



Article

# The Moderating Effect of Cross-Cultural Psychological Adaptation on Knowledge Hiding and Employee Innovation Performance: Evidence from Multinational Corporations

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**Abstract:** This study explores the effects of three dimensions of knowledge hiding: evasive hiding (EH), rationalized hiding (RH), and playing dumb (PD), on employee innovation performance in multinational corporations. Additionally, the moderating effects of cross-cultural psychological adaptation on the above relationships are analyzed. In terms of the empirical analysis, corresponding assumptions were investigated with a sample of 273 respondents from Chinese multinational corporations in different industries and regions. The research findings show that EH and PD significantly negatively impact employee innovation performance in multinational corporations. In contrast, RH has a significant positive impact on the latter. Notably, cross-cultural psychological adaptation weakens the negative relationship between EH, PD and employee innovation performance, while strengthening the positive relationship between RH and employee innovation performance in multinational corporations. This study provides a new perspective for understanding the internal relationship between knowledge hiding and employee innovation performance. It comprehensively reveals the impact mechanism of knowledge hiding on innovation performance at the individual level by exploring the boundary effect of cross-cultural psychological adaptation. This study expands the literature on knowledge management and innovation on the theoretical side. On the other hand, this study suggests that RH may improve the employee innovation performance of multinational corporations, and provides a potential research direction for predicting the positive consequences of employees' knowledge-hiding behavior. On the management side, this study offers practical guidelines for the human resource management of multinational corporations. Managers can promote cooperation and innovation among colleagues with cultural differences in home and host countries by improving employees' cross-cultural psychological adaptability, thus improving employee innovation performance.

**Keywords:** knowledge hiding; evasive hiding; rationalized hiding; playing dumb; employee innovation performance; cross-cultural psychological adaptation



Citation: Jin, Y.; Yu, S.-C. The Moderating Effect of Cross-Cultural Psychological Adaptation on Knowledge Hiding and Employee Innovation Performance: Evidence from Multinational Corporations. Sustainability 2022, 14, 16638. https://doi.org/10.3390/su142416638

Received: 21 November 2022 Accepted: 9 December 2022 Published: 12 December 2022

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#### 1. Introduction

In the face of globalization and turbulent and uncertain economic situations, enterprises are facing increasingly fierce competition [1,2]. If an enterprise wants to gain a competitive advantage, it must create innovations to improve its performance [3], because innovation is necessary for enterprise survival [4]. At this time, the stock of knowledge resources managed by enterprises or the knowledge resources available to enterprises, namely intellectual capital (IC) [5], becomes the key driving factor for enterprise innovation [6]. As an intangible asset, knowledge is the basis for maintaining a competitive advantage and promoting sustainable value creation, and is a key source of organizational function, innovation, performance, and competitiveness [7,8]. In recent years, in the face of global competition, organizations have emphasized the dynamic management of knowledge [9,10]. Knowledge management is "a set of business policies and actions that aim

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to support the creation of knowledge, transfer it to all members of the enterprise and its subsequent application, all to realize the unique capabilities that can bring long-term competitive advantage to the company" [11]. The management of knowledge and human capital should be an essential element of running any type of business, but few people understand this challenging area. Given the potential of knowledge management (KM) and intellectual capital as sources of innovation and renewal, corporate strategies should focus more on these issues.

Knowledge management involves a conscious strategy to get the right knowledge to the right people at the right time, and to help people share information and put it into action in a way that improves organizational performance [12]. Therefore, identifying barriers and enablers in knowledge management is an important step in knowledge management [13,14]. One of the facilitating factors in knowledge management is employees' knowledge-sharing behavior, which can promote organizational learning and successful knowledge management, thus being conducive to the formation of new knowledge and enhancing organizational competitiveness. However, in order to maintain competitiveness, employees are usually reluctant to share knowledge with their colleagues. When facing knowledge requests from colleagues, employees intentionally conceal or deliberately cover up knowledge, which hinders knowledge management in the organization. At present, there is a lot of research on employee knowledge sharing, but very little research on knowledge hiding [15–17]. This situation is especially real within culturally diverse multinational companies, because employees' cultural background and cognitive style can affect their knowledge transfer [18].

In the context of economic globalization, an increasing number of Chinese corporations are becoming essential participants in global politics and the international economy after implementing the international business strategy of "going global". Confronted with the furious competition in the market, Chinese MNCs must improve their innovation ability, which is the basis for maintaining competitive advantage and promoting sustainability for corporations, in order to maintain competitiveness [19].. Since innovation ability is reflected by innovation performance, and individuals are the primary source of organizational innovation, encouraging employees' creativity and innovation performance at the individual level is crucial to the development of MNCs. As an intangible asset, knowledge has the value of creation. In the era of the knowledge-based economy, the development of enterprises is more dependent on the production, dissemination, application and innovation of knowledge than ever before [20]. The successful knowledge management of an organization depends on the behavior of sharing knowledge among employees. The knowledge sharing of employees can promote the gain and formation of new knowledge, and enhance the creativity and competitiveness of the organization. However, organizations cannot force employees to transfer their knowledge to other members due to non-mandatory knowledge sharing. Therefore, employees with knowledge-sharing hostility are usually unwilling to share knowledge with colleagues to maintain competitiveness, and this behavior is called knowledge hiding [21]. A survey of more than 1700 employees found that 76% of them hide knowledge from their colleagues. A survey of Chinese employees also showed that 46% of them reported knowledge hiding in the workplace [22,23]. Therefore, knowledge hiding has become the norm in the organization. Mainly, the employees of MNCs are comprised of individuals from different countries or cultural backgrounds [24]. There are often significant differences in cultural values and cultural barriers between employees, and these differences and barriers tend to hinder communication. In a challenging and stressful cross-cultural environment, employees dispatched to the host country may also feel insecure due to changes in the environment. To ensure their competitive advantage in the organization, they are more likely to adopt knowledge-hiding behavior [25,26]. This hinders the transfer of knowledge within MNCs, inhibits the generation of new ideas, and has a negative effect on the innovation of individuals and corporations [27], making knowledge hiding one of the most critical issues in the development of MNCs. Therefore, Sustainability **2022**, 14, 16638 3 of 24

exploring knowledge hiding is significant to improving the MNCs' employee innovation performance.

At the same time, knowledge transfer and integration, which promote the innovation ability of MNCs' employees, need to be completed by employees in a cross-cultural context [28]. However, compared with employees from domestic corporations, expatriate employees need to deal with unfamiliar and complex environments and usually face challenges resulting in cross-cultural adaptation problems [29]. Likewise, these challenging tasks can trigger psychological discomfort or stress. Coping with the pervasive stress in cross-cultural environments, individual mental health and performance are affected, resulting in impaired mental health such as anxiety, stress, fatigue, and depression [30]. At the same time, expatriate employees' psychological well-being is damaged, seriously affecting their work performance. Furthermore, it will hinder communication between colleagues, affecting the acquisition of new knowledge, increasing the difficulty of knowledge transfer [31,32], and inducing knowledge-hiding behavior within the corporation. Only the continuous flow of knowledge within the corporation can effectively promote the exchange of ideas among employees and provide a knowledge base for improving innovation capabilities [33]. In this vein, the expatriate employees of MNCs will gradually adapt to the cross-cultural environment and alleviate cultural shock through self-adjustment. They strive to establish a work-life balance in the host country [34]. It is reported that this process of obtaining psychological comfort is a kind of cross-cultural psychological adaptation in a foreign country [35], which makes expatriate employees feel comfortable in a cross-cultural environment [36] and assists them in adapting well to the host country's territory. Therefore, cross-cultural psychological adaptation significantly impacts on MNCs' employee knowledge management and innovation performance. We believe that it is essential to study how cross-cultural psychological adaptation affects the knowledge hiding on MNCs' employee innovation performance.

To sum up, there is a huge space to study the impact of knowledge hiding on the innovation performance of employees in MNCs. Previous research conclusions pointed out the negative effects of knowledge hiding as an overall variable [17], and believed that it would hinder the flow of information, reduce the learning ability of both organizations and individuals, and bring negative effects to them [37,38]. Nevertheless, many scholars believe that different dimensions of knowledge hiding, namely evasive hiding (EH), rationalized hiding (RH) and playing dumb (PD), may affect individual innovation performance [15,37,39], and that rationalized hiding in particular may play a positive role in this effect [21,40]. In addition, in the cross-cultural context, how do different types of knowledge hiding positively or negatively affect employee innovation performance in multinational corporations? What role does cross-cultural psychological adaptation play in the relationship between the two, and is there a moderating effect? All of these problems deserve further study and examination. Based on this, from the perspective of emotional organizational capacity, this study takes respondents from different industries and regions of Chinese multinational corporations as research samples to explore the impact of knowledge hiding on the innovation performance of international employees. In addition, the moderating variable cross-cultural psychological adaptation is introduced to examine and analyze how cross-cultural psychological adaptation affects employee innovation performance through knowledge hiding, and clarifies the influence of three dimensions of knowledge hiding on employee innovation performance.

The subsequent parts of this study are arranged as follows. The second part introduces related theoretical backgrounds, the relationship between knowledge hiding and MNCs' employee innovation performance, and the moderating effect of cross-cultural psychological adaptation. We then propose research hypotheses and construct the theoretical model. The third part explains the research method. The fourth part carries out empirical tests of the collected data. The last part is the conclusion and discussion, including the research conclusion, theoretical contribution, management enlightenment, limitations, and prospects.

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#### 2. Literature Review and Hypothesis Development

## 2.1. Knowledge Hiding

Initially, knowledge hiding was proposed mainly to protect the private information that may appear in data mining [41], then it gradually became widespread in the field of management. When faced with requests for knowledge, knowledge owners can decide to share or hide. For a long time, knowledge hiding has been studied as the opposite of knowledge sharing. However, Kang (2016) proposed that knowledge hiding should not simply be regarded as the opposite of knowledge-sharing behavior, but should be further explored as an independent concept [42]. Connelly et al. (2012) proposed that knowledge hiding refers to the behavior whereby individuals in an organization intentionally conceal or cover up knowledge requests from colleagues [21]. It is a self-focused anti-social strategic action taken by employees in the face of competition [40,43]. It is also possible that not sharing knowledge is simply due to the lack of relevant knowledge or skills, rather than deliberate concealment [22]. In addition, knowledge hiding is different from "knowledge hoarding", "counterproductive workplace behavior", "deception" and other behavior [21]. Although knowledge hoarding and knowledge hiding both retain knowledge, the knowledge withheld may be shared with others in the future, while the knowledge hidden in order to maintain competitiveness will not be shared. (2012) proposed that the knowledge request behavior of knowledge hiding only comes from individuals and may not be harmful and deceptive [21]. Therefore, this study defines knowledge hiding as the behaviour of an employee who intentionally withholds or conceals knowledge that others have requested to protect their self-interest or prevent the leakage of organizational secrets. According to the existing research, knowledge hiding influences individual characteristics and team level, etc. [28]. In terms of knowledge characteristics, when the knowledge requested by the seeker is more complex, the person being questioned may be reluctant to provide help because it requires more energy, thus employees are more likely to choose knowledge hiding [21]. Meanwhile, the more important the requested knowledge is, the more likely it is that the knowledge owner will hide the knowledge [44]. Researchers have further studied the relationship between gender, age, organizational tenure, position rank, and knowledge hiding at the individual level. Among them, gender, age, and managerial assignment have no obvious correlation with knowledge hiding, while job rank has a significant negative correlation with knowledge hiding [45]. Moreover, psychological ownership, territorial cognition, internal motivation and goal orientation are the reasons that employees hide knowledge [15,44].

