will enhance the representativeness and generalizability of the research findings. Of course, if possible, collecting more sample data will further enhance the statistical power and credibility of the study.

3.2.3 Sampling Methods

This study used the convenience sampling method and the snowball sampling method. The researcher is currently a China State Construction Engineering employee with abundant resources of friends and colleagues and is still employed.

Researchers will distribute survey questionnaires to this group of people in order to quickly obtain samples. At the same time, those who have completed the survey questionnaire will be required to search for eligible individuals, obtain additional samples through their introductions, and gradually expand the sample size until the research objectives are achieved.

3.3 Data Collection

Identifying Sample Sources: The researcher selects easy-access samples, typically staff from the company.

Contact and Recruitment: The researcher reaches out to potential participants and invites them to participate in the study. Recruitment is done through various means, including face-to-face, social media, telephone, and email.

Data Collection: Once consent is obtained from participants, the researcher collects their data. In this study, data collection will be conducted through online electronic questionnaires using Credamo (<https://www.credamo.cn>). The questionnaire link will also be sent to the target respondents, and the data collection is expected to be complete within 6 weeks.

3.4 Research Instrument

Variable Measurement

The measurement scales used in this study are adapted from established scales in the existing literature. These scales have been previously translated into Chinese and validated by Yu et al. (2022) in their research. For this study, minor adjustments will be made to these scales to suit the context of the construction engineering industry. The specific measurement items are presented in Table 3.1. All items will be measured using a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree).

In particular, psychological contract breach is measured using a scale developed by Robinson and Morrison (2000), comprising 5 items. Responsibility displacement is measured using a scale by Barsky (2011) consisting of 5 items.

Knowledge hiding is measured using a scale by Connelly et al. (2012) consisting of 12 items. Zhong Yong's Thinking is measured using a scale by Wu Jiahui and Lin Yizheng (2005), which comprises 13 items. The measurement items are presented in Table 3.1.

Additionally, considering that the study focuses on employees, demographic variables commonly used in population statistics may have an impact. Therefore, gender, age, years of work experience, and educational background will be included.

Table 3.1. Measurement of Variables

Variables	Question Items
Psychological Contract Breach	A1. The company has tried to fulfill all its promises to me during recruitment. A2. I feel that the company has successfully fulfilled most of the promises made to me during my employment. A3. The company has done very well in fulfilling its original promises. A4. I have made contributions, but the company has not fully fulfilled its original promise of returns. A5. Upon joining, I fulfilled my promises to the company, but the company broke many promises made to me at the time of employment.
Knowledge Hiding	B1. Although I promised to help my colleagues, I do not intend to. B2. I promised to help my colleagues, but the knowledge I provide is not what they want. B3. I tell my colleagues I will help later but try to delay as much as possible. B4. I provide my colleagues with other knowledge to replace the knowledge they want. B5. I pretend not to know about this area of knowledge. B6. I tell my colleagues that I do not know, but in fact, I

do.

B7. I pretend not to understand what my colleague is saying.

B8. I pretend not to know much about this area of knowledge.

B9. I explained that I wanted to tell my colleagues, but it does not comply with company regulations.

B10. I explain that the information is confidential and only for relevant personnel.

B11. I tell my colleagues that the boss does not allow this knowledge to be shared.

B12. I explicitly tell my colleagues that I cannot answer this question.

Table 3.1. Measurement of Variables (continued)

Variable	Question Items
Zhong Yong Thinking	C1. I consider conflicting views during discussions. C2. I tend to think about the same thing from multiple perspectives. C3. I consider everyone's opinions when voting. C4. I consider all possible situations when making decisions. C5. I try to find an opinion everyone can accept in a contentious situation. C6. I try to find a balance between my opinion and the opinions of others. C7. I adjust my original thoughts after considering the opinions of others. C8. I look forward to reaching a consensus during discussions. C9. I try to integrate my opinions into the ideas of others.

	C10. I usually tactfully express my differing opinions.
	C11. When making decisions, I try to make the minority accept the majority's opinion harmoniously.
	C12. When making decisions, I usually consider the harmony of the overall atmosphere.
	C13. When making decisions, I usually adjust my expression to consider the harmony of the whole.
Responsibility	D1. If I misbehave due to excessive pressure from my boss,
Displacement	I should not be held responsible.
	D2. I should not be blamed for misbehaving because my boss forces me to.
	D3. It is unreasonable to be blamed for unethical behavior when it is encouraged by the company.
	D4. I should not be blamed for exaggerating the truth because others do the same.
	D5. It is unfair to blame the negative impact caused by the company on people with little power of speech.

(2) Data Analysis Techniques

Data analysis techniques are of utmost importance in this study as they help researchers extract information, draw conclusions, and validate research hypotheses from the collected data. The following data analysis techniques may be employed:

1. EXCEL

Excel is a common spreadsheet software widely used for data organization, processing, and visualization. This study will use Excel to clean data, calculate statistical indicators (such as mean and standard deviation), create charts, and perform simple descriptive statistical analysis. Excel's advantage lies in its user-friendly interface, making it suitable for preliminary analysis and presentation of small-scale data.

2. SPSS (Statistical Package for the Social Sciences)

SPSS is specialized software for statistical analysis in social sciences

research. In this study, SPSS will be used for various statistical analyses. It can handle large datasets and offers a wide range of statistical analysis functions, including descriptive statistics, correlation analysis, regression analysis, and analysis of variance. Through SPSS, a deeper understanding of relationships and trends between the data can be obtained, and research hypotheses can be validated.

3.5 Content Validity and Reliability

In empirical research, content validity and reliability are two key methods used to assess the quality and reliability of research tools, such as questionnaires, in measuring specific concepts or phenomena.

1. Content Validity

Content validity refers to whether a research tool comprehensively and accurately covers the content of the concepts or phenomena to be measured. It ensures that the items or questions in the research tool are relevant to the research objectives and effectively capture the required information.

The methods for assessing content validity include expert evaluation and literature review. In expert evaluation, researchers invite three experts with relevant domain knowledge and experience to assess the items in the research tool. Experts judge whether each item is relevant to the research objectives and appropriately reflects the concepts to be measured. This evaluation helps researchers identify and correct potential issues or ambiguities in the research tool.

To test the questionnaire's ability to cover the assertions of the theory, the content validity test with the index of item objective congruence (IOC) method was used. The questionnaire will be assessed by three experts in the business field and others.

$$IOC = \Sigma R/N$$

By IOC = Index of Item Objective Congruence, ΣR = score summation, and N = number of experts. An acceptable value of IOC is 0.5 or more. The questionnaire item must be modified if the IOC value is lower than 0.5.