Regarding the dimension of knowledge hiding, there are currently single-dimensional, two-dimensional, three-dimensional and four-dimensional divisions. Rhee and Choi (2017) considered knowledge hiding as a single concept related to knowledge hoarding [46]. Some scholars have suggested that knowledge hiding should be divided into active and passive hiding based on the Chinese situation. Active hiding is a self-centered perspective to protect one's competitiveness from suffering. In contrast, passive hiding is an altruistic perspective that safeguards the organization's interests or those of a third party. Connelly et al. (2012) considered three types of knowledge hiding in organizations—playing dumb, evasive hiding and rationalized hiding [21]. Evasive hiding refers to providing incorrect knowledge or promising a complete answer in the future but not intending to provide such. Rationalized hiding refers to offering a reasonable explanation for failing to provide the requested knowledge. Playing dumb refers to pretending to be ignorant of the requested knowledge [40]. Interestingly, Jha and Varkkey (2018) proposed that knowledge hiding is a four-dimensional structure that includes counter-questioning and the above three dimensions based on the case of India [47]. However, since this qualitative study lacks data support, the conclusion needs further verification. Overall, the three-dimensional structure by Connelly et al. (2012) is widely used in extant studies about knowledge hiding [21]. This study will find out the positive and negative influencing factors of knowledge hiding by analyzing the different relationships between different types of behavior and individual innovation performance from specific motivations and adopting

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relevant theories to elaborate on the impact mechanisms. Therefore, we will assume the three-dimensional structure of knowledge hiding for research.

Many studies in the past have suggested that the following four theories were keys to explaining the intentions of knowledge-hiding behavior [45,48]. Firstly, social exchange theory [49] is crucial for knowledge-hiding behavior. Cook (1987) believes that trust is the premise of positive social exchange, and the trust between employees is directly related to the quality of their reciprocal relationship [49]. If an employee feels that his/her coworker is hiding knowledge, in all likelihood, he/she will reciprocate similarly to retaliate [50]. Knowledge hiding will break mutual trust and cause a crisis in trust, thus forming a cycle of distrust [17], and consequently, knowledge hiding becomes a norm in the organization. Secondly, according to the theory of psychological ownership, employees will protect the knowledge they have invested a significant amount of time and effort to acquire as their personal property rights. They develop a feeling of ownership of knowledge. When faced with competition, they will actively establish protective mechanisms to hide knowledge that obstructs the exchange of different views and methods among employees [17,21], thereby inhibiting the generation of new ideas. Thirdly, drawing on the conservation of resources theory, when employees feel a threat to their knowledge ownership, they will feel pressure and job insecurity. Considering the threat of resource loss, they may take measures to protect their own knowledge, and avoid colleagues' knowledge requests. In other words, they may consolidate their own resource advantage by hiding knowledge required by others to reduce job insecurity. Lastly, from the perspective of regulatory orientation theory, knowledge management studies have found some essential motivations in organizations, and these motivations hinder knowledge flow and are important reasons for the failure of knowledge management. In the era of the knowledge economy, the value of knowledge makes it a kind of resource. On the one hand, knowledge owners can gain respect and prestige by sharing knowledge with others, thus improving their status in the organization. On the other hand, the loss of knowledge control will threaten the status of individuals in organizations [44]. The "loss" of knowledge is likely to weaken the competitive advantage [51]. From the perspective of "seeking advantages and avoiding disadvantages" and based on the theory of regulatory orientation, this study reveals the most fundamental motivation for individuals to hide knowledge and explores the formation mechanism of knowledge hiding.

#### 2.2. Employee Innovation Performance

There is a lot of research on innovation performance, but it mainly focuses on the innovation performance of organizations or teams, while there is relatively little research on the performance of individual employees. We also find that scholars have paid far less attention to individual innovation performance and they only evaluate from the perspective of innovation results. Wu et al. (2014) considered that individual innovation performance emphasizes the perceptive, measurable, and valuable innovation results from employees' new ideas. Farmer et al. (2003) defined individual innovation performance as a functional creative activity based on employees' job responsibilities compared with innovation performance at the team or organization [52]. It is associated with work performance and the foundation of team or organization innovation performance. Janssen and Van Yperen (2004) pointed out that individual innovation performance is a valuable complex to the organization composed of a particular novel, feasible ideas, methods, processes, and products encompassing the whole process of idea generation, idea promotion, and idea realization [53]. Therefore, employee innovation performance reflects innovation results and includes the entire process of innovation activities [54]. Based on this, Janssen and Van Yperen (2004) proposed that employee innovation performance is a process in which employees generate and promote innovative ideas and implement innovative behavior in their work roles, work teams or organizations [53]. This paper agrees with the concept definition and holds that innovation performance is the entire innovation activity in which

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a series of novel and useful ideas or schemes are applied and implemented by employees and individuals, teams or organizations to produce valuable results.

Considering that personal innovation needs both external force and internal motivation, the primary research suggests considerable factors influencing employee knowledge-hiding behavior [52], and these factors are generally divided into individual and situational dimensions. Unique factors in the studies have focused mainly on internal aspects such as individual innovation ability, innovation resources and innovation motivation, including personality traits, motivation, emotional state, psychological factors, knowledgeability, creativity, and employee well-being [55,56]. Moreover, situational factors focused mainly on affecting individual innovation performance through external innovation conditions and innovation support, including social networks, organizational structure, organizational climate, innovative climate, and leadership style [57].

To sum up, knowledge resources are required to improve individual innovation performance [58,59]. While several studies have linked knowledge management (e.g., knowledge transfer, knowledge creation, and knowledge sharing) with innovation outcomes (e.g., innovation capabilityand innovation performance) [60], the research about the relationship between knowledge-hiding behavior and employee innovation performance is still emerging and is yet to be fully explored. Meanwhile, negative knowledge-hiding behavior may have a more substantial and lasting effect on individual innovation than positive knowledge-hiding behavior [61]. Therefore, this study will research three dimensions of knowledge hiding to expand the relationship between knowledge hiding and employee innovation performance.

# 2.3. The Impact of Knowledge Hiding on MNCs' Employee Innovation Performance

Knowledge is one of the core resources that enables organizations to grow and gain sustainable competitive advantages to ensure the survival and sustainable development of organizations [62]. Knowledge sharing is beneficial for employees of multinational corporations to acquire necessary knowledge from the organization, stimulate innovative thinking, and actively participate in the innovation process, thus improving innovation ability [63]. However, it may also weaken the competitive advantage of employees in multinational corporations and affect the formation and promotion of creativity [21]. Therefore, to protect their interests, employees of multinational corporations often engage in knowledge hiding [51]. Conventionally, knowledge hiding is thought to hinder knowledge exchange and be shared among employees [17,21]; It also hurts the feelings between them and creates a cycle of mistrust between them [64,65]. In this way, it inhibits the generation of new ideas and negatively affects the innovation of employees and multinational corporations [38], and weakens the improvement of innovation performance. Amongknowledge-hidingg behavior, evasive hiding and playing dumb are challenging to be detected, deceptive, and indeed have a negative impact on individual innovation [17,21]. However, knowledge hiding is sometimes like "white lies" [66], which has a goointentionson and is an action to protect the interests of others. Its impact on the innovation performance of employees may be different from the first two, which may enhance the relationship between colleagues and break the cycle of distrust in the organization. It has a positive impact on employee innovation performance. Based on this, the impact of knowledge hiding on the innovation performance of employees in multinational companies is analyzed from three dimensions.

### 2.3.1. Evasive Hiding and MNCs' Employee Innovation Performance

Evasive hiding refers to the behavior whereby when faced with knowledge requests, the knowledge owner provides irrelevant knowledge or promises to provide help in the future, but does not intend to do so [40]. Evasive hiding is a behavior of the intentional concealment of knowledge, which can easily destroy interpersonal relationships [21] and affect innovation [67].

Several reasons explain the role of evasive hiding in the MNCs' employee innovation performance. In general, there are three specific reasons. First, according to the knowledge-

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based view, evasive hiding prevents knowledge flow and stops employees from accessing valuable knowledge and the information they need [68,69]. It weakens innovation capabilities and reduces employee innovation performance. Second, evasive knowledge hiders tend to regard their hiding behavior as honest and generous [70] and use it as a rational justification. However, it is inherently deceptive and it is difficult to justify its rationality in reality. Consequently, the original positive self-construction of the hider will be disturbed. Moreover, when MNCs' knowledge requesters were rejected, they will not only produce negative emotions, but also take negative reciprocal revenge against knowledge hiders [50], and hide the vital information and knowledge they have. This results in deteriorating relations between employees [40] and causes a distrusting atmosphere, which hinders the adequate flow of knowledge, weakens innovation motivation, innovation capability and performance of MNCs' employees [40,67]. Third, evasive hiding is the behavior of MNCs' employees who strategically hide the knowledge they possess from their interests. As it violates the behavior standards of MNCs' employees, it may cause psychological stress and fatigue in the knowledge hider, thereby damaging and reducing the sense of well-being [40,71]. From a psychological perspective, it has a negative impact on the improvement of MNCs' employee innovation performance in the long term [72]. Thus, this study proposes the following hypothesis:

**Hypothesis 1a (H1a):** Evasive hiding is negatively correlated with the MNCs' employee innovation performance.

#### 2.3.2. Rationalized Hiding and MNCs' Employee Innovation Performance

Rationalized hiding refers to the knowledge owners refusing to provide the requested knowledge but making reasonable explanations when faced with knowledge requests [40]. For example, an employee seeks work-related expertise from a colleague who may respond that he or she cannot share it because the report is confidential or because they have been asked not to share it. Although it involves the intentional hiding of knowledge, rationalized hiding may trigger a positive response because it provides a reasonable explanation and does not involve deception. Instead, it will improve the relationship between the parties [40], facilitate the innovation process, and improve innovation performance [72].