In addition, literature review is another commonly used method for content validity assessment. Researchers review relevant literature and studies to

confirm whether the items in the research tool are consistent with previous research findings and theoretical frameworks.

The scales used in this study are mature from existing literature, with appropriate adjustments for the context of the construction engineering industry. They have been evaluated by the advisor and employees, ensuring sufficient content validity.

2. Reliability

Reliability refers to the stability and consistency of a research tool in measuring the same concept or phenomenon under different times or conditions. A research tool with high reliability should yield similar results upon repeated measurements.

This study will employ the internal consistency method, which evaluates the consistency among different items in the research tool. The commonly used internal consistency test method is Cronbach's alpha coefficient. The Cronbach's alpha coefficient ranges from 0 to 1, with values closer to 1 indicating higher internal consistency of the research tool. The acceptable reliability value in this study is more than 0.7. A question that has scored lower than 0.7 will be removed.

By conducting content validity and reliability tests, researchers can ensure the quality and reliability of the research tool, thereby enhancing the accuracy and credibility of the empirical research. These validation methods are essential to guarantee the scientific validity and effectiveness of the research results.

3.6 Data Analysis

This study will employ the following methods to conduct data analysis:

1. Descriptive Statistics

Descriptive statistics are used to describe and summarize the data. It includes the following measures:

Mean: The average value of the data used to measure the central tendency of the data.

Standard Deviation: The measure of data dispersion, indicating the variability of the data.

Frequency: The number of occurrences of each value in the dataset,

applicable for categorical data.

Descriptive statistics provide an overview of the data, helping researchers to gain a preliminary understanding of the data characteristics.

2. Inferential Statistics

Independent sample t-test and one-way ANOVA will be used to test the effect of demographic factors.

3. Regression analysis is used to study the relationship between one or more independent variables and a dependent variable. It helps predict the changes in the dependent variable when the independent variables change and assesses the impact of the independent variables on the dependent variable.

Linear regression analysis: Applicable when there is a linear relationship between the independent and dependent variables.

Multiple regression analysis: Considers multiple independent variables' impact on the dependent variable while controlling for other variables. Additionally, hierarchical regression analysis is used to test mediation and moderation effects.



CHAPTER IV

ANALYSIS RESULT

4.1 Descriptive Statistics

In this study, we first described the essential characteristics of the sample, including sample size, age distribution, and gender distribution. Subsequently, we conducted a descriptive statistical analysis of variables such as psychological contract breach, knowledge hiding, Zhong Yong thinking, and responsibility displacement.

Demographic issues cover five aspects, including gender, age, marital status, educational background, and duration of service, as shown in Table 4.1

Table 4.1: Analysis of Demographic Factors

Gender	Frequency	Percent (%)
Male	347	62.3
Female	210	37.7
Total	557	100.0
Marital status	Frequency	Percent (%)
Married	320	57.4
Single	150	26.9
Divorced or widowed	87	15.6
Total	557	100.0
Age	Frequency	Percent (%)
22-35 years old	257	46.1
36-45 years old	190	34.1
More than 45 years old	110	19.8
Total	557	100
Educational level	Frequency	Percent (%)
High school	100	18.0
Bachelor's degree	390	70.1
Postgraduate qualifications	67	11.9
Total	557	100.0

Table 4.1: Analysis of Demographic Factors (continued)

Duration of service	Frequency	Percent (%)
Less than 3 years	200	35.9
3-8 years	227	40.8
More than 9 years	130	23.3
Total	557	100

This study investigated 557 China Construction Engineering Group employees, revealing detailed demographics and professional backgrounds. Among the participants, there are 347 males (62.3%) and 210 females (37.7%). The age distribution is segmented into three groups: 22-35 years old, encompassing 257 employees (46.1%); 36-45 years old, with 190 employees (34.1%); and those more than 45 years old, totaling 110 employees (19.8%). Marital status shows a majority of 320 married employees (57.4%), 150 singles (26.9%), and the remaining 87 (15.6%) as either divorced or widowed. In terms of educational background, 390 employees (70.0%) have a bachelor's degree, 67 (12%) have postgraduate qualifications, and the remaining 100 (18%) have completed high school. The duration of service reveals a broad range, with 200 employees (35.9%) serving less than 3 years, 227 employees (40.8%) between 3 and 8 years, and 130 employees (23.3%) with over 9 years of service, indicating a blend of fresh and experienced personnel within the company.

Descriptive Statistics of Variables:

Table 4.2: Descriptive Statistics of Psychological Contract Breach

	1	2	3	4	5	6	7	Mean	SD
Psychological contract breach	1	3	169	308	72	3	1	3.85	0.65

Table 4.2 shows the percentage of psychological contract breaches on a 7-point scale. Most respondents rate it as 3 (169) or 4 (308), with an average score of 3.85 and a standard deviation of 0.65.

Table 4.3: Descriptive Statistics of Employees Knowledge Hiding

	1	2	3	4	5	6	7	Mean	SD
Employee knowledge hiding	23	25	201	251	52	3	2	3.65	0.72

Table 4.3 shows the percentage of employees' knowledge hiding based on a 7-point scale. The majority of respondents rate it as 3 (201) or 4 (251), with an average score of 3.65 and a standard deviation of 0.72.

Table 4.4: Descriptive Statistics of Zhong Yong Thinking

	1	2	3	4	5	6	7	Mean	SD
Zhong Yong thinking	14	1	43	314	163	5	17	4.25	0.55

Table 4.4 shows the percentage of Zhong Yong thinking based on a 7-point scale. The majority of respondents rate it as 4 (314) or 5 (163), with an average score of 4.25 and a standard deviation of 0.55.

Table 4.5: Descriptive Statistics of Responsibility Displacement

	1	2	3	4	5	6	7	Mean	SD
Responsibility displacement	12	50	254	203	27	2	9	3.40	0.70

Table 4.5 shows the percentage of responsibility displacement based on a 7-point scale. The majority of respondents rate it as 3 (254) or 4 (203), with an average score of 3.40 and a standard deviation of 0.70.

4.2 Validation and Reliability Testing

A model fit test was conducted through confirmatory factor analysis for validity testing. The model's absolute fit index χ^2/df is less than 3, the root mean square residual (RMR) is close to 0.05, the root mean square error of approximation (RMSEA) is less than 0.08, the goodness of fit index (GFI) is 0.932, and the parsimonious

goodness of fit index (PGFI) is greater than 0.500, indicating that the model is relatively parsimonious. Relative fit indices such as the Normed Fit Index (NFI) and Relative Fit Index (RFI) are above 0.90. Therefore, the overall fit of the model is good. Fit coefficients are shown in Table 4.6.

Table 4.6: Fit Coefficient

X2/df	RMR	RMSEA	GFI	PGFI	NFI	RFI	CFI	IFI	TLI
2.244	0.049	0.076	0.932	0.614	0.923	0.943	0.956	0.928	0.914

Further validity was tested through factor loadings (see Table 4.7). The standardized loadings for all items are mainly above the 0.5 standard and have all passed the T-test at a significant level of $P < 0.001$. The AVE values for all six variables are almost all greater than 0.500 (explaining more than 50% of the variance for the items). Therefore, the scale demonstrates good convergent validity.

Finally, by calculating composite reliability using factor loadings, all composite reliability values are greater than 0.7, indicating excellent reliability of the scale.

Table 4.7: Convergent Validity and Reliability Test

Variables	Item	Standardized factor loading	AVE	Composite Reliability
Psychological contract breach	A1	0.763	0.547	0.857
	A2	0.688		
	A3	0.748		
	A4	0.819		
	A5	0.671		
Knowledge hiding	B1	0.792	0.529	0.930
	B2	0.704		
	B3	0.611		
	B4	0.742		
	B5	0.805		
	B6	0.627		
	B7	0.835		
	B8	0.799		
	B9	0.622		
	B10	0.801		
	B11	0.703		
	B12	0.636		

Table 4.7: Convergent Validity and Reliability Test (continued)

Variables	Item	Standardized factor loading	AVE	Composite Reliability
Zhong Yong thinking	C1	0.724	0.566	0.944
	C2	0.787		
	C3	0.822		
	C4	0.759		
	C5	0.641		
	C6	0.697		
	C7	0.754		
	C8	0.764		
	C9	0.802		
	C10	0.661		
	C11	0.712		
	C12	0.809		
	C13	0.819		
Responsibility displacement	D1	0.731	0.503	0.835
	D2	0.712		
	D3	0.722		
	D4	0.691		
	D5	0.689		

Discriminant validity was tested by comparing the correlation coefficients between variables and the square roots of the AVE values. The results show that the square roots of the AVE values for all variables are greater than their respective correlation coefficients, indicating effective differentiation among all variables (see Table 4.8). The scale demonstrates good discriminant validity.

Table 4.8: Discriminant Validity Test

Variables	Psychological contract breach	Knowledge hiding	Zhong Yong thinking	Responsibility displacement
Psychological contract breach	0.740	-	-	-
Knowledge hiding	0.567*	0.727	-	-
Zhong Yong thinking	0.313*	0.302*	0.752	-
Responsibility displacement	0.593*	0.537*	0.582*	0.709

Note: *p < 0.05

4.3 Inferential Statistics

In this survey, gender is a two-point discrete variable. Age, marital status, educational level, and duration of service are discrete variables with more than three points. Therefore, we use independent sample t-tests and one-way ANOVA to test whether there are differences in the demographic factors of employee knowledge hiding. Confucian traditional values and employee knowledge hiding are continuous variables. We employ simple linear regression analysis to examine the impact of psychological contract breach on employee knowledge hiding, the impact of psychological contract breach on responsibility displacement, and the impact of responsibility displacement on employee knowledge hiding. Hierarchical regression tests the mediating role of responsibility displacement and the moderating role of Zhong Yong's thinking. This part will present the results based on the research objectives, divided into 4 parts as follows:

Part I: The analysis results of demographic factors affecting employee knowledge hiding.

Part II: The analysis results of the impact of psychological contract breach on employee knowledge hiding, the impact of psychological contract breach on responsibility displacement, and the impact of responsibility displacement on employee knowledge hiding.

Part III: The analysis results of the mediating role of responsibility displacement.

Part IV: The analysis results of the moderating role of Zhong Yong's thinking.

4.3.1 Demographic Factors Affect Employee Knowledge Hiding

Hypothesis 4: The differences in demographic factors affect employee knowledge-hiding differently.

H4a: Gender differences affect employee knowledge hiding differently. An independent sample t-test was used to analyze data to test the difference in mean values between the 2 data groups at the statistically significant level of 0.05.

Table 4.9: The Independent Samples T-test of the Gender Factor

	Gender	N	Mean	SD	t-value	df	Sig.
Employee knowledge hiding	male	347	3.16	0.67	-2.34	554.34	0.019*
	female	210	3.60	0.70	-	-	-

Note: *p < 0.05

Table 4.9 presents the results of an independent samples t-test analyzing the gender factor's impact on employee knowledge hiding. The Table shows two groups: male (n=347) and female (n=210).

The mean employee knowledge hiding rating for males is 3.16, with a standard deviation of 0.67, while the mean for females is 3.60, with a standard deviation of 0.70. The t-value is -2.34, and the degrees of freedom (df) are 536.34. The p-value is 0.019, indicating a significant difference in employee knowledge hiding between males and females at the chosen significance level.

H4b: The age differences affect the employee knowledge hiding differently.

One-way ANOVA was used to analyze data to test the difference of mean values among more than 2 data groups at the statistically significant level of 0.05.

Table 4.10: Age Affects the Employee Knowledge Hiding

		Sum of Squares	df	Mean Square	F	Sig.
Employee knowledge hiding	Between Groups	20.51	2	10.25	28.91	0.000*
	Within Groups	196.44	554	0.35	-	-
	Total	216.95	556	-	-	-

From Table 4.10, the analysis results show that age differences affect employee knowledge hiding. The Table includes the following information for the groups. The sum of squares between groups is 20.51 with 2 degrees of freedom, resulting in a mean square of 10.25. Within groups, the sum of squares within groups is 196.44 with 554 degrees of freedom, resulting in a mean square of 0.35. The total

sum of squares is 216.95 with 556 degrees of freedom. The F-value is 28.91, and the p-value (Sig.) is 0.000, indicating significant differences in employee knowledge hiding across different age groups. The analysis of multiple comparisons of different occupation groups using LSD is demonstrated in Table 4.11.

Table 4.11: The Multiple Comparisons of the Different Age Groups That Affect The Employee Knowledge Hiding

Mean Difference (I-J)				
Age Group	Group J			
	$\bar{X}$	22-35 years	36-45 years	More than 45 years old
Group I		3.45	4.00	3.90
22-35 years	3.45	-	0.555 (0.000)*	0.453 (0.000)*
36-45 years	4.00	-	-	-0.102 (0.291)*
More than 45 years old	3.90	-	-	-

Note: *p < 0.05

Dependent Variable: employee knowledge hiding

Table 4.11 presents the pair mean comparison of employees' age groups that affect employee knowledge hiding. The employees in the age group 36-45 years old and those over 45 years old have a mean higher than those in the age group 22-35 years old, with a significant value equal to 0.000 and 0.000. However, the employees in the age group 36-45 years old and over 45 years old do not exhibit a significant difference.