Meanwhile, based on an extensive literature review, there are three main reasons for the effect of rationalized hiding on the MNCs' employee innovation performance. First, compared to evasive hiding, rationalized knowledge hiding is not deceptive, and is generated to maintain confidentiality or protect the interests of the third party [21]. Such a positive response can promote the relationship between the two parties [40] and improve employees' awareness of knowledge protection to create a climate of trust and fairness in knowledge sharing in MNCs [68]. All of these benefits increase knowledge creation, knowledge application, and the innovation outcomes of individuals and corporations, and contribute to MNCs' employee innovation performance. Second, employees will explain their rationalized knowledge-hiding behavior in MNCs, which is equivalent to directly telling the requester: "I can't help you". Although the knowledge requester also does not acquire knowledge, such a straightforward rejection can reduce ineffective communication between the two parties [37] and save time. Moreover, it allows the requester to promptly find another way to obtain resources from elsewhere, which could increase the sources of innovation [68]. At the same time, direct rejection can reduce the interference of invalid information among MNCs' employees and promote the generation and implementation of new ideas [73], which contributes to the improvement of innovation performance. Third, reasonable explanations can avoid or reduce the conflicts between the MNCs' employees, and promote communication and cooperation. In this vein, it is conducive to integrating MNCs' internal knowledge, experience and skills, enabling the practical knowledge to be quickly grasped, absorbed and utilized by other employees [25]. It will lead to the value orientation of the MNCs and form a shared value system, then improve innovation performance. Thus, we propose the following hypothesis:

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**Hypothesis 1b (H1b):** *Rationalized hiding positively correlates with the MNCs' employee innovation performance.* 

# 2.3.3. Playing Dumb and MNCs' Employee Innovation Performance

Playing dumb refers to the knowledge owner being ignorant of the required knowledge when facing knowledge requests [40]. For example, when an employee asks a colleague for work-related expertise, the colleague may pretend to be ignorant of the relevant knowledge [42]. Just like evasive hiding, playing dumb also hinders the communication of knowledge in the organization, causes a decrease in employee creativity, and then weakens the improvement of innovation performance.

The influence of playing dumb on the innovation performance of employees in multinational companies is mainly reflected in the following three aspects. First, employees who play dumb will pretend to be unable to help. Although the hiding behavior involves deception, it will not trigger negative retaliatory behavior from the other party because it is not obvious. However, the knowledge requester may distrust the hiders and deliberately keep their distance [40]. The relationship between the two parties will be affected. If communication between them cannot go smoothly, then the transfer of knowledge and the generation of new ideas will be hindered, and innovation performance will be negatively affected. Second, MNCs face a rapidly changing international economic situation in which time is an essential resource for employees' innovation [16]. To seize the opportunity of creation, it is necessary to minimize the time scale for generating new ideas and improving innovation efficiency. However, when the employees who requested knowledge finally failed, they may seek help from other employees [68], which increases the time for knowledge transfer, decreases the speed of knowledge acquisition, delays the generation of innovative ideas, and thus affects the improvement of innovation performance. Third, just like in evasive hiding, an employee who plays dumb experiences psychological pressure and fatigue due to their deceptive behavior, impairing their well-being [40,71], and making them experience job insecurity. As a result, the expatriate MNCs' employees tend to feel stressed, disconnected from the organization and not willing to deal with their work [25], which negatively affects innovation performance [72]. Thus, we put forward the following hypothesis:

**Hypothesis 1c (H1c):** *Playing dumb is negatively correlated with the MNCs' employee innovation performance.* 

#### 2.4. The Moderating Effect of Cross-Cultural Psychological Adaptation

Employees in different regions and countries have considerable differences in values, languages, customs, religious beliefs, lifestyles, etc. The impact of these potential cultural differences on expatriates may lead to many problems, such as stress, anxiety, loneliness and homesickness. Faced with this challenging and stressful cross-cultural shock, if employees of MNCs cannot adapt psychologically and adjust their roles in time, it may lead to a decline in job performance [74]. On the contrary, if the expatriates have strong cross-cultural psychological adaptability and adapt well to the host country's environment, they can reduce the expatriates' psychological stress and enable them to integrate well into cross-cultural work and life so that they can treat their surroundings and interpersonal relationships positively and reduce the occurrence of knowledge-hiding behavior.

MNCs' employees with strong cross-cultural psychological adaptation will gradually adapt to the cross-cultural environment and mitigate culture shock through proactive self-empowerment to regulate their mindset and cope with stress when facing the cross-cultural environment and gain psychological comfort so that they can feel comfortable in cross-cultural work and life [36]. At this time, they will not be negatively affected by work stress, and successful psychological adaptation provides fertile ground for developing innovative ideas enabling them to devote themselves to expatriate work. They will not be bothered by psychological stress. Thus, they will be able to interact cross-culturally with their superiors,

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subordinates, colleagues, and residents in the host country actively; They can enhance communication skills, thus reducing knowledge-hiding behavior and making it easier to generate innovative ideas and improve innovation performance. In general, employees will cope with the psychological pressure brought by the cross-cultural environment from the emotional, cognitive and behavioral aspects, and promote knowledge acquisition and communication. Based on these three aspects, the following part analyzes the influence of evasive hiding, rationalized hiding and playing dumb on the MNCs' employee innovation performance from the perspective of cross-cultural psychological adaptation.

# 2.4.1. The Moderating Effect of Cross-Cultural Psychological Adaptation on Evasive Hiding and MNCs' Employee Innovation Performance

Strong cross-cultural psychological adaptation will weaken the negative correlation between evasive hiding and MNCs' employee innovation performance for the following reasons: First, from the emotional aspect, MNCs' employees with strong cross-cultural psychological adaptation promote cross-cultural interaction skills and have a stable extroverted personality [75], so they can communicate and interact smoothly with members of the host country [76,77]. They will not be prejudiced against people from different cultures and will not judge them easily. It enables sincere communication and positive interaction between the two parties. It also avoids the cycle of mistrust and promotes positive reciprocity and knowledge sharing, thus reducing knowledge-hiding behavior and helping to improve innovation performance. Second, from the cognitive aspect, MNCs' employees with strong cross-cultural psychological adaptation adapt to new cultural environments quickly and develop more appropriate thoughts, actions, and social rules in the new cultural environment. It revises their mental models for cross-cultural and past cross-cultural situations [76,78,79]. This can mitigate the impact of cultural differences, weaken the uncertainty in cross-cultural interactions, and thus enable employees to positively face their work in cross-cultural environments, reducing knowledge-hiding behavior and enhancing innovation performance. Third, from the behavioral aspect, MNCs' employees with strong cross-cultural psychological adaptation can integrate into the cross-cultural environment faster, communicate well with their colleagues, and enhance their cross-cultural interaction. Therefore, they are good at self-disclosure and do not mind revealing important information about themselves to others [25]. They also have a proper sense of psychological ownership of knowledge. When faced with knowledge requests from colleagues, they will not push back; instead, they will actively share knowledge and then build trustful reciprocal relationships with colleagues. The behavior of reducing knowledge-hiding contributes to creativity and innovation performance. As such, we hypothesize that:

**Hypothesis 2a (H2a):** Cross-cultural psychological adaptation will weaken the negative correlation between evasive hiding and MNCs' employee innovation performance.

# 2.4.2. The Moderating Effect of Cross-Cultural Psychological Adaptation on Rationalized Hiding and MNCs' Employee Innovation Performance

Strong cross-cultural psychological adaptation will strengthen the positive correlation between rationalized hiding and MNCs' employee innovation performance for the following reasons: First, from the emotional aspect, MNCs' employees with strong cross-cultural psychological adaptation can enhance their cross-cultural interaction skills through the psychological adaptation process, which makes them enjoy performing their duties in different cultures, exhibit self-reliant and reliable traits [80], and rarely experience anxiety due to insecurity [81]. Therefore, when faced with a knowledge request, they will actively perform their duties to protect the corporation's intellectual property, make reasonable explanations for information that cannot be disclosed, and directly refuse (so as to avoid the distrust of the requestor), promote the relationship between the two sides, strengthen communication, and improve the innovation performance. Second, from the cognitive aspect, MNCs' employees with strong cross-cultural psychological adaptation can properly recognize cross-cultural similarities and differences [79]. Thus, they could better understand the host

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country's social values, customs, norms, and institutions [82] and articulate their ideas more appropriately. When confronted with a knowledge request, the employees will provide reasonable hidden reasons to avoid misunderstandings by the requester, strengthen trust between the two parties, and facilitate the generation of creative ideas, thus enhancing innovation performance. Third, from the behavioral aspect, MNCs' employees with strong cross-cultural psychological adaptation are good at using descriptive and supportive information in the communication process after psychological transformation and communicate effectively with others through nodding, eyes, facial expressions, etc. [83] to reduce the disconnection and conflict between colleagues and strengthen the trust of both sides. In this way, they can interoperate in a positive and reciprocal working environment, learn and communicate with each other, promote a knowledge-sharing atmosphere, improve the efficiency of cooperation, and thus contribute to the improvement of innovation. Therefore, we suggest the following hypothesis:

**Hypothesis 2b (H2b):** Cross-cultural psychological adaptation will strengthen the positive correlation between rationalized hiding and MNCs' employee innovation performance.

2.4.3. The Moderating Effect of Cross-Cultural Psychological Adaptation on Playing Dumb and MNCs' Employee Innovation Performance

The strong cross-cultural psychological adaptation will weaken the negative correlation between playing dumb and MNCs' employee innovation performance for the following reasons: First, from the emotional aspect, employees of MNCs with strong cross-cultural psychological adaptation will see themselves as an integral part of the corporation, which can reduce the negative effects of social categorization processes within the corporation [84]. This promotes knowledge sharing within the corporation and reduces the negative effects of knowledge-hiding behavior on innovation. After psychological adaptation, they become adept at communicating with people from different cultures [85]. Such employees have high self-esteem; they are good at expressing themselves and are readily accepted by others [77]. When confronted with a knowledge request, they consider that it may affect the other person's perception of them. Therefore, they will actively share knowledge, reduce the gap between colleagues, and bring both parties closer together. This will promote the exchange of new ideas and improve employees' innovation and innovation performance. Second, from the cognitive aspect, MNCs' employees with strong cross-cultural psychological adaptation have strong self-awareness and care about colleagues' opinions of them in cross-cultural interaction, so they will guide and adjust their behavior according to the perceived information to meet the requirements of society [86]. Therefore, MNCs' employees with strong cross-cultural psychological adaptation faced with knowledge requests from colleagues can better understand the intentions of the knowledge requester and give clear answers without feigning ignorance, thus promoting knowledge sharing and increasing innovation performance. Third, from the behavioral aspect, strong cross-cultural psychological adaptation can encourage employees' interaction skills, thereby showing strong verbal and communication skills and the ability to empathize with others [77]. Therefore, MNCs' employees with strong cross-cultural psychological adaptation are good at trans-personal thinking, and can actively create mutual understanding and trusting relationships with colleagues. When colleagues have knowledge requests, they will show positive reciprocity [87] and sharing, create a climate of knowledge sharing and promote innovative performance. Thus, the following hypothesis is suggested:

**Hypothesis 2c (H2c):** Cross-cultural psychological adaptation will weaken the negative correlation between playing dumb and MNCs' employee innovation performance.