H4c: The differences in educational level affect the employee knowledge hiding differently.

One-way ANOVA was used to analyze data to test the difference of mean values among more than 2 data groups at the statistically significant level of 0.05.

Table 4.12: The Differences in Educational Level Affect the Employee Knowledge Hiding

		Sum of Squares	Df	Mean Square	F	Sig.
Employee knowledge hiding	Between Groups	44.31	2	22.07	61.97	0.000*
	Within Groups	197.26	554	0.356	-	-
	Total	241.57	556	-	-	-

Note: *p < 0.05

From Table 4.12, the analysis results show that the differences in educational level affect employee knowledge hiding. The Table includes the following information for the groups. The sum of squares between groups is 44.31 with 2 degrees of freedom, resulting in a mean square of 22.07. Within groups, the sum of squares within groups is 197.26 with 554 degrees of freedom, resulting in a mean square of 0.356. The total sum of squares is 241.57 with 556 degrees of freedom. The F-value is 61.97, and the p-value (Sig.) is 0.000, indicating significant differences in employee knowledge hiding across different educational level groups. The analysis of multiple comparisons of different occupation groups using LSD is demonstrated in Table 4.13.

Table 4.13: The Multiple Comparisons of the Different Age Groups That Affect Employee Knowledge Hiding

Mean Difference (I-J)				
Educational Level Group	Group J			
	$\bar{X}$	High school	Bachelor's degree	Postgraduate qualifications
Group I	-	4.12	3.11	3.59
High school	4.12	-	-1.010 (0.000)*	-0.530 (0.000)*
Bachelor's degree	3.11	-	-	-0.480 (0.000)*
Postgraduate qualifications	3.59	-	-	-

Note: *p < 0.05

Dependent Variable: employee knowledge hiding

Table 4.13 presents the mean comparison of the employees' educational level group that affects employee knowledge hiding. The employees in the high school educational level group have a higher mean than those in the bachelor's degree and postgraduate qualifications educational level group, with significant values equal to 0.000 and 0.000. The employees in the postgraduate qualifications educational level group have a higher mean than those in the bachelor's degree educational level group with a significant value equal to 0.000.

H4d: The differences in marital status affect the employee knowledge hiding differently.

One-way ANOVA was used to analyze data to test the difference of mean values among more than 2 data groups at the statistically significant level of 0.05.

Table 4.14: The Differences in Marital Status Affect the Employee Knowledge Hiding

		Sum of Squares	df	Mean Square	F	Sig.
Employee knowledge hiding	Between Groups	47.08	2	23.54	45.04	0.000*
	Within Groups	289.51	554	0.523	-	-
	Total	336.59	556	-	-	-

Note: *p < 0.05

From Table 4.14, the analysis results of the marital status differences affect employee knowledge hiding. The Table includes the following information for the groups. The sum of squares between groups is 47.08 with 2 degrees of freedom, resulting in a mean square of 23.54. Within groups, the sum of squares within groups is 289.51 with 554 degrees of freedom, resulting in a mean square of 0.523. The total sum of squares is 336.59 with 556 degrees of freedom. The F-value is 45.04, and the p-value (Sig.) is 0.000, indicating no significant differences in employee knowledge hiding across different educational levels. The analysis of multiple comparisons of different occupation groups using LSD is demonstrated in Table 4.15.

Table 4.15: The Multiple Comparisons of the Different Age Groups That Affect Employee Knowledge Hiding

Mean Difference (I-J)				
Marital Status Group	Group J			
	$\bar{X}$	Single	Married	Divorced or widowed
Group I	-	3.15	3.65	4.20
Single	3.15	-	0.499 (0.000)*	1.045 (0.000)
Married	3.65	-	-	0.546 (0.000)*
Divorced or widowed	4.20	-	-	-

Note: * $p < 0.05$

Dependent Variable: employee knowledge hiding

Table 4.15 presents the mean comparison of the employee's marital status groups that affect employee knowledge hiding. The employees in the marital status group, divorced or widowed, have a mean higher than those in the married and single group, with significant values equal to 0.000 and 0.000. The married employees in the marital status group have a higher mean than those in the single marital status group, with a significant value equal to .000.

H4e: The differences in occupation affect the employee knowledge hiding differently.

One-way ANOVA was used to analyze data to test the difference of mean values among more than 2 data groups at the statistically significant level of 0.05.

Table 4.16: The Differences in Duration of Service Affect the Employee Knowledge Hiding

		Sum of Squares	df	Mean Square	F	Sig.
Employee knowledge hiding	Between Groups	83.75	2	41.87	84.48	0.000*
-	Within Groups	274.61	554	0.496	-	-
-	Total	358.36	556	-	-	-

Note: *p < 0.05

Table 4.16 indicates the analysis of how different occupations affect employee knowledge hiding. The Table includes the following information for the groups. The sum of squares between groups is 83.75 with 2 degrees of freedom, resulting in a mean square of 41.87. Within groups, the sum of squares within groups is 274.61 with 554 degrees of freedom, resulting in a mean square of 0.881. The total sum of squares is 358.36 with 556 degrees of freedom. The F-value is 84.48, and the p-value (Sig.) is 0.000, indicating no significant differences in employee knowledge hiding across different service durations. The analysis of multiple comparisons of different occupation groups using LSD is demonstrated in Table 4.17.

Table 4.17: The Multiple Comparison of the Different Occupation Groups Affects Employee Knowledge Hiding Differently

Mean Difference (I-J)				
Duration of Service Group	Group J			
	$\bar{X}$	Less than 3 years	4-9 years	More than 9 years
Group I	-	3.40	3.85	4.03
Less than 3 years	3.40	-	0.450 (0.000)*	0.632 (0.000)
4-9 years	3.85	-	-	0.181 (0.045)*
More than 9 years	4.03	-	-	-

Note: *p < 0.05

Dependent Variable: employee knowledge hiding

Table 4.17 presents the pair mean comparison of employees' duration of service group that affects employee knowledge hiding. The employees in the service group of more than 9 years have a higher mean than those in the duration of service group of less than 3 years and 4-9 years, with significant values equal to 0.000 and 0.000. The employees in the duration of service group 4-9 years have a higher mean than those in the duration of service group less than 3 years with a significant value equal to 0.000.

4.3.2 The Impact of Psychological Contract Breach on Employee Knowledge Hiding

Hypothesis 1: Psychological contract breach positively influences employee knowledge hiding.

This study's independent variable is psychological contract breach, while the dependent variable is employee knowledge hiding. Simple linear regression is employed to analyze the data and develop a forecasting equation at a confidence level of 95%. The form of the estimating equation is as follows:

$$\hat{Y} = b_0 + b_1X_2$$

Where:

Y = Psychological contract breach

X₂ = Employee knowledge hiding

Through regression analysis, the final data analysis results are shown in Table 4.18.

Table 4.18: Regression Analysis to Predict the Influence of Psychological Contract Breach on Employee Knowledge Hiding.

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate	Durbin-Watson
1	0.742a	0.550	0.548	0.895	2.109

a. Predictor: (Constant) psychological contract breach

From Table 4.18, the analysis results show that the ability to predict the analytical equation is 54.80% at the statistically significant level of 0.05. The Durbin-Watson value is 2.109, which is in the range of 1.5-2.5, thus indicating no problems with autocorrelation in residuals for multiple regression.

Table 4.19: The Linear Regression Coefficients for the Influence of Psychological Contract Breach on Employee Knowledge Hiding

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	0.540	0.146	-	3.699	.000*
Psychological contract breach	0.769	0.051	0.742	15.077	.000*

Note: *p < 0.05

a. Dependent variable: employee knowledge hiding

From Table 4.19, the developed prediction equation is as follows:

$$\hat{Y} = 0.540 + 0.769X_2$$

The equation can explain the coefficient of the psychological contract breach and employee knowledge hiding. R-square equals 0.550, the adjusted R-square equals 0.548, and the independent variables are unrelated.

In summary, the analysis results indicated that psychological contract breach with employee knowledge hiding had a significant value of 0.000.

4.3.3 The Moderating Role of Responsibility Displacement in the Impact of Psychological Contract Breach on Knowledge Hiding

Hypothesis 2a: Psychological contract breach positively influences responsibility displacement.

This study's independent variable is psychological contract breach, and the dependent variable is responsibility displacement. Simple linear regression is employed to analyze the data and develop a forecasting equation at a confidence level of 95%. The form of the estimating equation is as follows:

$$\hat{Y} = b_0 + b_1X_1$$

Where:

Y = Psychological contract breach

X₁ = Responsibility displacement

Through regression analysis, the final data analysis results are seen in Table 4.20.

Table 4.20: Regression Analysis to Predict the Influence of Psychological Contract Breach on Responsibility Displacement

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate	Durbin-Watson
1	0.863a	0.745	0.743	0.734	1.791

a. Predictors: (Constant), psychological contract breach

From Table 4.20, the analysis results show that the ability to predict the analytical equation is 74.30% at the statistically significant level of 0.05. The Durbin-Watson value is 2.261, which, in the range of 1.5-2.5, indicates no problem of autocorrelation in residuals for multiple regression.

Table 4.21: The Linear Regression Coefficients for the Influence of Psychological Contract Breach on Responsibility Displacement

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	0.127	0.120	-	11.058	.291
Psychological contract breach	0.973	0.042	0.864	14.971	.000*

Note: *p < 0.05

b. Dependent variable: responsibility displacement

From Table 4.21, the developed prediction equation is as follows.

$$\hat{Y} = 0.127 + 0.973X_1$$

The equation can explain the psychological contract breach coefficient and responsibility displacement coefficient. R-square is equal to 0.745, the adjusted R-square is equal to 0.743, and the independent variables are not related to each other.

In summary, the results of the analysis indicated that psychological contract breach with responsibility displacement had a significant value of 0.000.

Hypothesis 2b: Responsibility displacement positively correlates with knowledge hiding.

This study's independent variable is responsibility displacement, and the dependent variable is knowledge hiding. Simple linear regression is employed to analyze the data and develop a forecasting equation at a confidence level of 95%. The

form of the estimating equation is as follows:

$$X_1 = b_0 + b_1 X_2$$

Where:

X_1 = Knowledge hiding

X_2 = Responsibility displacement

The final data analysis results are seen in Table 4.22 through regression analysis.

Table 4.22: Regression Analysis to Predict the Influence of Responsibility Displacement on Knowledge Hiding

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate	Durbin-Watson
1	0.747a	0.559	0.556	0.886	2.198

a. Predictors: (Constant), responsibility displacement

From Table 4.22, the analysis results show that the ability to predict the analytical equation is 55.60% at the statistically significant level of 0.05. The Durbin-Watson value is 2.198, which, in the range of 1.5-2.5, indicates no problems of autocorrelation in residuals for multiple regression.

Table 4.23: The Linear Regression Coefficients for the Influence of Responsibility Displacement on Knowledge Hiding

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	0.710	0.134	-	5.301	.000*
Responsibility displacement	0.687	0.045	0.747	15.340	.000*

Note: * $p < 0.05$

c. Dependent variable: employee knowledge hiding

From Table 4.23, the developed prediction equation is as follows.

$$X_1 = 0.710 + 0.687X_2$$

The equation can explain the responsibility displacement coefficient and knowledge hiding. R square equals 0.559, adjusted R square equals 0.556, and the

independent variables are unrelated.

In summary, the results of the analysis indicated that responsibility displacement with knowledge hiding has a significant value of 0.000.

Hypothesis 2c: Responsibility displacement mediates the impact of psychological contract breach on knowledge hiding.

In this study, the independent variables are responsibility displacement and psychological contract breach, and the dependent variable is knowledge hiding. Hierarchical regression is employed to analyze the data and develop a forecasting equation at a confidence level of 95%. The form of the estimating equation is as follows:

$$\hat{Y} = b_0 + b_1X_1 + b_2X_2$$

Where:

Y = Responsibility displacement

X₁ = Psychological contract breach

X₂ = Knowledge hiding

Through regression analysis, the final data analysis results are shown in Table 4.24.

Table 4.24: Regression Analysis to Predict the Influence of Responsibility Displacement and Psychological Contract Breach on Knowledge Hiding

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate	Durbin-Watson
1	0.747a	0.559	0.556	0.886	2.198

a. Predictors: (Constant), responsibility displacement, psychological contract breach

From Table 4.24, the analysis results show that the ability to predict the analytical equation is 55.60% at the statistically significant level of 0.05. The Durbin-Watson value is 2.198, which, in the range of 1.5-2.5, indicates no problems of autocorrelation in residuals for multiple regression

Table 4.25: The Hierarchical Regression Coefficients for the Influence of Responsibility Displacement and Psychological Contract Breach on Knowledge Hiding

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	0.491	0.139	-	3.527	.001*
Responsibility displacement	0.386	0.085	0.421	4.542	.000*
Psychological breach	contract 0.392	0.096	0.379	4.091	.000*

Note: *p < 0.05

d. Dependent variable: employees' knowledge hiding

From Table 4.25, the developed prediction equation is as follows.

$$\hat{Y} = 0.491 + 0.392X_1 + 0.386X_2$$

The equation can explain the coefficient for the influence of responsibility displacement and psychological contract breach on knowledge hiding. R-square equals 0.559, the adjusted R-square equals 0.556, and the independent variables are unrelated.