An illustration of the theoretical framework and hypotheses is depicted in Figure 1.

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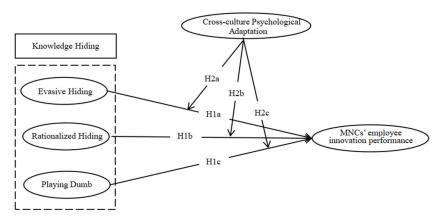


Figure 1. Theoretical framework.

#### 3. Research Method

#### 3.1. Sample and Data Collection

Under the influence of cultural differences in international operations, employees of MNCs usually exhibit knowledge-hiding behavior in order to ensure their competitive advantages in the company, thus affecting their innovation performance [88]. Therefore, drawing attention to employees' knowledge-hiding behavior is vital to further understanding and improving the MNCs' innovation performance. This study tries to illustrate this phenomenon by collecting questionnaires on MNCs' employees. In greater detail, we mainly distributed questionnaires in two ways. First, in March 2022, a paper questionnaire was distributed to part-time students in the MBA class of a Chinese-foreign cooperative master program at a university in Yunnan via the "random sampling" method. Most of the students are from multinational companies affiliated with the Yunnan Provincial Department of Commerce and have expatriate experience. When handing out questionnaires, it was emphasized to them that knowledge hiding was not an absolutely "bad" behavior, to prevent them from deliberately hiding their true thoughts. We assured them that all received answers were strictly confidential and were for research purposes only. Secondly, we asked a group of human-resources managers to help us distribute the online questionnaire surveys to employees with expatriate experience in MNCs. In addition, we conducted a two-stage investigation to reduce the occurrence of common method variance. In the first stage, the respondents were asked to answer the questionnaire in which knowledge hiding and control variables were evaluated. Two months later, we distributed the second questionnaire to assess cross-cultural psychological adaptation and employee innovation performance. As a result, the entire investigation process lasted four months, and 328 initial samples were received. We then eliminated suspicious and questionable questionnaires through data filtering (e.g., questionnaires with the same answers or completed in less than 100 s). Eventually, 273 valid questionnaires were gathered, with a final recovery rate of 83.23%.

The demographic characteristics of the respondents are shown in Table 1. A total of 111 males and 162 females accounted for 40.66% and 59.36% of the total respondents, respectively. Regarding age distribution, the number of employees under the age of 30 was 174, forming 63.74% of the whole group, which indicates that most of the respondents were young. The percentage of employees aged 30–39 years old and over 40 years old was 24.54% and 11.72%, respectively. In terms of education, the majority (63%) had a bachelor's degree, 26.37% had a master's degree and 0.73% have a doctoral degree. Meanwhile, respondents who have been working for less than one year constituted 45.42% of the total; 23.44% of respondents had more than ten years of work experience; 15.75% of respondents had worked for the MNCs for 4 to 10 years, while 15.38% of the staff had a tenure of 1 to 3 years. In terms of current jobs, there were 197 non-management employees, accounting for 72.16% of the total number, and 76 board members or senior executives, accounting for 27.84% of the total.

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**Table 1.** The demographic profile of the research sample.

Demographic Variables	Characteristics	Frequency	Percentage	
0 1	Male	111	40.66	
Gender	Female	162	59.34	
	<30 years	174	63.74	
	30–39 years	67	24.54	
Age range	40–49 years	18	6.59	
0 0	50–60 years	13	4.76	
	>60 years	1	0.37	
	Lower than the undergraduate degree	27	9.89	
Educational level	Undergraduate degree	172	63.00	
	Master degree	72	26.37	
	Ph.D. degree	2	0.73	
	<1 year	124	45.42	
T 1 .	1–3 years	42	15.38	
Job tenure	4–10 years	43	15.75	
	>10 years	64	23.44	
Talamasitian	Non-Managerial	197	72.16	
Job position	Board of Directors/Managerial	76	27.84	

#### 3.2. Variables

This study adopts a maturity scale published by international authoritative journals to ensure the reliability and validity of measurement tools. Moreover, considering that the question scale mainly derives from English literature, this study adopted the backtranslation procedure. First, two graduate students majoring in management translated the original English scale into Chinese. The Chinese scale was then translated back into English by two postgraduate students majoring in English. Finally, two management professors were invited to compare the original English scale, the translated Chinese scale, and the back-translated English scale. They then evaluated and optimized the contents and structures of the items and questionnaires to ensure maximum information equivalency of translation. In addition, a preliminary survey was conducted, which is a basis for adjusting the scale fitting Chinese answering habit. All formal questionnaires were evaluated by a Likert-5-point scale (1 meaning strongly disagree, 5 meaning strongly agree). The relevant variables are determined as follows:

# 3.2.1. Dependent Variable

The dependent variable of this study is employee innovation performance (IP). Following the questionnaire developed by Janssen and Van Yperen (2004), employee innovation performance consists of nine items arranged in a Likert scale format [53]. This survey scale involves innovation intention, innovative efforts, and innovation results. Specifically, the first three items focus on the employee's willingness to innovate (i.e., providing new ideas for improving the existing situation). Items 4–6 measured employees' innovative efforts, and the sample items included "searching new working methods, technologies or tools through learning". The other three items evaluated the innovation results. The sample item of innovation results includes "turning innovative ideas into practical applications". The internal consistency coefficient of this scale (Cronbach's  $\alpha$ ) is 0.927.

# 3.2.2. Independent Variable

The independent variable is knowledge hiding, including evasive hiding (EH), rationalized hiding (RH) and playing dumb (PD). Concerning the assessment of knowledge hiding, this study referred to the maturity scale developed by Connelly et al. (2012), which divided knowledge hiding into three dimensions: evasive hiding, rationalized hiding, and

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playing dumb [21]. These dimensions consist of four separate items [9]. A sample item of evasive hiding is: "When a colleague asks me for work-related knowledge/information, I ostensibly desirous to help him/her, but I do not intend to do so," and the internal consistency coefficient of this scale (Cronbach's  $\alpha$ ) is 0.931. In terms of rationalized hiding, one of the sample items is: "When a colleague asks me for work-related knowledge/information, I would explain that the information is confidential and can only be disclosed to relevant personnel," and the internal consistency coefficient of this scale (Cronbach's  $\alpha$ ) is 0.906. Playing dumb also consists of four items. The sample items of playing dumb include: "When a colleague asks me for work-related knowledge/information, I pretend to be unaware of it". The Cronbach's  $\alpha$  of this scale is 0.904.

#### 3.2.3. Moderator Variable

The moderator variable is a cross-cultural psychological adaptation (CCPA). In terms of cross-cultural psychological adaptation, this study adapted seven items designed by Demes and Geeraert (2014) and estimated them from three aspects: cross-cultural cognition, emotion, and behavior [88]. Sample items of cross-cultural psychological adaptation include "Happy with my day-to-day life in the host country" and "Nervous about how to behave in certain situations". The internal consistency coefficient of this scale (Cronbach's  $\alpha$ ) is 0.923. The reliability coefficient of each item in the scale is greater than 0.8, indicating that each scale has high internal consistency and good reliability.

#### 3.2.4. Control Variables

Research on knowledge sharing and corporate innovation shows that demographic factors affect personal knowledge management behavior and creativity [89]. Therefore, this study adopted employees' gender, age, educational level, job tenure and job position as the control variables.

Kilduff et al. (2000) reckoned that gender distribution reflects the differences in team members' attitudes, values, and norms, further affecting the unofficial exchange and knowledge sharing between staff [90]. In this regard, gender distribution affects the employee's innovation results. Respondents in this study were coded as: 1 = Male, and 2 = Female.

Age is one of the important factors that harm employee innovation performance [91]. Schubert and Andersson (2015) proposed that employees' ability and willingness to process new techniques would significantly decrease with increased age [91]. We controlled age by coding:  $1 \le 30$  years old, 2 = 30–39 years old, 3 = 40–49 years old, 4 = 50–60 years old, and  $5 \ge 60$  years old.

Scott and Bruce (1994) highlighted that the educational level of employees is positively correlated with their innovation ability [92]. An employee with a high educational level shows a broader range of knowledge and a more substantial capacity to process information to promote individual innovation behavior and core competencies in a corporation [93]. This study controlled for the employee's educational level by coding: 1 = Lower than bachelor's degree, 2 = bachelor degree, 3 = master's degree, and 4 = doctoral degree.

Employees with longer tenures have the weaker ability and higher resistance to change, and their innovation ability will decline, which will have a negative impact on innovation performance [91]. This study measured the number of years respondents have worked in a corporation by coding:  $1 \le 1$  year, 2 = 1-3 years, 3 = 4-10 years, and  $4 \ge 10$  years.

In an organization, people with higher job positions feel that they are the firm's backer and have a greater sense of responsibility. In this vein, employees with senior jobs tend to be more loyal to their corporations, which is beneficial to increasing business performance [94]. Meanwhile, there are clues that higher job status leads to a higher level of individual creativity [46]. The job position of respondents was coded as 1 = non-supervisory workers, 2 = A member of the board or senior executive.

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#### 3.3. Data Analytic Strategies

We adopted Amos24.0 and SPSS25.0 to analyze the questionnaire data. First, we used Amos24.0 to examine the reliability and validity of the survey data and measurement models. Secondly, we used SPSS 25.0 to conduct descriptive statistics and correlation analysis. Thirdly, we used EFA exploratory factor analyses and the Harman single factor test to evaluate whether there is a problem with standard method variance in this research sample. Finally, we established a first-order structural equation model to verify the relationship between knowledge hiding and employee innovation performance and the moderating effect of cross-cultural psychological adaptation on the above relationships.

#### 4. The Results

#### 4.1. Construct Reliability and Validity

The results of the reliability test and concurrent validity test are shown in Table 2. The results reveal that the normalized factor loads of the common factors were above  $0.7 \ (p < 0.01)$  in related items, which suggests that the questionnaire in this study has satisfactory construct validity. The results also indicate that the scale was acceptable in internal consistency, showing that the composite reliability (CR) achieved 0.9 (with a critical value of 0.7). Compared with the average reference value (0.5), the value range of average variance extracted (AVE) in this study was larger (ranging from 0.588 to 0.772), and thus this study has reasonable convergent validity [95].

Table 2. Reliability and validity tests.

Variables	Item	Estimate	S.E.	Est. /S.E.	p	Std. Loading	SMC	CR	AVE
IP	IP1	one	-	-	-	0.693	0.480		
	IP2	1.048	0.097	10.816	***	0.695	0.483		
	IP3	1.189	0.101	11.784	***	0.762	0.581		
	IP4	1.250	0.103	12.087	***	0.782	0.612		
	IP5	1.173	0.095	12.401	***	0.804	0.646	0.927	0.588
	IP6	1.141	0.093	12.272	***	0.795	0.632		
	IP7	1.123	0.094	11.928	***	0.771	0.594		
	IP8	1.209	0.101	11.990	***	0.776	0.602		
	IP9	1.278	0.103	12.414	***	0.805	0.648		
EH	EH1	one	-	-	-	0.855	0.731		
	EH2	0.945	0.052	18.200	***	0.849	0.721	0.021	0.772
	EH3	1.015	0.048	21.316	***	0.927	0.859	0.931	
	EH4	0.964	0.049	19.672	***	0.887	0.787		
RH	RH1	one	-	-	-	0.825	0.681		
	RH2	1.046	0.065	16.130	***	0.833	0.694	0.006	0.707
	RH3	1.097	0.061	17.905	***	0.900	0.810	0.906	
	RH4	0.938	0.061	15.261	***	0.801	0.642		
PD	PD1	one	-	-	-	0.915	0.837		
	PD2 0.936	0.043	21.692	***	0.878	0.771	0.004	0.700	
	PD3	0.883	0.042	20.837	***	0.862	0.743	0.904	0.702
	PD4	0.842	0.058	14.403	***	0.708	0.501		
CCPA	CCPA1	one	-	-	-	0.778	0.605		
	CCPA2	1.029	0.071	14.535	***	0.813	0.661		
	CCPA3	1.136	0.078	14.608	***	0.817	0.667	0.923	0.631
	CCPA4	1.078	0.075	14.450	***	0.810	0.656		
	CCPA5	0.972	0.071	13.688	***	0.775	0.601		
	CCPA6	1.101	0.077	14.289	***	0.802	0.643		
	CCPA7	0.992	0.074	13.346	***	0.759	0.576		

Notes: \*\*\* p < 0.01. Here, IP = Employee innovation performance, EH = evasive hiding, RH = rationalized hiding, PD = playing dumb, and CCPA = Cross-cultural psychological adaptation.

Moreover, the square roots of AVE displayed by the bold diagonal word in Table 3 are more significant than each value of correlation coefficients between variables, which

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provides a sufficient convergent validity of the multidimensional construct. In addition, Table 3 preliminarily indicates that employee innovation performance is negatively correlated with evasive hiding and playing dumb, with correlation coefficients of -0.252 and -0.177, respectively. The correlation coefficient between rationalized hiding and employee innovation performance is 0.148 (p < 0.01). There is a positive correlation between employee innovation performance and cross-cultural psychological adaptation, and the correlation coefficient is 0.475, with p < 0.01. In this study, each control variable has at least a significant relation with the main variables, revealing that the selection of these control variables in this study is reasonable. Furthermore, as shown in Table 3, the correlation coefficients in this study are all lower than the threshold value of 0.7. Thus, a multicollinearity problem does not exist.

Variables Mean SD ΙP EH RH PD **CCPA** AGE EL. JT JP ΙP 3.823 0.687 0.588 EH 2.020 0.252 \*\*\* 0.772 0.417 \*\*\* 0.677 \*\*\* 2.740 1.089 0.148 \*\* RH 0.707 -0.177 \*\*\* 0.540 \*\*\* PD 2.287 0.945 0.702 0.475 \*\*\* 0.175 \*\*\* **CCPA** 3 563 0.780 -0.044-0.0200.631 0.047 0.407 0.058 GE 0.4920.078 0.045 0.019 0.167 \*\*\* 0.141 \*\* 0.535 -0.078-0.0420.059 AGE 0.844 0.032 0.010 -0.262 \*\*\* EL 1.179 0.601 -0.0340.071 0.048 0.058 0.013 0.196 \*\*\* -0.250 \*\*\* -0.066-0.157 \*\*\* 0.181 \*\*\* 0.042 0.793 \*\*\* -0.255 \*\*\*

-0.080

**Table 3.** Descriptive statistics and correlation coefficients.

-0.088

Notes: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. The diagonal bold word is the square root of average variance extracted (AVE), and the lower triangle is the Pearson correlation coefficient between variables. Here, IP = Employee innovation performance, EH = evasive hiding, RH = rationalized hiding, PD = playing dumb, CCPA = Crosscultural psychological adaptation, GE = Employee's gender, AGE = Employee's age, EL = Employee's educational level, JT = Employee's job tenure, and JP = Employee's job position.

0.101 \*

0.099 \*

0.246 \*\*\*

0.391 \*\*\*

-0.063

#### 4.2. Hypothesis Testing

0.150 \*\*

ĴΡ

0.278

0.449

# 4.2.1. Main Effect Analysis

-0.106\*

The hypothesis testing results are shown in Table 4. In Model 1, The regression equation for predicting the innovation performance of employees in multinational companies only contains the following control variables: employees' gender (GE), age (AGE), educational level (EL), job tenure (JT), and job position (JP). The regression result reflects that job tenure (IT) positively affects the employee innovation performance of MNCs. It implies that employees can better understand the culture in host countries and intercultural communicative competence as their job tenure at an MNCs grows, and employees' creativity, along with their commitment to their employers, can be enhanced during the increase in job tenure. On the contrary, age negatively affects MNCs' employee innovation performance. One possible explanation for this effect is that employees' ability and willingness to process new technologies decrease sufficient with age. Thus, older employees' innovation ability becomes weaker with the decrease in new knowledge absorptive capacity compared with younger employees. Furthermore, there is no significant correlation between gender, educational level, job position, and employee innovation in MNCs. Based on Model 1, we added the independent variable 'evasive hiding' to Model 2. The value of R square in Model 2 concludes that model fitting in Model 2 is better than in Model 1 ( $R^2 = 0.185$ ). Furthermore, the empirical result in Model 2 shows that evasive hiding has a negative effect on employee innovation performance at a 1% significance level, that is, evasive hiding hinders the improvement of employee innovation performance in MNCs ( $\beta = -0.158$ , p < 0.01). Therefore, hypothesis H1a is supported. In Model 3, rationalized hiding is positively correlated with employee innovation performance at a significant level of 1% ( $\beta = 0.108$ ), indicating that rationalized hiding promotes the growth of employee innovation performance. As a result, Model 2 provides strong support for hypothesis H1b. As shown in Model 4, the correlation coefficient of playing dumb is -0.110 under the significance level at 0.05, which indicates that the higher the level of playing dumb, the more significant is the negative impact on employee innovation performance, and thus hypothesis H1c is also supported.

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Table 4.	Regression	results o	of the	main e	effects.
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	IP						
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Control variables							
GE	0.0613	0.086	0.05	0.071	0.088	0.058	0.077
AGE	-0.0223	0.037	-0.053	0.005	0.003	-0.071	-0.041
EL	0.0123	0.019	0.003	0.018	-0.012	-0.021	-0.002
JT	0.105 *	0.041	0.124 **	0.077	0.014	0.086 *	0.054
JP	0.122	0.124	0.139	0.119	0.09	0.112	0.079
Independent variables							
EH		-0.158 ***			-0.557 ***		
RH			0.108 ***			-0.271*	
PD				-0.110 **			-0.734***
Moderator							
CCPA					0.210 **	0.163	0.081
Interaction							
$EH \times CCPA$					0.112 **		
$RH \times CCPA$						0.088 **	
$PD \times CCPA$							0.171 ***
cons_	3.639 ***	3.983 ***	3.898 ***	3.983 ***	3.331 ***	3.019 ***	3.731 ***
F	0.0236	7.480 ***	3.289 ***	4.562 ***	14.278 ***	11.996 ***	13.845 ***
$\mathbb{R}^2$	0.0472	0.185	0.069	0.093	0.302	0.267	0.296

Notes: \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. Here, IP = Employee innovation performance, EH = evasive hiding, RH = rationalized hiding, PD = playing dumb, CCPA = Cross-cultural psychological adaptation, GE = Employee's gender, AGE = Employee's age, EL = Employee's educational level, JT = Employee's job tenure, and JP = Employee's job position.

## 4.2.2. Moderation Analysis

In Models 5–7, we introduced the moderator variable cross-cultural psychological adaptation into the regression analysis. In Model 5, the interactive effect between evasive hiding and cross-cultural psychological adaptation is significant ( $\beta$  = 0.112, p < 0.05). Thus, hypothesis H2a is supported. The cross-cultural psychological adaptation will weaken the negative relationship between evasive hiding and MNCs' employee innovation performance. In other words, with the enhancement of cross-cultural psychological adaptation, employees' potential for evasive hiding will decline while their innovation capacity increases. It indicates that employees with high cross-cultural psychological adaptation and low evasive hiding levels improve the innovation performance of MNCs.

We then conducted a simple slope test in Figure 2 to graphically describe the moderating effect of cross-cultural psychological adaptation on the relationship between evasive hiding and the employee innovation performance of MNCs. Figure 2 depicts that when the employee's cross-cultural psychological adaptation of MNCs is low, the slope that reflects the influence of evasive hiding on employee innovation performance is relatively flat. This marginal effect increases when employees' cross-cultural psychological adaptation improves. It is blatantly apparent that the slope of the influence of knowledge hiding on employee innovation performance increases.

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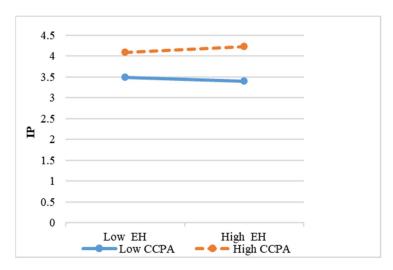


Figure 2. The moderating effect of CCPA between EH and IP.

In Model 6, the interaction between rationalized hiding and cross-cultural psychological adaptation is significantly and positively correlated with employee innovation performance ( $\beta = 0.088$ , p < 0.05), which reflects that cross-cultural psychological adaptation strengthened the positive relationship between rationalized hiding and employee innovation performance of MNCs. Thus, hypothesis H2b is supported. The regression analysis indicates that with an increase in cross-cultural psychological adaptation, the self-reliance and reliability of MNCs' employees become prominent. These employees with high cross-cultural psychological adaptation are skilled at strengthening mutual trust, dared to protect the interests of their corporations or the third parties, and make rational knowledge hiding. Thus, it is easier for them to build a pleasant "knowledge sharing" atmosphere with other corporations to learn what they need and promote innovation.

In addition, a simple slope diagram in Figure 3 depicts the moderating effect of cross-cultural psychological adaptation on the relationship between rationalized hiding and employee innovation performance. Figure 3 shows that when cross-cultural psychological adaptation is high, the slope indicating that the influence of rationalized hiding on employee innovation performance becomes steeper. That is, the positive impact of rationalized hiding on employee innovation performance will increase by a greater degree when there is a high cross-cultural psychological adaptation.

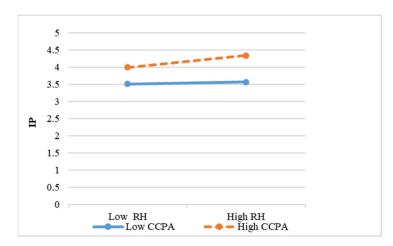


Figure 3. The moderating effect of CCPA between RH and IP.