In summary, as the data analysis results evolve, when conducting regression analysis on knowledge hiding with responsibility displacement and psychological contract breach as independent variables, the effect size of psychological contract breach on knowledge hiding decreases. Therefore, responsibility displacement plays a mediating role in the impact of psychological contract breach on knowledge hiding.

4.3.4 The Moderating Role of Zhong Yong Thinking

Hypothesis 3a: Zhong Yong's thinking negatively moderates the relationship between psychological contract breach and employees' knowledge hiding. In this study, the independent variable is psychological contract breach, the dependent variable is knowledge hiding, and the moderating variable is Zhong Yong's thinking. Hierarchical regression is employed to analyze the data and develop a forecasting equation at a confidence level of 95%. The form of the estimating equation is as follows:

$$\hat{Y} = b_0 + b_1X_1 + b_2Z + b_3(X*Z)$$

Where:

Y = Employees' knowledge hiding

X1 = Psychological contract breach

Z = Zhong Yong thinking

Through regression analysis, the final data analysis results are shown in Table 4.26.

Table 4.26: Regression Analysis to Predict the Influence of Zhong Yong Thinking, Psychological Contract Breach, and Zhong Yong Thinking*Psychological Contract Breach on Knowledge Hiding

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate	Durbin-Watson
1	0.742a	0.550	0.548	0.895	-
2	0.746b	0.557	0.552	0.89	-
3	0.748c	0.560	0.553	0.89	2.120

a. Predictors: (Constant), psychological contract breach

b. Predictors: (Constant), psychological contract breach, Zhong Yong thinking

c. Predictors: (Constant), psychological contract breach, Zhong Yong thinking, Zhong Yong thinking * psychological contract breach

From Table 4.26, in Model 3, analysis results show that the ability to predict the analytical equation is 55.30% at the statistically significant level of 0.05. The Durbin-Watson value is 2.120, which, in the range of 1.5-2.5, indicates no problems of autocorrelation in residuals for multiple regression.

Table 4.27 The Hierarchical Regression Coefficients for the Influence of Psychological Contract Breach and Zhong Yong Thinking on Knowledge Hiding

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	0.540	0.146	-	3.699	0.000*
Psychological contract breach	0.768	0.051	0.742	15.077	0.000*
(Constant)	0.451	0.175	-	3.617	0.002*
Psychological contract breach	0.735	0.054	0.709	13.564	0.000*
Zhong Yong thinking	0.488	0.051	0.461	1.739	0.004*
(Constant)	0.677	0.387	-	1.748	0.002*
Psychological contract breach	0.577	0.156	0.557	3.71	0.000*
Zhong Yong thinking	0.213	0.066	0.013	0.118	0.037*
Zhong Yong thinking Psychological contract breach	*-0.241	0.028	-0.219	1.081	0.021*

Note: *p < 0.05

e. Dependent variable: employees' knowledge hiding

From Table 4.27, the developed prediction equation is as follows:

$$\hat{Y} = 0.677 + 0.577X_1 + 0.213Z - 0.241(X_1*Z)$$

The equation can explain the coefficient for the influence of Zhong Yong thinking, psychological contract breach, and Zhong Yong thinking*psychological contract breach on knowledge hiding. R square equals 0.560, adjusted R square equals 0.553, and the independent variables are unrelated.

In summary, as Zhong Yong's thinking intensifies, the impact of psychological contract breach on employees' knowledge hiding weakens. Therefore, Zhong Yong's thinking negatively moderates the effect of psychological contract breach on employees' knowledge hiding.

Hypothesis 3b: Zhong Yong's thinking negatively moderates the relationship between psychological contract breach and responsibility displacement.

In this study, the independent variable is psychological contract breach, the dependent variable is responsibility displacement, and the moderating variable is Zhong Yong's thinking. Hierarchical regression is employed to analyze the data and develop a forecasting equation at a confidence level of 95%. The form of the estimating equation is as follows:

$$X2 = b_0 + b_1X1 + b_2Z + b_3(X1*Z)$$

Where:

X2 = Responsibility displacement

X1 = Psychological contract breach

Z = Zhong Yong thinking

Through regression analysis, the final data analysis results are seen in Table 4.28 below.

Table 4.28: Regression Analysis to Predict the Influence of Zhong Yong Thinking, Psychological Contract Breach, and Zhong Yong Thinking*Psychological Contract Breach on Responsibility Displacement

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate	Durbin-Watson
1	0.863a	0.745	0.743	0.734	-
2	0.865b	0.749	0.746	0.730	-
3	0.866c	0.750	0.746	0.730	1.892

a. Predictors: (Constant), psychological contract breach

b. Predictors: (Constant), psychological contract breach, Zhong Yong thinking

c. Predictors: (Constant), psychological contract breach, Zhong Yong thinking, Zhong Yong thinking * psychological contract breach.

From Table 4.28, in Model 3, analysis results show that the ability to predict the analytical equation is 74.60% at the statistically significant level of 0.05. The Durbin-Watson value is 1.892, which, in the range of 1.5-2.5, indicates no problems with autocorrelation in residuals for multiple regression.

Table 4.29: The Hierarchical Regression Coefficients for the Influence of Psychological Contract Breach and Zhong Yong Thinking on Responsibility Displacement

Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	t
1	(Constant)	0.127	0.12	-	1.058
	Psychological contract breach	0.973	0.042	0.863	23.291
	(Constant)	0.062	0.16	-	0.39
2	Psychological contract breach	0.945	0.044	0.838	21.283
	Zhong Yong thinking	0.074	0.042	0.070	1.777
	(Constant)	0.201	0.317	-	0.634
	Psychological contract breach	0.831	0.128	0.736	6.507
3	Zhong Yong thinking	0.041	0.087	0.001	0.006
	Zhong Yong thinking * Psychological contract breach	-0.133	0.041	-0.147	-0.96

Note: *p < 0.05

f. Dependent variable: responsibility displacement

From Table 4.29, the developed prediction equation is as follows.

$$X2 = 0.201 + 0.831X1 + 0.041Z - 0.133(X1*Z)$$

The equation can explain the coefficient for the influence of Zhong Yong thinking, psychological contract breach, and Zhong Yong thinking*psychological contract breach on responsibility displacement. R square is 0.750, adjusted R square is 0.746, and the independent variables are unrelated.