Model 7 investigates the effective mechanism underlying the interaction between playing dumb and the cross-cultural psychological adaptation on employee innovation performance. As Model 7 shows, the interaction term between playing dumb and cross-

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cultural psychological adaptation is significantly positive at a 1% level ( $\beta$  = 0.171, p < 0.01). In other words, when cross-cultural psychological adaptation is high, the negative influence of playing dumb on employee innovation performance of MNCs is weakened, so hypothesis H2c is supported. Employees with high cross-cultural psychological adaptation present more vital self-awareness and self-esteem. It is conceivable that they will not hide their knowledge by pretending not to know, but rather make good use of their communication competence to build a relationship of understanding and trust with colleagues, show positive reciprocity, and promote innovation performance (IP).

We also conducted a simple slope test in Figure 4, describing the moderating effect of cross-cultural psychological adaptation on the relationship between playing dumb and employee innovation performance of MNCs. As Figure 4 suggests, when cross-cultural psychological adaptation is low, the slope that demonstrates the influence of playing dumb on employee innovation performance becomes steeper. In contrast, as cross-cultural psychological adaptation is high, the slope reflecting the correlation between playing dumb and employee innovation performance becomes positive and slightly increases. In this sense, with higher cross-cultural psychological adaptation, the effect of playing dumb on employee innovation performance will be more substantial.

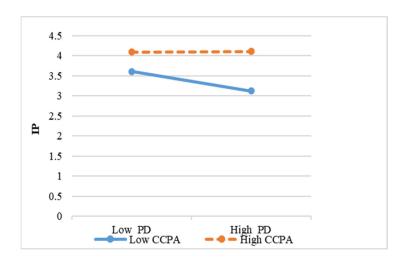


Figure 4. The moderating effect of CCPA between PD and IP.

# 5. Conclusions and Discussion

#### 5.1. The Research Conclusions

Drawing from a knowledge-based view, conservation of resources theory and psychological ownership theory, this study collected data from 273 employees in Chinese MNCs. It proposed a theoretical model to explore the relationship between knowledge hiding and MNCs' employee innovation performance. In contrast, the moderating effect of cross-cultural psychological adaptation on the above links is investigated. In this regard, we conducted empirical analysis and achieved the following main conclusions.

The relationships between evasive hiding, playing dumb and MNCs' employee innovation performance are significantly negative, whereas there is a positive relationship between rationalized hiding and MNCs' employee innovation performance. Deceitful knowledge-hiding behavior will damage the hider's happiness and cause the requester to retaliate through knowledge hiding in the future. As a result, there will be a cycle of mistrust between the two sides which hinders the internal knowledge flow within a corporation, thus limiting employees' behavior and weakening their innovation performance. Although playing dumb has no apparent knowledge-hiding behavior, it is also deceptive; the hider would feel psychological pressure and fatigue equally. Meanwhile, requesters will feel distant from the hider, resulting in distrust on both sides. The knowledge flow within a corporation is abruptly cut off, thus affecting the improvement of innovation performance. On the contrary, rationalized hiding can avoid conflict between the two sides while creating

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a reliable and fair knowledge-sharing atmosphere in the corporation. Moreover, it can save ineffective time for communication between employees, thus promoting the internal knowledge flow, fostering individual creativity and employee innovation performance. Hence, it is found that evasive hiding and playing dumb play a negative role in MNCs' employee innovation performance, respectively. However, there is a positive relationship between rationalized hiding and MNCs' employee innovation performance.

Cross-cultural psychological adaptation significantly moderates the relationship between different types of knowledge-hiding behavior and MNCs' employee innovation performance. The results show that employees with low cross-cultural psychological adaptation tend to offer more cross-cultural communication skills than those with common cross-cultural psychological adaptation, no matter what type of knowledge hiding behavior will play a positive role. Specifically, cross-cultural psychological adaptation will weaken the negative relationship between evasive knowledge hiding and employee innovation performance and strengthen the positive relationship between rationalized knowledge hiding and employee innovation performance. In other words, with the augmentation of cross-cultural psychological adaptability, the employees can actively respond to the challenges of different cultures, reduce cross-cultural impact, and also adjust their psychological adaptability promptly, which can enable them to communicate smoothly with members of the host country, break the cultural barriers between the two sides, and promote knowledge sharing. It also can help them increase collaborative innovation and promote innovation performance improvement. In addition, with the enhancement of cross-cultural psychological adaptability, the competitive pressure brought by the cross-cultural environment will be weakened. Employees can actively face a new culture and timely adjust their behavior to meet the cultural requirements of the host country. In conclusion, cross-cultural psychological adaptation can make employees in multinational corporations show positive reciprocity and actively share their knowledge with others, which is conducive to reducing knowledge-hiding behavior and promoting innovation performance.

#### 5.2. Theoretical Contributions

- This study enriches and expands the research on knowledge hiding. We elaborate on the influence mechanism regarding the three dimensions of knowledge hiding on the MNCs' employee innovation performance. Referring to the research results of Connelly et al. (2012), knowledge hiding could not be regarded as a single concept, therefore it is divided into three dimensions (i.e., evasive hiding, playing dumb and rationalized hiding) [21]. To the best of our knowledge, this study contributes to the study on the impact mechanism of three dimensions of knowledge hiding on the MNCs' employee innovation performance, taking a step towards answering this essential but under-explored question in the existing literature. Previous studies mainly studied innovation performance from knowledge sharing and considered that knowledge hiding was detrimental to employees' innovation ability [64,96]. In this study, it is worth noting that rationalized hiding positively affects the MNCs' employee innovation performance, which indicates that knowledge hiding has both positive and negative effects. To be more specific, it is noted that rationalized hiding can improve the MNCs' employee innovation performance and provide a potential future direction for predicting employees' knowledge-hiding behavior, which is a specific theoretical contribution.
- (2) This study extends our understanding of the role of cross-cultural psychological adaptation by innovatively shedding light on its moderating effect on the relationship between knowledge hiding and employee innovation performance in the MNCs context, contributing to the emerging topic of psychological adaptation. About the research on knowledge management and innovation performance, the extant literature mainly focused on influencing factors about the innovation climate, social capital, and leadership style. Simultaneously, cross-cultural psychological adaptation is a part of cross-cultural adaptation which is usually treated as an antecedent or mediating

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variable along with social adaptation. However, few studies analyzed cross-cultural psychological adaptation as a moderator variable separately. To address this issue, this study is designed to study the moderating effect of cross-cultural psychological adaptation on the relationship between knowledge hiding and MNCs' employee innovation performance, and it enlarges the previous findings regarding psychological adaptation and provides a better understanding of the indirect factors of knowledge and innovation management.

#### 5.3. Managerial Implications

- Managers should be acutely aware of the importance of knowledge hiding to promote employee innovation performance. In the COVID-19 era, innovation has become critical in enhancing competitiveness as the global economy faces unprecedented uncertainties. In this regard, the turbulent international business environment urgently urges transnational corporations to create new business models and increase competitive opportunities to cope with the current crisis, which requires transnational corporations to effectively learn and utilize external knowledge resources and effectively absorb and integrate internal knowledge resources. However, when faced with different cultural environments, employees tend to hide their knowledge to maintain competitiveness, thus hindering internal knowledge exchange and affecting employees' innovation performance. However, managers of a company have no right to force their employees to share personal knowledge. Therefore, managers of multinational companies should pay special attention to employees' knowledge-hiding behavior. To be more specific, they should find out the antecedents of knowledge hiding and provide relevant policy support to reduce the occurrence of dangerous knowledge-hiding behavior. At the same time, managers should create a good knowledge sharing and collaborative atmosphere and take adequate measures to alleviate the negative effects of knowledge hiding while providing conditions to facilitate employee innovation performance.
- Managers should reduce negative knowledge-hiding behavior and improve employee innovation performance by strengthening employees' cross-cultural psychological adaptation. There is evidence that employees face cultural barriers caused by crosscultural differences in continuous innovation. In this vein, managers of MNCs should stay alert to employees' knowledge-hiding behavior. Similarly, it is also necessary to find practical ways to enhance their employees' capacity for cross-cultural psychological adaptation. For instance, practitioners are suggested to hold regular cross-cultural training or improve organizational support, which will effectively provide solutions for employees who are facing psychological pressure in a cross-cultural work context and help them reduce culture shock and cross-cultural stress. In addition, managers can also use various communication platforms (such as group meetings, exchange meetings, team rooms, learning spaces, forums, dialogues, etc.) to promote communication between employees from distinct cultural backgrounds, which is conducive to enhancing feelings, reducing psychological pressure, and enhancing psychological adaptability. Doing so is significant about assisting employees in breaking cultural barriers, and they could learn from each other through a steady and constant knowledge flow. Ideal knowledge sharing and a positive and reciprocal atmosphere in an enterprise are essential to reduce negative knowledge hiding and improve innovation performance.

#### 5.4. Research Limitations and Future Research

(1) The definition and measurement of knowledge hiding need to be studied further. The current research on knowledge hiding is still in the exploratory stage, and in particular the related research on the three dimensions of knowledge hiding has not reached a consensus. Although this study summarizes and defines the concept of knowledge hiding based on previous studies, it still needs further research and exploration.

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(2) The scale of the research sample of the proposed questionnaire could be further expanded. This study collects first-hand data from employees of Chinese MNCs for empirical analysis by distributing questionnaires, and we targeted the respondents with expatriate experience in MNCs. Although we have applied extensive personal contacts, it is clear that the survey process has particular difficulty. Hence, the research sample collected for empirical tests in this study is of a relatively small scale.

(3) Future studies could further investigate the universality and applicability of the research conclusions in global multinationals from different cultural contexts. Considering that this study's research object is Chinese employees from MNCs, the research conclusion is mainly applicable to China and other countries with similar cultural backgrounds. It remains to be proved whether the results of this survey apply to different countries and regions with different cultural differences. Therefore, future research could advance this study by expanding the diversity of interviewees, covering other countries and areas, providing a more general understanding of how knowledge-hiding behavior is affected in different cultural and institutional backgrounds, thereby making the current research conclusions more scientific and comprehensive.

**Author Contributions:** Y.J. conducted the data collection and analysis during the writing period and wrote the manuscript. S.-C.Y. conducted the review and editorial modification and the data collection and survey of the paper. All authors contributed to the conception and design of the study, read, and edited the manuscript, and suggested improvements at several stages during the preparation and revision of the manuscript. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

**Informed Consent Statement:** Not applicable. **Data Availability Statement:** Not applicable.

**Conflicts of Interest:** The authors declare no conflict of interest.

#### References

- 1. Elsetouhi, A.; Elbeltagi, I.; Haddoud, M.Y. Intellectual Capital and Innovations: Is Organisational Capital a Missing Link in the Service Sector? *Int. J. Innov. Mgt.* **2015**, *19*, 1550020. [CrossRef]
- 2. Chen, C.-J.; Liu, T.-C.; Chu, M.-A.; Hsiao, Y.-C. Intellectual capital and new product development. *J. Eng. Technol. Manag.* **2014**, *33*, 154–173. [CrossRef]
- 3. Martín-de Castro, G.; Delgado-Verde, M.; Navas-López, J.E.; Cruz-González, J. The moderating role of innovation culture in the relationship between knowledge assets and product innovation. *Technol. Forecast. Soc. Change* **2013**, *80*, 351–363. [CrossRef]
- 4. Hsu, Y.-H.; Fang, W. Intellectual capital and new product development performance: The mediating role of organizational learning capability. *Technol. Forecast. Soc. Change* **2009**, *76*, 664–677. [CrossRef]
- 5. Youndt, M.A.; Subramaniam, M.; Snell, S.A. Intellectual Capital Profiles: An Examination of Investments and Returns\*: Intellectual Capital Profiles. *J. Manag. Stud.* **2004**, *41*, 335–361. [CrossRef]
- 6. Wu, S.H.; Lin, L.Y.; Hsu, M.Y. Intellectual capital, dynamic capabilities and innovative performance of organisations. *Int. J. Technol. Manag.* **2007**, 39, 279. [CrossRef]
- 7. Chen, C.; Huang, J.; Hsiao, Y. Knowledge management and innovativeness: The role of organizational climate and structure. *Int. J. Manpow.* **2010**, *31*, 848–870. [CrossRef]
- 8. Carneiro, A. How does knowledge management influence innovation and competitiveness? *J. Knowl. Manag.* **2000**, *4*, 87–98. [CrossRef]
- 9. Birkinshaw, J.; Sheehan, T. Managing the knowledge life cycle. MIT Sloan Manag. Rev. 2002, 44, 75. [CrossRef]
- 10. Zhao, S.; Liu, X.; Andersson, U.; Shenkar, O. Knowledge management of emerging economy multinationals. *J. World Bus.* **2022**, 57, 101255. [CrossRef]
- 11. Claver-Cortés, E.; Zaragoza-Sáez, P.; Pertusa-Ortega, E. Organizational structure features supporting knowledge management processes. *J. Knowl. Manag.* **2007**, *11*, 45–57. [CrossRef]
- 12. O'dell, C.; Grayson, C.J. If only we knew what we know: Identification and transfer of internal best practices. *Calif. Manag. Rev.* 1998, 40, 154–174. [CrossRef]

Sustainability **2022**, 14, 16638 22 of 24

13. Alavi, M.; Leidner, D.E. Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Q.* **2001**, *25*, 107–136. [CrossRef]

- 14. Nonaka, I.; Toyama, R.; Konno, N. SECI, Ba and leadership: A unified model of dynamic knowledge creation. *Long Range Plan.* **2000**, *33*, 5–34. [CrossRef]
- 15. Singh, S.K. Territoriality, task performance, and workplace deviance: Empirical evidence on role of knowledge hiding. *J. Bus. Res.* **2019**, 97, 10–19. [CrossRef]
- 16. Škerlavaj, M.; Connelly, C.E.; Cerne, M.; Dysvik, A. Tell me if you can: Time pressure, prosocial motivation, perspective taking, and knowledge hiding. *J. Knowl. Manag.* **2018**, 22, 1489–1509. [CrossRef]
- 17. Černe, M.; Nerstad, C.G.; Dysvik, A.; Škerlavaj, M. What goes around comes around: Knowledge hiding, perceived motivational climate, and creativity. *Acad. Manag. J.* **2014**, 57, 172–192. [CrossRef]
- 18. Bhagat, R.S.; Kedia, B.L.; Harveston, P.D.; College, B.; Triandis, H.C. Cultural Variations in the Cross-Border Transfer of Organizational Knowledge: An Integrative Framework. *Acad. Manag. Rev.* **2002**, 27, 204–221. [CrossRef]
- 19. Nicolau, J.L.; Santa-María, M.J. The effect of innovation on hotel market value. Int. J. Hosp. Manag. 2013, 32, 71–79. [CrossRef]
- 20. Ding, Y.; Liu, Y. The Influence of High-Performance Work Systems on the Innovation Performance of Knowledge Workers. Sustainability 2022, 14, 15014. [CrossRef]
- 21. Connelly, C.E.; Zweig, D.; Webster, J.; Trougakos, J.P. Knowledge hiding in organizations: Knowledge Hiding in Organizations. *J. Organiz. Behav.* **2012**, 33, 64–88. [CrossRef]
- 22. Ford, D.P.; Staples, S. Are full and partial knowledge sharing the same? J. Knowl. Manag. 2010, 14, 394–409. [CrossRef]
- 23. Peng, H.; Pierce, J. Job- and organization-based psychological ownership: Relationship and outcomes. *J. Manag. Psychol.* **2015**, 30, 151–168. [CrossRef]
- 24. Marquardt, M.J.; Horvath, L. *Global Teams: How Top Multinationals Span Boundaries and Cultures with High-Speed Teamwork*; Nicholas Brealey Publishing: London, UK, 2001; ISBN 0-89106-301-3.
- 25. Ali, M.; Ali, I.; Albort-Morant, G.; Leal-Rodríguez, A.L. How do job insecurity and perceived well-being affect expatriate employees' willingness to share or hide knowledge? *Int. Entrep. Manag. J.* **2021**, *17*, 185–210. [CrossRef]
- 26. Heizmann, H.; Olsson, M.R. Power matters: The importance of Foucault's power/knowledge as a conceptual lens in KM research and practice. *J. Knowl. Manag.* **2015**, *19*, 756–769. [CrossRef]
- 27. Ardito, L.; Petruzzelli, A.M.; Dezi, L.; Castellano, S. The influence of inbound open innovation on ambidexterity performance: Does it pay to source knowledge from supply chain stakeholders? *J. Bus. Res.* **2020**, *119*, 321–329. [CrossRef]
- 28. Chatterjee, S.; Chaudhuri, R.; Thrassou, A.; Vrontis, D. Antecedents and consequences of knowledge hiding: The moderating role of knowledge hiders and knowledge seekers in organizations. *J. Bus. Res.* **2021**, *128*, 303–313. [CrossRef]
- 29. Platanitis, P. The Role of Counselling Psychology on Expatriate Adjustment in East Asia: A Systematic Review. *Int. J. Psychol. Behav. Sci.* **2017**, *11*, 292–300.
- 30. Sam, D.L.; Berry, J.W. Acculturation: When Individuals and Groups of Different Cultural Backgrounds Meet. *Perspect. Psychol. Sci.* **2010**, *5*, 472–481. [CrossRef]
- 31. Easterby-Smith, M.; Lyles, M.A.; Tsang, E.W. Inter-organizational knowledge transfer: Current themes and future prospects. *J. Manag. Stud.* **2008**, 45, 677–690. [CrossRef]
- 32. Van Wijk, R.; Jansen, J.J.P.; Lyles, M.A. Inter- and Intra-Organizational Knowledge Transfer: A Meta-Analytic Review and Assessment of its Antecedents and Consequences. *J. Manag. Stud.* **2008**, *45*, 830–853. [CrossRef]
- 33. Ferreira, J.; Mueller, J.; Papa, A. Strategic knowledge management: Theory, practice and future challenges. *J. Knowl. Manag.* **2018**, 24, 121–126. [CrossRef]
- 34. Peltokorpi, V. Cross-cultural adjustment of expatriates in Japan. Int. J. Hum. Resour. Manag. 2008, 19, 1588–1606. [CrossRef]
- 35. Searle, W.; Ward, C. The prediction of psychological and sociocultural adjustment during cross-cultural transitions. *Int. J. Intercult. Relat.* **1990**, *14*, 449–464. [CrossRef]
- 36. Giorgi, G.; Lecca, L.I.; Alessio, F.; Finstad, G.L.; Bondanini, G.; Lulli, L.G.; Arcangeli, G.; Mucci, N. COVID-19-related mental health effects in the workplace: A narrative review. *Int. J. Environ. Res. Public Health* **2020**, *17*, 7857. [CrossRef]
- 37. Xiong, C.; Zheng, L.J.; Germon, R.; Susini, J.-P.; Chang, V. Telling "white lies" within the entrepreneurial firm: How rationalized knowledge hiding between founder CEO and founder CTO influences new product development. *J. Bus. Res.* **2021**, *136*, 431–439. [CrossRef]
- 38. Bogilović, S.; Černe, M.; Škerlavaj, M. Hiding behind a mask? Cultural intelligence, knowledge hiding, and individual and team creativity. *Eur. J. Work Organ. Psychol.* **2017**, *26*, 710–723. [CrossRef]
- 39. Shrivastava, S.; Pazzaglia, F.; Sonpar, K. The role of nature of knowledge and knowledge creating processes in knowledge hiding: Reframing knowledge hiding. *J. Bus. Res.* **2021**, *136*, 644–651. [CrossRef]
- 40. Connelly, C.E.; Zweig, D. How perpetrators and targets construe knowledge hiding in organizations. *Eur. J. Work Organ. Psychol.* **2015**, 24, 479–489. [CrossRef]
- 41. Gkoulalas-Divanis, A.; Verykios, V.S. Hiding sensitive knowledge without side effects. *Knowl. Inf. Syst.* **2009**, 20, 263–299. [CrossRef]
- 42. Kang, S.-W. Knowledge withholding: Psychological hindrance to the innovation diffusion within an organisation. *Knowl. Manag. Res. Pract.* **2016**, *14*, 144–149. [CrossRef]

Sustainability **2022**, 14, 16638 23 of 24

43. Serenko, A.; Bontis, N. Understanding counterproductive knowledge behavior: Antecedents and consequences of intraorganizational knowledge hiding. *J. Knowl. Manag.* **2016**, 20, 1199–1224. [CrossRef]