In summary, as Zhong Yong's thinking intensifies, the impact of psychological contract breach on employees' responsibility displacement weakens. Therefore, Zhong Yong's thinking negatively moderates the psychological contract breach's effect on employees' responsibility displacement.

4.3.5 Summary Results

Hypothesis 1: Psychological contract breach positively influences employee knowledge hiding.

According to Table 4.30 below, the analysis results indicate that differences in employees' age and occupation affect employee knowledge hiding in sponsored products differently.

Table 4.30: Summary of Demographic Data Affects Employee Knowledge Hiding

Demographic	Employee Knowledge Hiding
Gender	✓
Age	✓
Educational level	✓
Marital status	✓
Duration of service	✓
- have no different effects at the statistical significance of 0.05	
✓ have different effects at the statistically significant value of 0.05	

Table 4.31 provides the data analysis results for the impact of psychological contract breach on employee knowledge hiding, the impact of psychological contract breach on responsibility displacement, the impact of responsibility displacement on knowledge hiding, and the mediating effect of responsibility displacement.

Table 4.31: Summary of the Relationships among Psychological Contract Breach, Responsibility Displacement, and Knowledge Hiding

Hypothesis	Result	Forecasting Equations
H1: Psychological contract breach positively influences the employee knowledge hiding	✓	$\hat{Y} = 0.540 + 0.769X_2$
H2a: Psychological contract breach positive influence with responsibility displacement	✓	$\hat{Y} = 0.127 + 0.973X_1$
H2b: Responsibility displacement positively influences employee knowledge-hiding	✓	$X_1 = 0.710 + 0.687X_2$
H2c: Responsibility displacement mediates the impact of psychological contract breach on knowledge hiding.	✓	$\hat{Y} = 0.491 + 0.392X_1 + 0.386X_2$

-have no significant effect at the statistical significance of 0.05

✓have a significant effect at the statistical significance of 0.05

Y = Knowledge hiding

X1 = Psychological contract breach

X2 = Responsibility displacement

Table 4.32 provides the data analysis results for how Zhong Yong's thinking

negatively moderates the relationship between psychological contract breach and responsibility displacement and the relationship between psychological contract breach and responsibility displacement.

Table 4.32: Summary of the Moderating Role of Zhong Yong Thinking

Hypotheses	Result	Forecasting Equations
H3a: Zhong Yong's thinking negatively moderates the relationship between psychological contract breach and employees' knowledge-hiding.	✓	$\hat{Y} = 0.677 + 0.577X_1 + 0.213Z - 0.241(X_1*Z)$
H3b: Zhong Yong's thinking negatively moderates the relationship between psychological contract breach and responsibility displacement	✓	$X_2 = 0.201 + 0.831X_1 + 0.041Z - 0.133(X_1*Z)$

-have no significant effect at the statistically significant value of 0.05

✓have a significant effect at the statistically significant value of 0.05

Y = Knowledge-hiding

X1 = Psychological contract breach

X2 = Responsibility displacement

Z = Zhong Yong thinking

CHAPTER V

CONCLUSION AND DISCUSSION

5.1 Conclusion

This research explored the intricate relationships among psychological contract breach, responsibility displacement, knowledge hiding, and the moderating effect of ZhongYong thinking within organizational settings. The findings robustly indicate that psychological contract breaches significantly increase employee knowledge-hiding behaviors. Such breaches were also positively correlated with responsibility displacement, suggesting that when employees perceive their psychological contract has been violated, they are more likely to displace their perceived responsibilities, which, in turn, exacerbates knowledge-hiding practices. This study's pivotal discovery is the mediating role of responsibility displacement in the relationship between psychological contract breach and knowledge hiding. This mediation underscores how psychological contract violations indirectly lead to increased knowledge hiding, facilitated by shifts in perceived responsibilities among employees.

Equally important, our analysis revealed that Zhong Yong thinking is critical in moderating the adverse effects of psychological contract breaches. Specifically, Zhong Yong thinking was found to negatively moderate the impact of psychological contract breach on knowledge hiding and its indirect impact through responsibility displacement. This highlights the protective and mitigating effects of Zhong Yong thinking in organizational dynamics, suggesting that individuals with higher levels of this thinking style are less likely to engage in knowledge-hiding behaviors in response to contract breaches.

Furthermore, the study addressed the influence of demographic factors on knowledge-hiding behaviors, acknowledging that factors such as gender, age, marital status, educational background, and duration of service contribute to variations in how employees react to and cope with psychological contract breaches.

This research contributes to a deeper understanding of the mechanisms driving knowledge hiding in the workplace. It introduces Zhong Yong thinking as a valuable

lens to mitigate these dynamics. The findings emphasize the need for organizations to foster environments that reduce psychological contract breaches and promote cognitive styles that buffer against the negative repercussions of such breaches.

5.2 Discussion

This study makes three primary and significant contributions to the existing literature on psychological contract breaches and employee behavior within organizations, particularly in knowledge hiding.

Firstly, it clarifies the link between psychological contract breach and knowledge hiding. While previous research, such as those conducted by Rousseau (1995) and Robinson & Morrison (2000), primarily focused on exploring the impact of psychological contract breaches on employee behavior at the cognitive level, this study takes a more comprehensive approach. Empirical research expands the scope of discussion in this field by explicitly revealing a positive relationship between psychological contract breaches and knowledge hiding. This finding is crucial as it highlights the direct consequences of unmet workplace expectations on employees' tendency to withhold and conceal knowledge, which can significantly hinder organizational performance and innovation.

Secondly, this study elucidates the mediating role of responsibility displacement in the relationship between psychological contract breach and knowledge hiding. Although prior research, such as Tekleab and Taylor's (2003) work, has explored the relationship between psychological contract breaches and various organizational behaviors, this study goes further. It confirms that responsibility displacement mediates the relationship between psychological contract breach and knowledge hiding. It provides a deeper understanding of how employees respond to perceived injustices through defensive and potentially harmful behavior. This insight is valuable for organizations seeking to mitigate the negative impacts of psychological contract breaches and foster a more open and collaborative work environment.

Lastly, this research integrates Zhong Yong thinking as a moderating variable, filling a significant gap in the literature. Previous studies, such as those conducted by Hwang (2012) and Morris, Podolny, and Ariel (2000), have seldom

discussed how cultural cognitive styles influence organizational behavior. By introducing Zhong Yong thinking as a moderating variable, this study demonstrates how it can alleviate the negative impacts of psychological contract breach on responsibility displacement and knowledge hiding. This finding is particularly relevant in cross-cultural contexts, where understanding the roles of culture and cognition in organizational dynamics is crucial for effective management and leadership. This study provides new perspectives on the complex interplay between psychological contract breaches, employee behavior, and organizational cultural factors.