- 44. Huo, W.; Cai, Z.; Luo, J.; Men, C.; Jia, R. Antecedents and intervention mechanisms: A multi-level study of R&D team's knowledge hiding behavior. *J. Knowl. Manag.* **2016**, *20*, 880–897.
- 45. Peng, H. Why and when do people hide knowledge? J. Knowl. Manag. 2013, 17, 398-415. [CrossRef]
- 46. Rhee, Y.W.; Choi, J.N. Knowledge management behavior and individual creativity: Goal orientations as antecedents and in-group social status as moderating contingency: Knowledge Management Behavior. *J. Organiz. Behav.* **2017**, *38*, 813–832. [CrossRef]
- 47. Jha, J.K.; Varkkey, B. Are you a cistern or a channel? Exploring factors triggering knowledge-hiding behavior at the workplace: Evidence from the Indian R&D professionals. *J. Knowl. Manag.* **2018**, 22, 824–849.
- 48. Oubrich, M.; Hakmaoui, A.; Benhayoun, L.; Söilen, K.S.; Abdulkader, B. Impacts of leadership style, organizational design and HRM practices on knowledge hiding: The indirect roles of organizational justice and competitive work environment. *J. Bus. Res.* **2021**, *137*, 488–499. [CrossRef]
- 49. Cook, K.S.; Emerson, R.M. Social exchange theory. In *Handbook of Social Psychology*; Springer: Dordrecht, The Netherlands, 1987.
- 50. Smart Richman, L.; Leary, M.R. Reactions to discrimination, stigmatization, ostracism, and other forms of interpersonal rejection: A multimotive model. *Psychol. Rev.* **2009**, *116*, 365. [CrossRef]
- 51. Husted, K.; Michailova, S. Diagnosing and fighting knowledge-sharing hostility. Organ. Dyn. 2002, 31, 60–73. [CrossRef]
- 52. Farmer, S.M.; Tierney, P.; Kung-McIntyre, K. Employee creativity in Taiwan: An application of role identity theory. *Acad. Manag. J.* **2003**, *46*, 618–630. [CrossRef]
- 53. Janssen, O.; Van Yperen, N.W. Employees' goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction. *Acad. Manag. J.* **2004**, *47*, 368–384. [CrossRef]
- 54. Mumtaz, S.; Parahoo, S.K. Promoting employee innovation performance: Examining the role of self-efficacy and growth need strength. *Int. J. Product. Perform. Manag.* **2019**, *69*, 704–722. [CrossRef]
- 55. James, K.; Brodersen, M.; Eisenberg, J. Workplace affect and workplace creativity: A review and preliminary model. *Hum. Perform.* **2004**, *17*, 169–194. [CrossRef]
- 56. Lyubomirsky, S.; King, L.; Diener, E. The benefits of frequent positive affect: Does happiness lead to success? *Psychol. Bull.* **2005**, 131, 803. [CrossRef] [PubMed]
- 57. Jafri, M.H. Psychological capital and innovative behaviour: An empirical study on apparel fashion industry. *J. Contemp. Manag. Res.* **2012**, *6*, 42.
- 58. Liang, J.; Shu, R.; Farh, C.I. Differential implications of team member promotive and prohibitive voice on innovation performance in research and development project teams: A dialectic perspective. *J. Organ. Behav.* **2019**, *40*, 91–104. [CrossRef]
- 59. Papa, A.; Dezi, L.; Gregori, G.L.; Mueller, J.; Miglietta, N. Improving innovation performance through knowledge acquisition: The moderating role of employee retention and human resource management practices. *J. Knowl. Manag.* **2020**, 24, 589–605. [CrossRef]
- 60. Singh, S.K.; Gupta, S.; Busso, D.; Kamboj, S. Top management knowledge value, knowledge sharing practices, open innovation and organizational performance. *J. Bus. Res.* **2021**, *128*, 788–798. [CrossRef]
- 61. Chierici, R.; Tortora, D.; Del Giudice, M.; Quacquarelli, B. Strengthening digital collaboration to enhance social innovation capital: An analysis of Italian small innovative enterprises. *J. Intellect. Cap.* **2021**, 22, 610–632. [CrossRef]
- 62. Alam, T.; Ullah, Z.; AlDhaen, F.S.; AlDhaen, E.; Ahmad, N.; Scholz, M. Towards explaining knowledge hiding through relationship conflict, frustration, and irritability: The case of public sector teaching hospitals. *Sustainability* **2021**, *13*, 12598. [CrossRef]
- 63. Perry-Smith, J.E. Social Yet Creative: The Role of Social Relationships in Facilitating Individual Creativity. *Acad. Manag. J.* **2006**, 49, 85–101. [CrossRef]
- 64. Jiang, Z.; Hu, X.; Wang, Z.; Jiang, X. Knowledge hiding as a barrier to thriving: The mediating role of psychological safety and moderating role of organizational cynicism. *J. Organ. Behav.* **2019**, *40*, 800–818. [CrossRef]
- 65. Banagou, M.; Batistič, S.; Do, H.; Poell, R.F. Relational climates moderate the effect of openness to experience on knowledge hiding: A two-country multi-level study. *J. Knowl. Manag.* **2021**, 25, 60–87. [CrossRef]
- 66. Saxe, L. Lying: Thoughts of an applied social psychologist. Am. Psychol. 1991, 46, 409. [CrossRef]
- 67. Bai, X.; Wang, Q.; Sheng, S.; Li, J.J. Cross-level interpersonal ties and IJV innovation: Evidence from China. *J. Bus. Res.* **2021**, *134*, 618–630. [CrossRef]
- 68. Ghasemaghaei, M.; Turel, O. Possible negative effects of big data on decision quality in firms: The role of knowledge hiding behaviours. *Inf. Syst. J.* **2021**, *31*, 268–293. [CrossRef]
- 69. Grover, V.; Gokhale, R.; Narayanswamy, R.S. Resource-based framework for IS research: Knowledge firms and sustainability in knowledge markets. *J. Assoc. Inf. Syst.* **2009**, *10*, 2. [CrossRef]
- 70. Gordon, A.K.; Miller, A.G. Perspective differences in the construal of lies: Is deception in the eye of the beholder? *Personal. Soc. Psychol. Bull.* **2000**, *26*, 46–55. [CrossRef]
- 71. Giacalone, R.A.; Jurkiewicz, C.L.; Promislo, M. Ethics and well-being: The paradoxical implications of individual differences in ethical orientation. *J. Bus. Ethics* **2016**, 137, 491–506. [CrossRef]
- 72. Khoreva, V.; Wechtler, H. Exploring the consequences of knowledge hiding: An agency theory perspective. *J. Manag. Psychol.* **2020**, *35*, 71–84. [CrossRef]

Sustainability **2022**, 14, 16638 24 of 24

73. Wu, W.-Y.; Lee, L.-Y.; Phan, N.V.Q.; Qomariyah, A.; Nguyen, P.-T. The influential factors and consequences of knowledge sharing for expatriates. *Int. J. Emerg. Mark.* **2021**. *ahead-of-print*. [CrossRef]

- 74. Motowidlo, S.J.; Packard, J.S.; Manning, M.R. Occupational stress: Its causes and consequences for job performance. *J. Appl. Psychol.* **1986**, 71, 618. [CrossRef] [PubMed]
- 75. Gardner, G.H. Cross cultural communication. J. Soc. Psychol. 1962, 58, 241–256. [CrossRef]
- 76. Triandis, H.C. Cultural Intelligence in Organizations. *Group Organ. Manag.* 2006, 31, 20–26. [CrossRef]
- 77. Adler, R.B.; Towne, N. Looking Out/Looking In; Harcourt Brace Jovanovich: Orlando, FL, USA, 1993.
- 78. Ang, S.; Van Dyne, L.; Koh, C. Personality correlates of the four-factor model of cultural intelligence. *Group Organ. Manag.* **2006**, 31, 100–123. [CrossRef]
- 79. Brislin, R.; Worthley, R.; Macnab, B. Cultural intelligence: Understanding behaviors that serve people's goals. *Group Organ. Manag.* **2006**, *31*, 40–55. [CrossRef]
- 80. Harris, J.G. A science of the South Pacific: Analysis of the character structure of the Peace Corps volunteer. *Am. Psychol.* **1973**, 28, 232. [CrossRef] [PubMed]
- 81. Stephan, C.W.; Stephan, W.G. Reducing intercultural anxiety through intercultural contact. *Int. J. Intercult. Relat.* **1992**, *16*, 89–106. [CrossRef]
- 82. Lustig, M.W.; Koester, J.; Halualani, R. *Intercultural Competence: Interpersonal Communication across Cultures*; Pearson/A and B: Boston, MA, USA, 2006; ISBN 0-205-45352-X.
- 83. Parks, C.D.; Vu, A.D. Social dilemma behavior of individuals from highly individualist and collectivist cultures. *J. Confl. Resolut.* **1994**, *38*, 708–718. [CrossRef]
- 84. Rockstuhl, T.; Ng, K.-Y. The effects of cultural intelligence on interpersonal trust in multicultural teams. In *Handbook of Cultural Intelligence*; Routledge: New York, NY, USA, 2015; pp. 224–238. ISBN 1-315-70385-8.
- 85. Fiedler, F.E.; Mitchell, T.; Triandis, H.C. The culture assimilator: An approach to cross-cultural training. *J. Appl. Psychol.* **1971**, *55*, 95. [CrossRef]
- 86. Snyder, M. *Public Appearances, Private Realities: The Psychology of Self-Monitoring;* WH Freeman/Times Books/Henry Holt & Co.: New York, NY, USA, 1987; ISBN 0-7167-1797-2.
- 87. Chen, G.-M. A test of intercultural communication competence. Intercult. Commun. Stud. 1992, 2, 63–82.
- 88. Demes, K.A.; Geeraert, N. Measures matter: Scales for adaptation, cultural distance, and acculturation orientation revisited. *J. Cross-Cult. Psychol.* **2014**, *45*, 91–109. [CrossRef]
- 89. Wang, S.; Noe, R.A. Knowledge sharing: A review and directions for future research. *Hum. Resour. Manag. Rev.* **2010**, *20*, 115–131. [CrossRef]
- 90. Østergaard, C.R.; Timmermans, B.; Kristinsson, K. Does a different view create something new? The effect of employee diversity on innovation. *Res. Policy* **2011**, *40*, 500–509. [CrossRef]
- 91. Schubert, T.; Andersson, M. Old is gold? The effects of employee age on innovation and the moderating effects of employment turnover. *Econ. Innov. New Technol.* **2015**, *24*, 95–113. [CrossRef]
- 92. Scott, S.G.; Bruce, R.A. Determinants of Innovative Behavior: A Path Model of Individual Innovation in the Workplace. *Acad. Manag. J.* **1994**, *37*, 580–607. [CrossRef]
- 93. De Visser, M.; Faems, D. Exploration and exploitation within firms: The impact of CEOs' cognitive style on incremental and radical innovation performance. *Creat. Innov. Manag.* **2015**, *24*, 359–372. [CrossRef]
- 94. Cho, S.; Mor Barak, M.E. Understanding of diversity and inclusion in a perceived homogeneous culture: A study of organizational commitment and job performance among Korean employees. *Adm. Soc. Work* **2008**, *32*, 100–126. [CrossRef]
- 95. Fornell, C.; Larcker, D.F. Evaluating structural equation models with unobservable variables and measurement error. *J. Mark. Res.* **1981**, *18*, 39–50. [CrossRef]
- 96. Arain, G.A.; Bhatti, Z.A.; Ashraf, N.; Fang, Y.-H. Top-down knowledge hiding in organizations: An empirical study of the consequences of supervisor knowledge hiding among local and foreign workers in the Middle East. *J. Bus. Ethics* **2020**, *164*, 611–625. [CrossRef]