5.3 Recommendation

Based on our study's findings, several recommendations can be made to help organizations manage and mitigate the impacts of psychological contract breach, responsibility displacement, and knowledge hiding. Additionally, leveraging the moderating role of Zhong Yong thinking provides a novel approach to enhancing organizational culture and behavior.

Establish Open Communication Channels: Organizations should initiate and maintain open lines of communication, ensuring that all employees are aware of their roles, responsibilities, and the expectations placed upon them. This practice can significantly reduce misunderstandings and the incidence of psychological contract breaches by keeping employees informed and engaged with their work and the company's objectives.

Develop and Integrate Zhong Yong Thinking Workshops: To leverage the protective effects of Zhong Yong thinking against negative workplace behaviors, organizations should design and implement workshops that promote balanced and flexible thinking among employees. These workshops can be embedded into existing training programs, especially those targeting leadership and team dynamics, to cultivate a culture that values moderation and adaptability.

Create Systems for Transparent Responsibility Allocation: Organizations must develop and implement systems that ensure responsibilities are distributed fairly and transparently across teams. This could involve using technology to track and manage workload distribution or regular team meetings to discuss and adjust work

allocations. Organizations can minimize feelings of responsibility displacement and its subsequent impact on knowledge-hiding behaviors by ensuring that responsibilities are clearly defined and equitably shared.



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APPENDICES

QUESTIONNAIRE

Employee Knowledge Hiding and Psychological Contract Breach Survey Questionnaire

Dear Participant,

Thank you for taking the time to participate in this survey. This study aims to understand employee knowledge hiding and the impact of psychological contract breaches in the construction engineering industry. Your responses will remain confidential and will be used for research purposes only.

Part One: Personal Information

1. Gender:

- Male
- Female

2. Age:

- 22-35 years old
- 36-45 years old
- More than 45 years old

3. Educational background?

- High School
- Bachelor's Degree
- Postgraduate qualifications

4. Duration of service

- Less than 3 years
- 3-8 years
- More than 9 years

5. Your marital status

- Single
- Married
- Divorced or widowed

Part Two: Please indicate your level of agreement with each statement using a 7-point scale, where 1 represents "Strongly Disagree" and 7 represents "Strongly Agree."

1. The company has tried to fulfill all its promises to me during recruitment.
2. I feel that the company has successfully fulfilled most of the promises made to me during my employment.
3. The company has done very well in fulfilling its original promises.
4. I have made contributions, but the company has not fully fulfilled its original promise of returns.
5. I fulfilled my promises to the company upon joining, but the company broke many promises made to me at the time of employment.
6. Although I promised to help my colleagues, I do not intend to.
7. I promised to help my colleagues, but the knowledge I provide is not what they want.
8. I tell my colleagues I will help later, but I try to delay as much as possible.
9. I provide my colleagues with other knowledge to replace the knowledge they want.
10. I pretend not to know about this area of knowledge.
11. I tell my colleagues that I do not know, but in fact, I do.
12. I pretend not to understand what my colleague is saying.
13. I pretend not to know much about this area of knowledge.
14. I explained that I wanted to tell my colleagues, but it does not comply with company regulations.
15. I explain that the information is confidential and only for relevant personnel.
16. I tell my colleagues that the boss does not allow this knowledge to be shared.
17. I tell my colleagues I cannot answer this question.
18. I consider conflicting views during discussions.
19. I tend to think about the same thing from multiple perspectives.
20. I consider everyone's opinions when voting.

21. I consider all possible situations when making decisions.
22. I try to find an opinion everyone can accept in a contentious situation.
23. I try to find a balance between my opinion and the opinions of others.
24. I adjust my original thoughts after considering the opinions of others.
25. I look forward to reaching a consensus during discussions.
26. I try to integrate my opinions into the ideas of others.
27. I usually tactfully express my differing opinions.
28. When making decisions, I try to make the minority accept the majority's opinion harmoniously.
29. When making decisions, I usually consider the harmony of the overall atmosphere.
30. When making decisions, I usually adjust my expression to consider the harmony of the whole.
31. If I misbehave due to excessive pressure from my boss, I should not be held responsible.
32. I should not be blamed for misbehaving because my boss forced me.
33. It is unreasonable to be blamed for unethical behavior when it is encouraged by the company.
34. I should not be blamed for exaggerating the truth because others do the same.
35. It is unfair to blame the negative impact caused by the company on people with little power of speech.

Thank you for your participation!

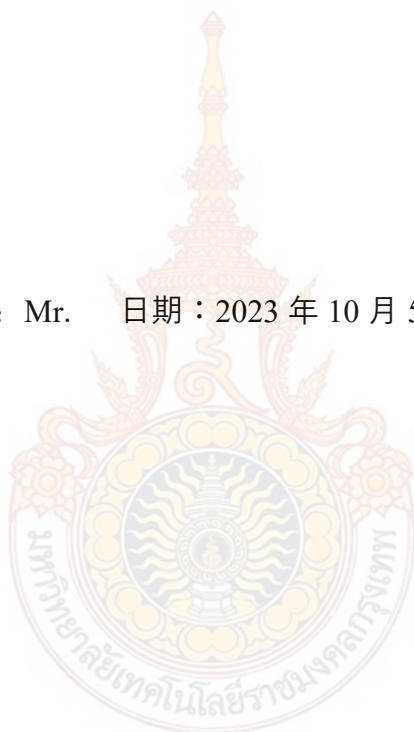
声明

作者郑重声明：所提交的学位论文，是本人在导师的指导下进行研究工作所取得的成果。尽我所知，除文中已经注明引用内容和致谢的地方外，本论文不包含其他个人或集体已经发表的研究成果，也不包含其他已申请学位或其他用途使用过的成果。与我一同工作的同志对本研究所做的贡献均已在独立研究报告中作了明确的说明并表示了谢意。

若有不实之处，本人愿意承担相关法律责任。

独立研究报告题目：

作者签名：Mr. 日期：2023 年 10 月 5 日



DECLARATION

The author solemnly declares that the submitted master's thesis is the result of my research work under the guidance of my supervisor. To the best of my knowledge, except for the content cited and acknowledged in the text, this dissertation does not contain any research results that other individuals or groups have published, nor does it contain results that have been used for other degree applications or other purposes. The contributions made by my colleagues who worked with me on this research have been clearly explained and acknowledged in a separate research report.

I am willing to bear the relevant legal responsibilities if any inaccuracies exist.

Title of Independent Research Report:

EFFECTS OF PSYCHOLOGICAL CONTRACT BREACH ON EMPLOYEES'
KNOWLEDGE HIDING IN THE CHINA CONSTRUCTION ENGINEERING
CORPORATION LIMITED

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